



National Household Education Surveys Program:2001



Methodology Report

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1. INTRODUCTION

The National Household Education Surveys Program (NHES) was developed by the National Center for Education Statistics (NCES) to study educational issues that cannot be addressed in institutional surveys. The NHES collects timely information on specific education topics from a relatively large, targeted sample of households and has been conducted approximately every other year since 1991. The NHES gathers data on several important topics on a rotating basis. For instance, adult education and early childhood program participation have been the focus of several NHES surveys. One-time surveys on current issues, such as school readiness, school safety and discipline, and civic involvement, have been conducted as well.

The NHES surveys conducted in 2001 (NHES:2001) included two that had been fielded in previous years, the Early Childhood Program Participation survey (ECPN-NHES:2001) and the Adult Education and Lifelong Learning survey (AELL-NHES:2001). The third NHES:2001 survey was the Before- and After-School Programs and Activities survey (ASPA-NHES:2001); this was the first full-scale NHES survey on this issue, although questions on the topic had been included in previous survey administrations.

The NHES provides data on the populations of special interest to NCES and education researchers as defined by age and/or grade in school for each survey. It targets these populations using specific screening and sampling procedures. Populations of interest include children from birth to 12th grade and civilian adults age 16 and older and not enrolled in 12th grade or below. Specific age or grade ranges for a given survey are determined by the survey topic and the research questions formulated for the specific survey administration.

The NHES provides national cross-sectional estimates for the 50 states and the District of Columbia. The NHES design also yields estimates for subgroups of interest for each survey, as defined by age or grade for children, educational participation status for adults, and Black and Hispanic origin for all populations of interest. In addition to providing cross-sectional estimates, the NHES is also designed to provide estimates of change over time in key statistics. The survey instruments are designed to address the selected issues in sufficient detail so that analyses can be performed to help explain the phenomena of interest.

The NHES surveys are random-digit-dial (RDD) telephone surveys of households in the United States. Interviews are administered using computer-assisted telephone interview (CATI)

technology, which is a data collection methodology specifically designed so that relatively complex questionnaires can be handled smoothly and efficiently. Previous NHES surveys have been conducted in 1991, 1993, 1995, 1996, and 1999. All surveys were conducted at the same time of the year, winter to early spring. The 2001 administration was conducted by Westat from January 2 through April 14, 2001.

The NHES was intended by NCES to complement its institutional surveys. It also fills a need that existing household surveys, such as the Current Population Survey (CPS) and the Survey of Income and Program Participation (SIPP), cannot satisfy because they are designed to focus primarily on issues other than education. In these other survey systems, data on educational issues are usually collected through supplements to the main household survey, and supplemental surveys have not provided NCES with the level of detail needed for desired analyses.

NHES Survey Topics

This section presents the topics that have been addressed in the prior NHES surveys, including those that have been conducted on a recurring basis and one-time surveys. Exhibit 1-1 shows the topics of the NHES surveys from the inception of the program in 1991 through the 2001 administration.

Exhibit 1-1. Surveys conducted under the National Household Education Surveys Program and years administered: NHES

Survey	NHES:1991	NHES:1993	NHES:1995	NHES:1996	NHES:1999 ¹	NHES:2001
Early Childhood Program Participation	√		√		√	√
Adult Education/Lifelong Learning	√		√		√	√
School Readiness		√			√	
School Safety and Discipline		√				
Parent and Family Involvement in Education/Civic Involvement				√	√	
Adult Civic Involvement				√		
Youth Civic Involvement				√	√	
Before- and After-School Programs and Activities					√	√
Household and Library Use				√		

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

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

Early Childhood Program Participation

The nonparental care and education of preschool children has been an important recurring topic for the NHES and was the subject of the 1991 Early Childhood Education survey (ECE-NHES:1991) and the Early Childhood Program Participation surveys of 1995 and 2001 (ECPP-NHES:1995 and ECPP-NHES:2001). In addition, selected items about nonparental care were included in the 1999 Parent survey (Parent-NHES:1999). The ECPP surveys have provided cross-sectional, national estimates of participation in early care and education programs for children in varying age groups, depending on the specific research questions addressed in a given survey. Estimates can be computed for White, Black, and Hispanic children for subgroups composed of 2 to 3 years of age or two to three grades in school, depending on the survey year. In addition, the surveys were designed to support the analysis of change in early childhood care and education over time.

In the ECE-NHES:1991, parents of children ages 3 through 8 completed interviews about their children's early childhood education, including participation in nonparental care by relatives, nonrelatives, or in center-based programs (including Head Start). They also answered questions about early school experiences, including delayed kindergarten entry and grade retention, and activities children engaged in with parents and other family members inside and outside the home. For the ECPP-NHES:1995, the population was expanded to include children newborn through 3rd grade. Parents were again asked detailed questions about their children's participation in nonparental care and education programs. Other items captured information about early school experiences of school-age children and home and out-of-home family activities with children. The ECPP-NHES:2001 focused on preschool children from birth through age 6 who were not yet enrolled in kindergarten. In addition to obtaining the same in-depth information on relative care, nonrelative care, center-based program participation, and participation in Early Head Start and Head Start, questions designed to capture continuity of care, parents' perceptions of the quality of care, and reasons for choosing parental over nonparental care were included.

Information on early childhood care and program participation for preschool children was also gathered in the Parent-NHES:1999, which collected data on key indicators that had been measured in previous NHES collections in order to provide the Department of Education with end-of-decade estimates for important education issues. The Parent-NHES:1999 was administered to parents of children from birth through grade 12. Detailed information about children's health and disability status and parent and family characteristics has also been obtained in all NHES ECPP surveys as well as in the Parent-NHES:1999.

Adult Education

Adult educational activities capture the interest of educational researchers and policymakers interested in the phenomenon of learning over the lifetime. This topic is appropriate for a household survey, and consequently, it has been an important focus of the NHES. Adult Education surveys were conducted in 1991, 1995, and 1999 (AE-NHES:1991, AE-NHES:1995, AE-NHES:1999), and the Adult Education and Lifelong Learning survey was administered in 2001 (AELL-NHES:2001). Each of the surveys provided cross-sectional, national estimates of educational participation for persons 16 years and older who were not enrolled in grade 12 or below, as well as estimates for White, Black, and Hispanic adults. The 1995 and 2001 surveys provided estimates for adults who did not have a high school diploma or a GED. The surveys were also designed to permit the analysis of change over time in educational participation.

Respondents were asked about their participation in basic skills courses, English as a second language (ESL) courses, credential (degree or diploma) programs, apprenticeships, work-related courses, courses taken for personal development or personal interest, and in the AELL-NHES:2001, informal learning at work. Adults participating in programs or courses provided details about those programs or courses, such as subject matter, duration, cost, location and sponsorship, and employer support. In the AE-NHES:1991 and AE-NHES:1995, adults who had not participated in selected types of adult education were asked about their interest in educational activities and the barriers to participation in educational activities that they perceived. A battery of personal background, employment, and household questions was also asked in each Adult Education survey.

School Readiness

The School Readiness survey was conducted in 1993 (SR-NHES:1993); a subset of key items was also included in the Parent-NHES:1999 survey. Adopting a broad approach to assessing children's readiness for entering school, the survey encompassed a range of items related to learning. Parents of 3- to 7-year-olds who were in 2nd grade or below completed interviews about their children's developmental accomplishments and difficulties, including emerging literacy and numeracy, center-based program participation, educational activities with family members, and health and nutrition status. Parents of children in elementary school were also asked about school adjustment, early school experiences, and feedback from teachers on children's school adjustment. Information about family stability and other risk factors was collected along with parent and household characteristics. The SR-

NHES:1993 provided cross-sectional, national estimates for the population of interest, for White, Black and Hispanic subgroups, and for preschoolers (children ages 3 to 5 and not yet in kindergarten).

School Safety and Discipline

In 1993, the NHES included the School Safety and Discipline survey (SSD-NHES:1993). Interviews were conducted with parents of students in grades 3 through 12 and with youth in grades 6 through 12. Parents and youth were asked about the school learning environment, discipline policy, safety at school, victimization, availability and use of alcohol and drugs, and alcohol and drug education. Youth were also asked about peer norms for achievement and behavior in school and substance use. The survey addressed parents' contributions to their children's learning environment through questions about parental expectations for academic achievement and good behavior at school, parental efforts to educate and protect their children, and parental involvement in the school. Parent and family characteristics were also elicited. The SSD-NHES:1993 provided national estimates of the topics above for the full population of interest, for White, Black, and Hispanic children, and for children in grades 3 through 5, 6 through 8, and 9 through 12.

Parent and Family Involvement in Education and Civic Involvement

The Parent and Family Involvement in Education and Civic Involvement survey was conducted in 1996 (PFI/CI-NHES:1996). Key family involvement items were incorporated in the Parent-NHES:1999 as well. The PFI/CI-NHES:1996 was different from the ECPP surveys in population of interest and subtopics incorporated in the survey; it focused on parents' participation in educational activities at home as well as participation in various capacities at the programs or schools their children attended. The population of interest was children age 3 through 12th grade. Questions for parents whose children attended school or a center-based program addressed specific ways the family was involved in the school/program, communication with teachers and other school practices to involve families, and parent involvement with children's homework. Parents of all children responded to questions about parent and family involvement with their children in educational activities outside of school. Children's contact with nonresidential parents and the involvement of those parents with school was also captured. An additional topic for parents of preschoolers was support and training received for parenting.

The civic involvement of parents of students in grades 6 through 12 and that of the students themselves, as well as a separate random sample of adults, was addressed in the PFI/CI-NHES:1996 and

in two other 1996 surveys, the Youth Civic Involvement survey (YCI-NHES:1996) and the Adult Civic Involvement survey (ACI-NHES:1996). The topic of community service was expanded for inclusion in the end-of-decade 1999 Youth survey (Youth-NHES:1999). Questions related to the diverse ways that parents and other adults may socialize children for informed civic participation. The surveys were intended to provide an assessment of the opportunities that youth have to develop the personal responsibility and skills that would facilitate their taking an active role in civic life, such as through exposure to information about politics or national issues, through discussion of politics and national issues, and by the example of adults who participate in community or civic life. Questions about attitudes that relate to democratic values and knowledge about government were also included. In the YCI-NHES:1996, special emphasis was placed on the opportunities youth had for participation in community service and the extent of school efforts to support youth community involvement.

The PFI/CI-NHES:1996 and Parent-NHES:1999 provided cross-sectional national estimates of the topics described above for all children in the population of interest, for White, Black, and Hispanic children, for preschoolers, and for 3-year groupings of grades.

Before- and After-School Programs and Activities

This topic, focusing on the ways that parents arrange for supervision and enrichment during the out-of-school hours for children who are enrolled in kindergarten through 8th grade, was introduced as part of the Parent-NHES:1999. It was the focus of the 2001 Before- and After-School Programs and Activities survey (ASPA-NHES:2001). Interviews were conducted with parents who reported on the before- and/or after-school arrangements in which their children participated, including care by relatives or nonrelatives in a private home, before- or after-school programs in centers and in schools, activities that might provide adult supervision in the out-of-school hours, and children's self-care. Items also addressed continuity of care arrangements, parental perceptions of quality, reasons for choosing parental care, and obstacles to participation in nonparental arrangements. The child's health and disability status and characteristics of the parents and household were also collected.

The ASPA-NHES:2001 provided cross-sectional estimates of participation in various types of arrangement for White, Black and Hispanic children, and for in grades K through 5th and 6th through 8th.

Household and Library Use

The Household and Library Use survey of 1996 (HHL-NHES:1996) examined public library use by household members. This brief survey was administered to every household screened in 1996. The items tapped the ways in which household members used public libraries (e.g., borrowing books, lectures, story hour) and the purposes for using public libraries (e.g., for school assignments, enjoyment, work-related projects). The HHL-NHES:1996 provided cross-sectional, national estimates of household characteristics and library use for all households in the United States as well as estimates by state.

NHES:2001 Surveys

The preceding discussion contains a description of each of the topical areas covered by NHES surveys since the survey program's inception. A more detailed discussion of the topics and issues for the NHES:2001 surveys follows. There were two types of instruments in the NHES:2001, the screening interview (referred to as the Screener) and three extended interviews, one for the ECPP-NHES:2001, one for the ASPA-NHES:2001, and one for the AELL-NHES:2001. (See appendix A for copies of the NHES:2001 survey instruments.) The Screener was completed by a member of the household who was age 18 or older.¹ It was used to determine whether sampled telephone numbers belonged to households, gather the information needed to sample household members to be interview subjects for one or more surveys,² select the appropriate respondent for ECPP and ASPA interviews, and administer some items about household characteristics in households in which no one was sampled for an extended interview. The Screener was designed to accomplish these tasks efficiently, placing minimum burden on the respondent.

Early Childhood Program Participation Survey (ECPP-NHES:2001)

In the ECPP-NHES:2001 survey, data were collected about children from birth through age 6 as of December 31, 2000, who were not enrolled in kindergarten or a higher grade in school.³ The

¹ Any household member age 18 or older was eligible to respond to the screening interview. However, if there were no household members age 18 or older, the male or female head of the household completed the Screener. Household members were defined as persons who considered that household as their residence, kept their possessions there, and had no other place to live.

² Up to three interviews were conducted in a household. Interviews could have been conducted about a maximum of two children and one adult in any household.

³ Because the proportion of 7-year-olds who are not enrolled in school is very small (about 1.5 percent), an upper age limit of 6 was established for the ECPP survey.

respondent for the ECPP interview was the adult living in the household who was the most knowledgeable about the child's care and education.⁴

In the ECPP interview, subjects were routed to one of two questionnaire paths, infant or preschool. The infant path (I) of the ECPP interview was for children newborn through 2 years of age. The preschool path (N) was for children who were age 3 or older and not yet attending kindergarten or primary school. These children were typically 3 to 5 years old, but eight were 6 years old. Information was collected about participation in early childhood care and programs (relative care, nonrelative care, center-based programs, and Early/Head Start), program continuity, parental perceptions of the quality of arrangements, and factors in parental choice of arrangement, literacy-related skills and activities, and training and support for families of preschoolers.

Irrespective of the questionnaire path for the child, parents were asked basic demographic questions about the child, the child's health and disability status, parent/guardian characteristics, and household characteristics. To avoid redundancy and greater response burden in households with multiple interviews, household information was collected only at the end of the first extended interview conducted in each household. Similarly, parent/guardian information was collected only once per household, unless sampled children in the same household had different parents.⁵ Exhibit 1-2 shows the structure of the ECPP and ASPA interviews, which contained many parallel items, and the distribution of topics among the paths for each interview.

⁴ The respondent for the ECPP and ASPA surveys was identified by the Screener respondent as the household member most knowledgeable about the care and education of the sampled child. In more than 75 percent of the cases, it was the child's mother; in more than 96 percent of the cases, it was the child's mother or father. In about 2 percent of the cases, it was the child's grandmother. For ease of discussion, the respondent to the ECPP and ASPA surveys is referred to as the parent/guardian.

⁵ Demographic information on the mother and father residing in the household was collected in the first ECPP or ASPA interview conducted in the household and was copied to the interview for a second sampled child if the sampled children had the same mother and father. If a sampled child had no mother and no father in the household, parent information was collected about the guardian responding to the interview.

Exhibit 1-2. Content by path: ECPP-NHES:2001 and ASPA-NHES:2001

Characteristic	ECPP survey			ASPA survey	
	Infants/ toddlers (I)	Preschoolers (N)		Enrolled in school (S)	Home- schooled (H)
		Not enrolled	Center-based ¹		
Demographics ²	√	√	√	√	√
Current school/program status		√	√	√	√ ³
Characteristics of program/school			√		
Homeschooling					√
Care/program characteristics	√	√	√	√	
School characteristics				√	√ ³
Student academic performance and behavior				√	√ ³
Nonparental care/education	√	√	√		
Before-/after-school care arrangements/programs				√	
Parental care during out-of-school hours				√	
Program continuity	√	√	√	√	
Perceptions of quality of care and programs	√		√	√	
Factors in parental choice	√	√	√	√	
Support for families of preschoolers	√	√	√		
Home activities	√	√	√		
Emerging literacy and numeracy	√	√	√		
Health and disability	√	√	√	√	√
Parent/guardian characteristics	√	√	√	√	√
Household characteristics	√	√	√	√	√

¹ Center-based programs include day care centers, nursery schools, preschools, and prekindergartens.

² Age and sex were collected in the Screener for some household members. This information was confirmed in the ECPP and ASPA extended interviews.

³ Asked of homeschooled students who also attended regular school for 9 hours per week or more.

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), 2001; and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001.

Before- and After-School Programs and Activities Survey (ASPA-NHES:2001)

In the ASPA-NHES:2001 survey, data were collected about children who were in kindergarten through 8th grade provided they were age 15⁶ or younger. The respondent for the ASPA interview was the parent or guardian living in the household who was the most knowledgeable about the sampled child's care and education. There were two paths through the interview items, the school path and the homeschool path. All respondents were asked basic demographic questions about the child, the child's health and disability status, parent/guardian characteristics, and household characteristics in both paths of the interview (see exhibit 1-2).

The subjects of the school path (S) were children currently attending a regular school in kindergarten, including transitional kindergarten and prefirst grade, through 8th grade. The ages of the children ranged from 3 to 15; however, all but 95 of them were ages 5 to 14. In the school path, data were collected about enrollment in school, school characteristics, student academics and behavior at school, before- and after-school care arrangements and programs, before- and after-school activities, self-care, parental care during the out-of-school hours, program continuity, parental perceptions of the quality of arrangements, and factors in parental choice of arrangement.

The homeschool path (H) was for children who were being instructed at home for some or all of their classes instead of attending regular school and who had a grade equivalent of kindergarten through 8th grade. Parents of homeschoolers were asked questions about the student's grade equivalent, reasons for schooling their child at home, and receipt of support for homeschooling from their public school or district. For those students who were reported to be homeschooled but also attended a school 9 or more hours per week, parents/guardians were administered the sections on school characteristics and student performance at school.

Adult Education and Lifelong Learning Survey (AELL-NHES:2001)

The AELL-NHES:2001 was designed to provide national estimates of participation in adult educational activities. Adults age 16 and older who were not enrolled in grade 12 or below, not institutionalized, and not on active duty in the military were eligible for this survey.

⁶ Less than 1.5 percent of children enrolled in 8th grade are 16 years or older; therefore, the upper age limit for the ASPA survey was set at 15 years.

Respondents were asked about their participation in the following types of educational activities: English as a second language, basic skills/GED preparation, credential courses in colleges or universities, vocational or technical credential courses, apprenticeships, career- or job-related training or courses, personal interest/development classes, and informal learning activities at work. Information about employer support for educational activities was obtained. Other items gathered demographic, household, and detailed employment information.

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2. QUESTIONNAIRE DESIGN

This section of the report describes the activities conducted in the design of the NHES:2001 questionnaires. The goals of these activities were to identify major research issues and data needs, to assess the availability of data and measures in extant research, and to refine the instruments. This process involved consultation with researchers in government, academe, and private sector settings, as well as extensive reviews of published materials. In addition, cognitive laboratory research was used to develop the ASPA instrument and to refine all instruments. A summary of this research and its impact on survey content is included in this chapter; it is described in more detail in appendix C. A two-stage field test of the NHES:2001 was also conducted.

Telephone Conferences with Researchers

Telephone conferences were conducted with researchers and NHES data users in academic and research institutions across the nation, in associations, and in government. Before the calls were conducted, each of the conferees was sent a description of the NHES, copies of previous questionnaire related to the specific surveys under discussion, and a short list of topics developed by NCES to be considered for inclusion in the NHES:2001. The conferences elicited experts' opinions on potential enhancements to items from past surveys and explored new items that might be appropriate and useful for the NHES:2001. All conferences were conducted by project staff, either the survey managers or the research assistant. Survey managers were present for all conferences, and a representative of NCES, typically an Education Statistics Services Institute (ESSI) staff person, listened to most of the AELL telephone conferences.

Early Childhood Program Participation

Telephone conferences were conducted with 18 researchers with expertise in areas covered by the ECPP-NHES:2001, including 8 government researchers and policymakers and 10 persons associated with academic institutions or private research organizations. In addition to gathering comments on items previously fielded in the NHES early childhood education surveys, the conferences focused on the issues of 1) quality of care arrangements and early childhood programs, in particular delineating those measures of quality for which parents would be reliable reporters, 2) appropriate and accurate measures of total time in nonparental care, both on a day-to-day basis and over the life span of the child, and 3) child

care as related to the recent welfare-to-work initiatives, including government and nongovernment resources used to assist parents in paying for care.

Researchers who participated in the telephone conferences believed that although the ECPP-NHES:1995 has been very useful for early child care related research, enhancements to the survey would be valuable. Researchers agreed that measuring participation in relative care, nonrelative care, Head Start, Early Head Start, and other center-based programs should be retained along with much of the detailed information gathered in previous NHES surveys. However, some concern was expressed about the reliability of parent reports of Head Start participation. Discussions were focused on how the NHES:2001 could help generate more reliable and valuable data for researchers and policymakers in the field. Topics most frequently mentioned as important for the ECPP-NHES:2001 included developing measures of the quality of care, total time a child spends in nonparental care, special needs care, and issues related to welfare-to-work transition. Number of care arrangements and fathers' involvement in child care also received attention from the researchers. Less frequently mentioned topics included parental child care training, characteristics of relative care, logistics of transportation, infant care, and other demographics.

A consensus emerged that the NHES:2001 should include a focus on parental satisfaction with care and the program's ability to meet their needs rather than program quality, which is best assessed through observation. The reliability of previous NHES measures of quality was a concern to the researchers because there were some items about which parents have little direct knowledge, such as the caregivers' education and training background. The consensus was that the ECPP-NHES:2001 will help generate more reliable data if the focus is on understanding parents' care needs and how well care arrangements or programs meet their needs. Researchers suggested that collecting information via indirect measures of quality would be valuable for researchers and policymakers. Some indirect measures of care or program quality about which parents have knowledge were suggested by many researchers, such as staff turnover, consistency in child raising practices between parents and the care providers, structured care or program activities, care impact on child developmental growth, and communication between caregivers and parents. Amount of TV watching was also recommended as an indirect measure of quality. Many experts stated that safety should be a major indicator of care quality and can be assessed by asking parents what procedures are in place for emergencies, if their child has ever had an injury that required medical attention, and whether parents believe that the play equipment is appropriate for their children.

Several researchers commented that previous NHES studies focused on the economic aspects of child care, but placed less emphasis on the impact of care on children's educational and emotional development and parental satisfaction with the care. Experts suggested adding questions measuring child-care provider interaction, parent-care provider communication, and overall parent satisfaction with care,

yielding data that would paint a picture of the degree to which parents' child care needs are met. In addition, measuring how well parents' special needs are met, for example, with regard to sick child care and care during irregular working hours, was deemed valuable to researchers and policymakers.

A majority of the conferees agreed that collecting reliable and fresh data about the total time a child spends in nonparental care is important and may contribute to the understanding of the dynamics of early childhood care. Some experts suggested an hour-by-hour reporting of the previous day's activities, including who was with the child at each hour. However, the likely sensitivity of such a measure and the time constraints of a brief telephone interview promoted alternatives such as number and types of care arrangements over the lifespan of the child, which are also related to the issue of stability and continuity in care arrangements, an important measure of overall quality.

Most experts expressed interest in information relevant to welfare-to-work transition, for instance, parental employment and the history of receiving public assistance, including the receipt of child care subsidies. It was also recommended that the survey measure whether the decision to work was voluntary. Questions concerning the proportions of the costs paid from parents' pockets, from governmental agencies, and from employers were frequently suggested. In order to evaluate eligibility for government subsidies, more detailed information about income for households at 200 percent of poverty or less was requested.

Before- and After-School Programs and Activities

For the ASPA survey of the NHES:2001, conferences were held with 14 experts in the field, including university researchers, program evaluators, and administrators of before- and after-school programs. The topics covered in these conferences included 1) the development of measures sufficient to capture the variety of before- and after-school arrangements, 2) factors affecting parental choice of arrangements and parental assessment of program quality and benefits, and 3) the barriers that may prevent elementary and middle school students from participating in before- and after-school programs. Discussions about the kinds of data that might be of value to researchers and policymakers in the area of before-and after-school programs and activities revealed a considerable degree of agreement. Although the experts varied in terms of their research interests, backgrounds, and emphases, their recommendations revealed a common core of overlapping themes and issues.

Most highly rated on their lists of priorities was the need for national data on existing before- and after-school arrangements, both formal and informal, and details about the arrangements. In addition

to collecting data on arrangements before and after the school day during the week, some mentioned the need for information about what arrangements are made for children at other times, such as in-service days and regular school holidays. Several experts discussed the need for data on multiple arrangements, as well as information about the frequency and number of hours of specific formal and informal arrangements. Many expressed interest in data on the number of children either in self-care or sibling care.

In addition, experts stated that national-level data are lacking with respect to information about the content and structure of before- and after-school arrangements. For instance, several experts expressed interest in data on the kinds of activities in which youth participated in school-based programs. Of particular interest was whether programs offered academic, recreational, cultural, and/or community service activities, and whether activities were age-appropriate.

Many experts expressed interest in data reflecting structural, organizational, and physical features of various arrangements. For instance, several experts stated that there was a need for information about the level of structure involved in different arrangements, including center-based programs as well as relative, sibling, and self care. Experts also said they would like to see data on program organization, such as the number of staff members, and the location and physical space of programs.

Several experts described the need for data on variation in arrangements by social and economic characteristics. This interest appeared to be fueled in part by previous research findings. For example, research has shown that middle-income families tend to have little access to information about available after-school programs. Another topic of interest was the cost of arrangements, particularly data from parents on the costs of all arrangements and on parents' payment of full fees.

Experts also showed interest in factors affecting parents' choice of arrangements for their children (e.g., accessibility and convenience, affordability, program quality, etc). They expressed the need for data on the parents' criteria for choosing a program for their children, their reasons for seeking after-school programs in the first place, and their expectations of program content (e.g., academic enrichment, music, adult supervision). Also, some mentioned the need for understanding the factors that might influence parents' choice of self-care and sibling care, rather than other types of arrangements.

The question of parent assessment of program quality was discussed with many experts. The consensus was that the notion of quality would be best measured in terms of parent satisfaction. To gain satisfactory results, however, they recommend indirect questions to evaluate particular details of

programs rather than program quality in general, because past research has shown that parents tend to positively evaluate their children's programs overall.

Almost all of the experts touched on the need for data pertaining to one or more barriers to program participation, although several talked about barriers only after being prompted. In addition to financial constraints, several experts said they would like to see data on logistical barriers such as transportation, timing, and the problem of multiple arrangements for siblings as well as other barriers such as lack of information about available programs. Researchers were also looking for information on how many parents had to adjust their work hours to ensure that their children were taken care of before and after school.

Adult Education and Lifelong Learning

A range of topics and design alternatives was explored for the AELL with 20 researchers who were interviewed over the telephone. These experts represented interests in all types of adult educational activities, including adult basic education, ESL, postsecondary education, and training and work-related activities. Several topics were addressed in the discussions, including 1) motivation to participate in educational activities, particularly the perceived benefits of education, 2) perceived barriers to seeking education as an adult and appropriate ways to measure them, 3) the merits of measuring competencies, 4) measurement of transitions between full-time labor force participation and full-time participation in educational activities, and 5) the use of technology and distance learning in adult education.

The researchers agreed that the AE-NHES:1995 gathered useful data applicable to many subdisciplines in the field of adult education and that the topics and general structure should be retained. Although one specialist suggested that ABE and GED should be inquired about separately, most approved of the organization of types of activities in the NHES. There was general agreement that the full-time/part-time characterization of course taking was no longer useful, and there was interest in obtaining information on course completion and more detail about the main reasons courses were taken.

Many experts expressed interest in data related to the use of technology in adult education. Specifically, they were interested in data reflecting the types of technologies employed as well as the use of the Internet as a medium for learning and course taking. In addition, since Internet courses were a new phenomenon, data on the usefulness of and levels of satisfaction with these types of courses were cited as important goals. Experts were also interested in knowing whether courses taken through distance

education were for credit or noncredit and toward a credential or industry certification. They pointed out that computer literacy was becoming increasingly vital for daily life in the labor force as well as in education. They expressed interest in information about whether adults had and used computers at home or work, as well as whether they used computers in the classroom.

Several experts stated that data were needed on the perceived benefits or usefulness of participation in adult education. According to the experts, adults might have taken adult education for a promotion, economic pay-off, a new career or job, or other forms of incentives. Also, many experts mentioned the need for measurement of program quality. Of particular interest were expectations of and satisfaction with courses taken.

Researchers recommended collecting more detailed data on employer support for participation in adult education and information about on-the-job training or informal learning activities in the workplace. Many experts expressed interest in the range of employer requirements for educational activities and apprenticeship programs. Some mentioned the need for measuring participation rates in industry certification programs and how certificates benefited adults (e.g., career advancement, promotion, or bonus). The issue of measuring structured, on-the-job training was discussed, and researchers stressed that this type of work-related education may have been as common as education in a more formal classroom setting.

Although some researchers mentioned that questions about barriers to participation in adult education might be useful, others pointed out that measuring barriers in a telephone survey has substantial limitations. Some expressed concern that respondents would name as an obstacle an “excuse” that was not actually a barrier to educational participation. Capturing past perceived utility of courses, as well as interest in continuing education, were judged more useful.

There was general agreement that the NHES is not an appropriate vehicle for measuring school-to-work transitions. However, information on work history, welfare history, and the mandatory nature of some adult education was considered useful to shed light on this issue, and it was recommended that the AELL-NHES:2001 include these types of measures.

Review of Extant Data

An additional step in the process of identifying topics for the NHES:2001 surveys was the review of other studies to ensure that the NHES:2001 did not duplicate information available from

sources of data and to identify potential questionnaire items for new constructs to be measured in the NHES:2001. A variety of methods were used to identify extant data sources, including past NHES experience, the consultations with experts described above, government and university information sources, computer searches, and references to data sources in relevant literature. The review included public government data sources as well as those from universities or private organizations.

Detailed information about each extant survey, i.e., its purpose, design, content, periodicity, and limitations was submitted to NCES (see appendix B). In general, it was found that the NHES:2001 provided a unique opportunity to obtain needed current and time-series information on the topics to be addressed. A limitation of some surveys was that they gave a peripheral treatment to topics central to the NHES. For example, in the field of adult education, in which the NHES captures participation in a wide range of educational activities, other surveys were more focused on one or two types. No other existing survey was found to contain the same content as the NHES presented in an educational context. Finally, because a majority of surveys were conducted only once or with a specific cohort of the population, the NHES was found to be uniquely suited to providing data on cross-sectional trends in education over the past decade.

In addition to reviewing extant surveys for their content, the staff also considered the population coverage of the available studies. This aspect of the review allowed an assessment of whether the available studies covered the populations of interest in the NHES:2001 surveys. Many of the other surveys reviewed were found to use limited samples, either in size, populations represented, and/or the degrees to which the sample was nationally representative. Estimates from these extant studies were compared with estimates from the NHES:2001 surveys as a measure of data quality. The comparative findings are presented in chapter 8.

Review of Literature

In addition to the review of extant studies described above, NHES staff members conducted reviews of the research literature in the content areas addressed in the NHES:2001. Searches were conducted on databases containing information on government publications and scholarly journal articles, and project staff consulted sources known to them to be useful.

The literature reviews focused on the research issues that had been identified as high priorities for the NHES:2001 during the expert consultations and review of extant research. A summary

of each report or article was prepared, citing key research issues, methods, and findings. In addition, a synthesis of the research was developed for each NHES:2001 survey.

Formulation of Research Questions

Guided by the information gathered during the design procedures described above, research questions for the NHES:2001 surveys were formulated. All of these research questions were addressed to some extent in the NHES:2001 surveys.

Early Childhood Program Participation Research Questions

Research questions of interest for the ECPP survey are given below.

- To what extent have preschool children participated in nonparental care and early childhood programs?
 - In what different types of nonparental care arrangements/programs have children participated?
 - How many children are participating in multiple care arrangements/programs?
 - Where are care arrangements/programs located?
 - How much time do children spend in nonparental care arrangements/programs?
 - What is the relationship of relative care providers to the children for whom they are caring?
 - What is the cost and what payment arrangements are made for the cost of care arrangements/programs?
 - How are child and family characteristics related to the care or early childhood education children receive?
- How has the participation of preschool children in nonparental care arrangements/programs changed from the 1990s?
 - Have the subpopulations of children participating in various types of care arrangements/programs changed?
 - Has the amount of time children spend in care arrangements/programs changed?
- Do at-risk children have the same access to nonparental care arrangements/programs as other children?

- Are at-risk children more or less likely to participate in nonparental care arrangements/programs than other children?
- Do at-risk children participate in different numbers and/or types of care arrangements/ programs than those children not classified as at-risk?
- What are the parents' reports of the care arrangement/program quality?
 - Are parents' ratings of the quality of care arrangement/program characteristics associated with family characteristics, such as parental education or household income?
 - Are children participating in care arrangements/programs that reflect their parents' child-raising values and beliefs about the importance of certain aspects of care?
 - What factors influenced the parents' choice of care arrangements/programs?
- What has been the impact of welfare reform on access to and use of child care arrangements/programs?
 - Are parents aware of available child care resources?
 - What is the extent of parental knowledge about their eligibility for governmental child care subsidies?
 - What type of child care subsidies/benefits have parents received from government agencies or from their employers?
- What is the status of certain aspects of parental care?
 - To what extent do mothers and fathers participate in selected educational activities at home with their child?
 - Do parents prefer to stay at home to care for their children or would they choose nonparental care if they could find high quality, affordable care?
 - What are parents' main reasons for choosing parental care over nonparental care?
- Is participation in nonparental care related to preschoolers' emerging literacy and numeracy?
 - How do parents' perceptions of the quality of care received by their children relate to children's emerging literacy and numeracy?
 - Does continuity of care relate to the development of literacy and numeracy skills?
 - Does parents' participation in home activities with their children promote the development of literacy and numeracy?

Before- and After-School Programs and Activities Research Questions

The following research questions were addressed in the ASPA survey:

- In what types of before- and after-school arrangements are kindergarten, elementary, and middle school children participating?
- What percentage of children participate in before- or after-school center-based programs?
- What percentage of children participate in before- or after-school arrangements, such as relative care, nonrelative care, and self-care?
- To what extent are children taking part in other activities arranged by their parents after school (e.g., music lessons, and sports) in order for their children to have adult supervision?
- What backup arrangements are made for children on days when the school is scheduled to be closed, such as school holidays and teacher inservice days?
- How much time each week before and after school do children spend in relative care, nonrelative care, center-based programs, activities for adult supervision, and self-care?
- What percentage of families have multiple children in different arrangements or children in multiple arrangements before and after school?
- Which populations of children are more likely to experience continuity of care/programs?
- How is type of care arrangement related to child and family characteristics?
- Is type of arrangement related to student performance, current school status, or school characteristics?
- Do before- and after-school arrangements differ for children with disabilities?
- What are the characteristics of before- and after-school arrangements?
- In what kinds of activities are youth participating in center-based programs? What activities do children do in their relative care, nonrelative care, self-care, and parental care arrangements?
- What are some features of various arrangements?
- Where are the various types of arrangements located and how much time do children spend traveling to and from school, arrangements, and home?
- What is the cost of arrangements and to what extent are parents receiving outside support for those costs (e.g., tax credits, pre-tax plans)?
- To what extent are activities of before- and after-school programs academically oriented?

- How are children in self-care monitored by their parents or by other adults?
- What are the factors that influence parental choice of before- and after-school arrangements?
- How do factors such as availability, cost, location, safety, and arrangement activities affect parental choice of arrangements?
- What are parents' preferences regarding center-based programs and other arrangements?
- What are the perceived barriers to center-based program participation? To what extent do parents feel that alternative arrangements were available to them?
- How happy are children with their before- and after-school arrangements? How do parents evaluate features of the children's arrangements?
- How do parents' work schedules influence choice of arrangements? How does the need for before- and after-school arrangements impact parents' work schedules?
- How are indicators of quality related to program cost and to child and parent characteristics?
- What has been the impact of welfare reform on access to and use of before- and after-school arrangements/programs?
- How is utilization of nonparental arrangements related to parents' employment history?
- Are parents aware of available before- and after-school resources?
- What type of before- and after-school care subsidies/benefits have parents received from government agencies or from their employers?
- How have participation rates in various types of before- and after-school arrangements changed between 1995, 1999, and 2001?
- Has participation in various types of arrangements increased or decreased between 1995 and 2001?
- Has the number of children in self-care and sibling care increased or decreased between 1995 and 2001?

Adult Education and Lifelong Learning Research Questions

The research questions for the AELL survey are as follows:

- To what extent do adults participate in AELL activities?
 - To what extent do adults participate in AELL activities overall?
 - To what extent do adults participate in specific types of AELL activities?
-

- English as a second language classes?
 - Basic skills and GED preparation classes?
 - College or university degree programs?
 - Vocational or technical diploma programs?
 - Apprenticeship programs?
 - Work-related courses?
 - Personal interest courses?
 - Work-related informal learning activities?

 - How is participation in AELL activities related to characteristics of adults?
 - To what extent do adults who have a certification and licensure participate in AELL activities?

 - For what reasons do adults participate in AELL activities?
 - To what extent do adults report that their primary reason for participation is work-related or personal interest?
 - For what specific reasons do adults participate in AELL activities?

 - To what extent do adults participate in AELL activities provided by various institutions or organizations?

 - How much time do adults spend participating in AELL activities?
 - How are the total hours of instruction associated with the type of AELL activity?
 - How are the total hours of instruction associated with the type of provider for a given activity?
 - How are the total hours of instruction spent in AELL activities associated with employment status?

 - To what extent do adults participate in AELL activities where technology was used in instruction?

 - To what extent do adults use their own resources to pay for participation in AELL activities?
 - What is the distribution of out-of-pocket costs for tuition and fees?
 - What is the distribution of out-of-pocket costs for books and other materials?
 - How is the cost associated with the type of AELL activity?
-

- To what extent do adults report employer support and involvement in their AELL participation?
 - To what extent do adults report that the educational instruction they receive is provided by their employers?
 - To what extent do adults report that their employers require their participation?
 - To what extent do adults report that their employers suggest or encourage their participation?
 - To what extent do adults report that educational activities in which they participate are located at their workplace?
 - To what extent do adults report that they participate in educational activities during work hours or that their employers give them time off from work to participate?
 - To what extent do adults report that their employers pay all or part of the cost for their participation?
- To what extent do adults participate in AELL activities in order to obtain an industry, occupation, or company certificate?
- To what extent do adults participate in courses for which they earn college credits or continuing education units?
- To what extent do adults have access to a computer and the Internet?
- To what extent do adults know about and are using the Lifetime Learning tax credit?

Cognitive Research

Following formulation of the research questions, cognitive research was conducted. Its purpose was to obtain in-depth information from participants selected to be similar to those who would be interviewed to help instruct the design of questionnaire items for the ECPP, ASPA, and AELL surveys. Cognitive research was conducted in two rounds: round 1 during the early design phase of the new ASPA survey, and round 2 after the development of the first draft of the questionnaires for the three surveys. The following sections give an overview of this activity. A more detailed account is found in appendix C, which contains the full Cognitive Research Report.

Recruiting Procedures

The participants for the NHES:2001 cognitive research were recruited by Westat by means of flyers posted in public locations, advertisements in local newspapers, and placing calls to persons who had volunteered for cognitive research at Westat in the past but who had not been selected to participate previously. Interested persons were administered a brief screener to determine if they qualified to participate in NHES cognitive research activities. Persons were selected from among those meeting the recruiting criteria, and potential participants were called and scheduled to attend a focus group or respond to an intensive interview.

In most focus groups, homogeneity of demographic characteristics among participants is desirable, since commonality of background allows for freer expression of opinions and factual detail. However, focus groups conducted in the past for the NHES have demonstrated that demographic differences are often superseded by a common concern with parenting issues that promotes free discussion, while demographic variety opens the possibility for participants to reveal a wider range of experiences. Therefore, diversity of race and level of education was sought for each focus group. The parents recruited came from households in which the only parent or both parents worked at least part time. Past experience indicates that mothers are usually most well-informed about their children's schooling and care arrangements, so there was no effort to balance the groups by gender. An effort was made to include parents of more than one child in the target grade range, of children in different grades, and of children attending different schools. Finally, every attempt was made to have an array of arrangements and programs represented in each group.

Participants for the intensive interviews were recruited from the same pool of cognitive research volunteers from which the focus group participants had been drawn. For the ECPP and ASPA surveys, parents were selected on the basis of demographic characteristics, such as race, level of education, marital status, and occupational status. Also, parents with different care arrangement types, such as relative care, nonrelative care, and center-based care, as well as parents with children in different grade levels were selected.

The recruiting criteria for the AELL survey also sought diversity in race, education level, and occupation. However, the main recruitment criterion was participation in an adult education activity, especially work-related courses, personal interest courses, and/or degree or credential programs, within the past 12 months. Since adults who ordinarily take work-related courses tend to be more highly educated, there was little variability in the educational background of those recruited for AELL intensive interviews (all had at least a bachelor's degree). However, demographic variation among those recruited with respect to gender, race/ethnicity, and marital status was achieved.

Round 1—Focus Groups

The first round of cognitive research consisted of two focus groups to gather information for the ASPA survey. Because the ASPA was a new survey for the NHES, it was determined that focus groups would offer insight into the variety of arrangements used by parents to care for their children during the before- and after-school hours. Focus groups, consisting of 8 to 10 participants and led by a trained moderator using a semistructured protocol, are designed to take advantage of group interaction, and the informal discussion often produces rich and unexpected information. Group members cue each other as they discuss their experiences and attitudes, facilitating recall, motivating participation, and encouraging self-revelation. Focus groups provide an open forum for the expression of information and beliefs that go well beyond what may be captured by a more constrained quantitative survey with closed-ended questions, and therefore, they are well suited to test concepts and wording to be used in a new survey. However, this methodology would have less utility for the ECPP and AELL surveys because they have been the subjects of focus group discussions in cognitive research conducted for past survey administrations.

For the purpose of the cognitive research, before- and after-school arrangements were conceptualized as falling into two general categories, center-based programs on the one hand, and all other arrangements, including relative care, nonrelative care, self-care, and other adult-supervised activities, on the other. Because of this conceptual dichotomy, two focus groups were organized to explore issues related to the ASPA interview. Participants were assigned to the focus group corresponding to the type of before- and after-school care in which their children participated, either center-based programs or another type of arrangement. Each participant was paid an honorarium of \$40. The focus groups were held in Westat's focus group room, lasted approximately 2 hours, and were led by the NHES project director. The ASPA survey manager and NCES and ESSI staff observed the groups.

Ten adults participated in the first focus group and eight in the second. Of the total 18 participants, 6 were Black, 6 were White, 3 were Hispanic, 2 were Asian, and 1 was Native American. All but two of the participants were female. Four participants had a high school diploma or less, seven had some college, six had a bachelor's degree or higher, and no educational information was available for one participant. Exhibits C-1 and C-2 in appendix C present details about the focus group participants.

Protocol and Topics of Discussion

The focus groups were led by a trained moderator and guided by a predetermined set of topics. The moderator's guide consisted of broad, open-ended questions designed to stimulate discussion among participants. Before the discussion began, parents were asked to map their children's activities before and after school during the previous week. This provided a useful backdrop for analyzing the comments made during the discussion.

In the first focus group, the discussion began with parents describing the arrangements they had in place at that time using the words and concepts most familiar to them. This part of the discussion also addressed special arrangements that parents might have when children are not in school yet parents are working, such as school holidays, inservice days, or when the child is sick. Parents were encouraged to talk about their particular needs for child care while they are working and the extent to which their current arrangements met those needs. The issues of location of the arrangement and transporting the child to and from the arrangement were included, as were the challenges posed by different arrangements for siblings or multiple arrangements for one child.

To help explore the issues of choice and barriers, parents were asked to describe former before- and after-school arrangements for their children, how long the children had participated, and why the arrangements had changed. The topics of self-care and sibling care were major discussion points in the group composed of parents with non-center-based arrangements and was touched on in the group of parents with children in center-based programs. The advantages and disadvantages of self- and sibling care as opposed to other arrangements, as well as parental strategies for monitoring children in self- or sibling care, were explored.

The second focus group incorporated topics pertinent to parents with children in center-based programs. The relative desirability of center-based programs versus other arrangements was explored. Factors such as convenience, cost, and the receipt of private or public subsidies were included in the discussion. Issues associated with program staffing and parent involvement were also discussed.

Information about decisionmaking regarding types of before- and after-school arrangements or programs was elicited. Parents were asked how they learned about the arrangement or program in which their children were participating, what their alternatives were, how they decided on their current type of arrangement, the main reason for selecting the current arrangement, and how satisfied they were with their choice. The discussion incorporated parents' expectations for the arrangements/programs in which their children participated, for instance, whether academic enrichment or exposure to cultural

events or new technologies figured in their choice, and what type of arrangement parents would make for their children if all alternatives were available to them. Information about barriers to participation in center-based programs was invited. Parents were also asked to specify what to them were the indicators of quality in before- and after-school arrangements and to evaluate the cost of their arrangements in light of the benefits to their lives and those of their children. Discussion included reference to the impact on parents' work schedules and responsibilities as related to choice of arrangement. Parents were asked for reports of their children's satisfaction with the current arrangement or program. Finally, differences in activities by type of arrangement were discussed, and the parents' confidence in reporting was noted.

Focus Group Findings

The focus groups conducted for the ASPA survey aimed to elicit from parents their perspectives on a host of issues regarding the out-of-school arrangements they make for their children. The ASPA focus groups led to the development of items measuring participation in four types of arrangements, as well as items designed to capture activities arranged by parents to provide supervision for children. The information gathered from parents in the focus groups benefited questionnaire design in a variety of ways. First, focus group results revealed new information from parents' points of view and confirmed that parents reported with confidence about many aspects of their children's before- and after-school activities. Second, results made apparent what parents do *not* know or are not able to articulate about their children's programs and activities before and after school. Having this information helped NCES avoid asking questions that may not have elicited meaningful responses from parents. Third, results provided clarification of issues and terminology that were significant to both parents and researchers, but not adequately clarified in questionnaire items.

Overall, parents in both focus groups revealed that maintaining arrangements for their children before and after school is a difficult and ongoing process. Almost all of the parents relied on a patchwork of arrangements to ensure that their children were cared for. Specific recommendations that emerged from the focus groups included focusing on before-school as well as after-school activities and programs, asking about all arrangements (up to a specific number) not just the primary arrangement, and including a limited number of questions that would measure barriers to center-based participation. Parents in the groups also had definite ideas about criteria that were important for arrangements, indicating that questions tapping that issue would be appropriate. Finally, parents were unsure about licensure and independent evaluations of their children's arrangements or programs, which suggests that their responses to such questions might be unreliable.

Round 2—Intensive Interviews

Round 2 of the cognitive research consisted of intensive interviews and was conducted for all three surveys after draft questionnaires had been developed. The methodology was chosen as the most appropriate to test the flow and wording of the interviews. With intensive interviews, the researcher focuses on one respondent at a time and tailors the specific cognitive approach to each case. In addition, intensive interviews allow assessment of respondents' willingness to answer, ability to accurately grasp the meaning of the survey questions, easily recall information, and respond with an answer that conforms to the coding categories. Preliminary administration times can also be obtained.

In order to maximize the information gathered from the cognitive research participants, every attempt was made to recruit participants who could respond to more than one interview. It was intended that respondents to ECPP and APSA interviews would be administered the interview for the other parent survey if possible, but no volunteers had children eligible for both surveys. Also, information was collected on the activities of the adult education participants' children, if any, so that participants could respond to a parent interview; however, only one person who volunteered for the research and met the other criteria for inclusion had a child and was administered an ASPA interview in addition to the AELL interview.

As previously described, participants for round 2 of the cognitive research were recruited by Westat from a variety of sources. Westat employees and their immediate families were not eligible to participate in the intensive interviews. However, pretest interviews were administered to some Westat employees who fit the recruitment criteria to test skip patterns and flow of the instruments before conducting interviews with paid respondents. In all, 24 interviews were administered to non-Westat participants: 6 ECPP, 9 ASPA, and 9 AELL interviews. All interviews were conducted in person, in small conference rooms at Westat's office in Rockville, Maryland. They were audiotaped with the permission of the participants. Each participant received an honorarium of \$40.

Eighteen adults were interviewed about their children's participation in early education programs or before- and after-school programs and activities, their own educational activities, or a combination thereof. Twelve of the participants were White, five were Black, and one was Hispanic. Five participants had a high school diploma or less, three had some college, five had bachelor's degrees, and five had master's degrees. ECPP interview participants had a variety of child care arrangements, including nonrelative care, center-based care, and in the case of one mother who works at a day care

center, bringing a child to work. Participants receiving the ASPA interview also had a variety of arrangements, including nonrelative care, sports and scouts, relative care, and center-based programs.

The AELL questionnaire was administered to participants with a variety of demographic differences. Within the 12 months prior to the research, two participants had taken only work-related courses, one had taken personal interest courses, two were in credential programs, and four had taken both work-related and personal interest classes. See exhibit C-3 in appendix C for details on characteristics of the intensive interview participants and the types of interviews administered.

Findings and Recommendations from the Early Childhood Program Participation Intensive Interviews

The large majority of items in the ECPP-NHES:2001 questionnaire were fielded in the ECPP-NHES:1995, and those questions had been tested in previous cognitive research activities. However, the 2001 questionnaire included additional topics such as parents' perceptions of the quality of their children's care arrangements, the flexibility of child care arrangements, and the use of child care subsidies while transitioning from welfare to work. These topics were the focus of the ECPP intensive interviews.

The intensive interviews for the ECPP questionnaire provided useful information about the length and flow of the questionnaire and about parents' ability to recall and report with confidence on their children's child care arrangements. Overall, the interview was quite lengthy, about 25 minutes. Respondents indicated that several questions were redundant (e.g., backup care arrangements and options), and these items were suggested for deletion. The cognitive research interviews also revealed problems with skip patterns, particularly in the welfare section where all parents should be asked if they receive child care subsidies, regardless of welfare status. Also, it was discovered that parents were able to report on their perceptions of the quality of their child care arrangements and on the difficulty they had in finding child care. Parents were less able to report whether their care provider had taken early childhood education classes and whether there had been more than one option for child care that they were willing to consider.

Findings from the Before- and After-School Programs and Activities Intensive Interviews

Some of the questions to be included in the ASPA-NHES:2001 interview were fielded in the Parent-NHES:1999 and the ECPP-NHES:1995 and had already been tested. Thus, this round of cognitive research focused mainly on the testing of newer items, specifically those having to do with activities, backup arrangements, self-care, center-based program features, parental perceptions about and factors in choosing arrangements, and the impact of arrangements on parents' working lives.

Information from the intensive interviews revealed that the ASPA instrument presented few problems to respondents. Findings pointed to the need for clarification of some questions and the addition of response categories in several cases. Parents generally had considerable knowledge about aspects of their children's before- and after-school arrangements, such as their particular activities and the features of their children's center-based programs. Further, feedback from intensive interviews suggested the need to modify and add response categories to questions that addressed specific activities within different arrangements. Another recommendation to emerge from this round of cognitive research was to remove the backup arrangement questions from each section and replace them with a single set of backup questions in a later section of the ASPA interview, which would shorten the interview and avoid the redundancy reported by intensive interview respondents. As for results relating to parental perceptions and factors in choosing arrangements for their children, findings suggested the need for considerable revision of question wording and response categories, although in general parents found these questions to be meaningful and answerable.

Findings from the Adult Education and Lifelong Learning Intensive Interviews

Cognitive interviews for the AELL survey focused largely on sections pertaining to college or university programs, work-related courses, personal interest/development courses, and informal learning activities. Although revisions were made in both the ESL and adult basic education sections for the NHES:2001 instrument, most of the items in these sections were fielded in previous NHES administrations.

The cognitive research conducted for the AELL survey indicated the need for some limited changes to the interview. For example, respondents had difficulty reporting their transportation costs for participation in AELL activities if they drove their own vehicles to the classes. However, items asking about other expenses, including tuition or fees and books or materials, did not present any difficulties for

respondents. The cognitive research also revealed that the interview would proceed more efficiently if it was ascertained whether an adult was employed at the time of participation in a particular AELL activity prior to asking questions concerning employer support. Those who did not have a job at the time would skip the employer support questions. Another suggested change was dropping the total number of hours for participation in informal learning activities. These types of learning activities are often ongoing and spread throughout the 12-month period, making it very difficult for respondents to give a time estimate. Also, new probes were recommended for interviewers to provide cues for any other courses that the respondent might have taken but did not initially recall.

Field Test

Following completion of the survey design (including cognitive research) and receipt of Office of Management and Budget (OMB) clearance, a two-phase field test of the NHES:2001 surveys was conducted. The purpose of phase 1 of the field test was to assess the instruments under actual survey conditions and to make sure the CATI system, specifically skip patterns, logic checks, etc., was operating correctly. In addition, the field test provided an opportunity to identify areas of respondent confusion, lack of knowledge, and related measurement issues by monitoring and analyzing actual interviews. The second phase of the field test focused on the ECPP and ASPA surveys, because changes to those instruments following phase 1 warranted further live testing, while the few made to the AELL instrument did not.

For the NHES:2001 field test sample, 5,500 telephone numbers were purchased from the Marketing Systems Group (MSG) at GENESYS Sampling Systems, a commercial firm from which previous NHES field test samples have also been obtained. For cost efficiency and simplification of scheduling of interviewers for the field test, the sample contained only listed, residential telephone numbers from the eastern and central time zones. With such a sample, the screening out of nonworking and nonresidential numbers was reduced and the need to schedule late-night interviewer hours to cover other time zones was eliminated. This is common practice for field testing and does not have any negative implications as far as evaluating the performance of the survey instruments because all types of households are represented in eastern and central time zones.

To help maximize the chances of completing the desired number of interviews during the field test period, GENESYS was instructed to draw the numbers from the most recent MSG sampling frame (the frame is updated quarterly) and to use demographic data to ensure that the set of numbers for the field test included a higher prevalence of households with children aged 17 or younger than would be

found in a random sample. The MSG frame comprises all working 100-banks with at least one listed telephone number. Demographic data are attached to about half of the telephone numbers on the frame, although they are not guaranteed to be accurate. The sampling algorithms programmed into the CATI system were the same as those to be used for the full-scale data collection. However, the sampling of certain subgroups (for example, elementary students, who are relatively plentiful in the population) was stopped when the field test interviewing goals for that group were met in order to ensure that time was available for interviewing other groups of interest.

Goals were established for the number of interviews conducted in the field test for each major path or subpopulation of interest in the NHES:2001. The initial goals for the field test included 900 extended interviews. This number was selected based on previous cycles of the NHES survey and the intent was to provide a sufficient number of cases to assess all aspects of the questionnaire, including testing of all possible paths and items. However, during the course of the field test this number was modified, with NCES approval, to 640 extended interviews. The decision to adjust the field test goals was made when it became apparent that the time required to complete each extended interview was longer than had originally been anticipated. After reviewing the data that had been collected in the first half of the field test and noting that there were sufficient numbers of respondents in each interview path to accomplish the substantive field test goals, it was determined that meaningful results could be obtained using a smaller number of cases. No specific goals were established for the NHES:2001 Screener. Instead, Screeners were completed as necessary to obtain the target numbers of extended interviews. Outlined in table 2-1 are the original and adjusted targets and the actual numbers of completed phase one field test interviews.

Interviewer Training

The initial interviewer training was conducted at Westat's Rockville, Maryland, Telephone Research Center (TRC) on the evening of May 31, 2000. Twenty-one interviewers were trained for the field test, all of whom had experience as interviewers in previous NHES studies. However, because the labor time required per completed interview was greater than expected, the field test was extended and an additional 14 experienced interviewers and 2 supervisors were trained at Westat's Frederick, Maryland, TRC on the evening of June 6, 2000. Both training sessions were led by project staff and the NHES:2001 TRC manager for the NHES. Training was conducted for the English-language version of the instruments only; interviews were not conducted in Spanish during the field test.

Each training session lasted approximately 4 hours and included three interactive lecture scripts that presented several scenarios in which household members were sampled and interviewed. The sessions also provided an opportunity to review questions commonly asked by respondents and furnish the interviewers with appropriate answers. These sessions presented information on the mechanics and flow of each interview in the NHES:2001, important substantive concepts in each interview, as well as some strategies for gaining respondent cooperation.

Table 2-1. Phase 1 field test interviewing targets and results: NHES:2001

Interview type	Original minimum targets ¹	Adjusted minimum targets	Interviews completed
 Screener	†	†	427
ECPP interviews			
Total.....	350	250	320
Infant/toddlers.....	150	125	168
Preschoolers.....	150	125	152
ASPA interviews²			
Total.....	350	250	254
Grades K–4.....	†	†	99
Grades 5–8.....	†	†	155
AELL interviews³			
Total.....	200	140	135
Participants.....	120	†	87
Nonparticipants.....	50	†	48

† Not applicable.

¹ Original targets for subpopulations represent minimums for each subgroup and do not sum to the total. For example, the original target for ECPP was 350 total interviews, with at least 150 being about infants/toddlers and at least 150 being about preschoolers.

² No specific targets were set for grades K–4 and 5–8 in the ASPA Survey (adjusted targets). Specific numbers for these groups are provided here for informational purposes.

³ No specific targets were set for AELL participants and nonparticipants (adjusted targets). Specific numbers for these groups are provided here for informational purposes.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), NHES:2001 field test, 2000.

Data Collection and Debriefing

The data collection for the first phase of the field test started on Thursday, June 1, 2000. The field test was originally scheduled to be completed on Sunday, June 4, 2000. However, as noted above, this was extended in order to attempt to meet the adjusted minimum targets for each survey. The first field test ended on June 9.

During data collection, Westat NHES staff, TRC supervisors, NCES staff, and ESSI staff monitored interviews extensively. At least one person from the NHES project staff or the TRC operations manager monitored during all field test data collection hours. Monitors and interviewers documented questionnaire-related matters, such as respondent questions or confusion, recall problems, awkward question wording, and CATI-related problems.

An interviewer debriefing meeting was held on Monday, June 12 at the Frederick TRC. A standard feature of the NHES, this meeting was used to obtain feedback from the interviewers concerning their experiences in administering the survey. The meeting focused on obtaining interviewers' observations regarding the overall flow of the questionnaires, specific questionnaire items that had been targeted for examination, concepts or other issues that should be emphasized during interviewer training, as well as other additional feedback interviewers wished to give. The debriefing was attended by the NHES project director, survey managers, research assistant, and TRC operations manager, as well as an NCES staff member and five ESSI staff members.

A staff debriefing was held on June 19, and included the NHES project director and survey managers, the NCES COTR and other staff members, and ESSI staff. Recommendations for instrument changes were discussed at this meeting and in a subsequent meeting and conference call. A preliminary field test report and revised questionnaires were submitted to NCES prior to the second phase of the field test.

Phase 2 Field Test Procedures

The second phase of the NHES:2001 field test focused specifically on the ECPP and ASPA interviews. The changes to the AELL instrument following phase 1 were not sufficiently complex or extensive to warrant a second field testing of that instrument. However, several significant changes were made to the ECPP and ASPA interviews, and it was determined that a second, although smaller, field test would be appropriate. In addition to the assessment of all changes made following phase 1, the following new sections of the interview common to both the ECPP and ASPA interviews were examined in the second phase of the field test: the reasons for choosing parental care and the desire for nonparental care; the presence of same-sex parents in the household; and care arrangements while the mother is at work. Also, for the ASPA survey, special attention was focused on children's activities, both within after-school programs and those participated in for their own sake.

Interviewer Training

The second phase of the field test was conducted at Westat's Frederick, Maryland, TRC. An abbreviated training session was held in which nine interviewers were trained for a period of 2 hours. All of the interviewers who worked on phase 2 of the field test had worked on phase 1.

Sampling Procedures and Completed Interviews

The sample for the second phase of the NHES:2001 field test consisted of 2,836 telephone numbers remaining from the phase 1 sample. This group included 1,213 telephone numbers that were not called during phase 1, and 1,623 numbers that had been called, but at which no contact had been made. Contrary to the experience in phase 1, labor time per completed interview was shorter than expected in phase 2, and the final number of interviews completed exceeded the phase 2 goals. Table 2-2 shows the number of expected and completed phase 2 interviews.

Table 2-2. Phase 2 field test interviewing targets and results: NHES:2001

Interview type	Original targets	Interviews completed
Screener.....	†	311
ECPP interviews	40	74
ASPA interviews.....	60	86

† Not applicable.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), NHES:2001 field test, 2000.

Data Collection and Debriefing

The data collection for the phase 2 field test started on Thursday, September 28, 2000, and ended on Sunday, October 1, 2000. As in phase 1, Westat NHES staff, TRC supervisors, NCES staff, and ESSi staff monitored interviews extensively. Monitors and interviewers documented questionnaire-related matters, such as respondent questions or confusion, recall problems, awkward question wording, and CATI-related problems. An interviewer debriefing meeting was held on Monday, October 2, at the Frederick TRC with Westat NHES staff, NCES staff, and ESSi staff attending. The meeting focused on

obtaining interviewers' observations regarding the specific changes that had been made following the phase 1 field test, but interviewers' comments on any other matters of concern were also solicited.

A staff debriefing held on October 5 included the NHES project director and survey managers, the NCES COTR and other staff members, and ESSI staff. Proposed changes were discussed, and decisions were made regarding final changes to the questionnaires. Revisions involved items new to the NHES:2001 surveys and items that were modified after the cognitive research activities. The field test also provided an opportunity to collect questionnaire administration timings. The tools for analyzing the questionnaires included these interview administration times, feedback from interviewers, and the observations that staff members made while monitoring the interviews. The field test analysis also included examinations of the item response and nonresponse distributions, entries in "other, specify" variables, online comment entries, and hard and soft range data editing violations.

A report giving the administration time for the Screener and each survey was submitted to NCES. It documented revisions to the questionnaire that had been agreed upon and the reasons for those revisions. A memorandum documenting the changes was also submitted to OMB, along with the full field test report and the final instruments.

3. SAMPLE DESIGN

An important purpose of the NHES is to conduct repeated measurements of the same phenomena at different points in time, and this goal is reflected the sample design of the NHES:2001. The NHES:2001 is a random-digit-dial (RDD) telephone survey covering the 50 states and the District of Columbia. It was conducted from January through mid-April 2001. Households were randomly sampled, and a screening interview was administered to a household respondent age 18 or older.⁷ Demographic information about household members was used to determine whether anyone was eligible for the ECPP, ASPA, or AELL surveys.

The ECPP survey was administered to the parent or guardian⁸ in the household who was most knowledgeable about the care and education of the sampled child from birth through age 6⁹, as of December 31, 2000, who was not yet in kindergarten. For the ASPA survey, the parent/guardian most knowledgeable about the care and education of children age 15 or younger¹⁰ who were enrolled in kindergarten through 8th grade were interviewed. The AELL survey was administered to sampled persons 16 years or older who were not currently enrolled in 12th grade or below and were not institutionalized or on active duty in the U.S. Armed Forces.

Sampling Telephone Numbers

The sampling method used for the NHES:2001 was a list-assisted method described by Casady and Lepkowski (1993). This method was used previously in the NHES:1995, the NHES:1996, and the NHES:1999. The list-assisted method is a single-stage, unclustered method that produces a self-weighting sample. In a list-assisted sample, a simple random sample of telephone numbers is selected from all telephone numbers that are in 100-banks (the set of numbers with the same first eight digits) in which there is at least one residential telephone number listed in the White pages directory. This is called

⁷ Any household member age 18 or older was eligible to respond to the screening interview. However, if there were no household members age 18 or older, the male or female head of the household completed the Screener. Household members were defined as persons who considered that household as their residence, kept their possessions there, and had no other place to live.

⁸ The respondent for the ECPP and ASPA surveys was identified by the Screener respondent as the household member most knowledgeable about the care and education of the sampled child. In more than 75 percent of the cases, it was the child's mother; in more than 96 percent of the cases, it was the child's mother or father. In about 2 percent of the cases, it was the child's grandmother. For ease of discussion, the respondent is referred to as the parent/guardian.

⁹ Because the proportion of 7-year-olds who are not enrolled in school is very small (about 1.5 percent), an upper age limit of 6 was established for the ECPP survey.

¹⁰ Less than 1.5 percent of children enrolled in 8th grade are 16 years or older, so the upper age limit for the ASPA survey was set at 15 years.

the listed stratum. Telephone numbers in 100-banks with no listed telephone numbers, the zero-listed stratum, are not sampled. The telephone numbers in the listed stratum include both listed and unlisted numbers and both residential and nonresidential numbers. Telephone exchanges are classified by Bellcore type, a code that indicates the types of telephone numbers assigned within the exchange (e.g., mobile only, cellular only, etc.). A complete list of Bellcore type codes is given in exhibit 3-1. For the NHES:2001, as in previous NHES studies, telephone numbers were sampled from exchanges having Bellcore types 00 or 52 only, which cover about 99 percent of listed households. However, for future NHES studies, this restriction should be reexamined; in particular, Bellcore types 50, 51, and 54 should be considered. These were excluded because of ethical concerns about cellular telephone customers having to pay for incoming calls. In the future, studies will be conducted to assess the advisability of sampling from these types also.

Exhibit 3-1. Bellcore type codes: 1999

Code	Description
00	Regular
01	Mobile
02	Paging
03	Packet switching
04	Cellular
05	Test code
06	Maritime
07	Air to ground
10	Called party pays
11	Information provider
13	Directory assistant
15	Official exchange carrier service
16	Originating only
30	Broadband
50	Shared among 3 or more services
51	Shared between plain old telephone service (POTS) and mobile
52	Shared between POTS & paging
54	Shared between POTS & cellular
55	Special billing options - Cellular
56	Special billing options - Paging
57	Special billing options - Mobile
58	Shared among 2 or more
60	IntraLATA billing option - Cellular
61	IntraLATA billing option - Paging
63	IntraLATA billing option - Mobile
65	Special option
66	Special option
67	PCS / Miscellaneous service
68	Selective local exchange, IntraLATA special billing option - PCS / Misc.

SOURCE: Marketing System Group's GENESYS third quarter 1999 database.

In the NHES:2001, unlike previous NHES administrations, a two-phase stratification was used to select telephone numbers in order to produce more reliable national estimates from the extended interviews for subdomains defined by race and ethnicity. The two-phase selection is described more fully later in this chapter.

An issue that arises with the list-assisted sampling scheme is that of coverage bias because not all telephone households are included in the listed stratum; households in the zero-listed stratum have no chance of being included in the sample. (A *telephone household* is a household with at least one working, residential land-line telephone number.) Empirical findings were presented in Brick et al. (1995) to address the question of coverage bias. The results show that the percentage of telephone numbers in the zero-listed stratum that are residential is small (about 1.4 percent) and that about 3 to 4 percent of telephone households are in the zero-listed stratum. Similar findings were reported in Giesbrecht, Kulp, and Starer (1996) based on data from the Current Population Survey. Therefore, the bias resulting from excluding the zero-listed stratum is generally very small.

As in previous NHES administrations, tritone¹¹ checks for nonworking numbers and purging of business numbers was done prior to data collection to reduce the number of unproductive calls. All telephone numbers that were not identified as business numbers or nonworking numbers through these checks were sent to two vendors to obtain mailing addresses.¹²

Oversampling Blacks and Hispanics

The general precision requirement for each survey in the NHES:2001 was the ability to detect a 10 to 15 percent change for an estimate of between 30 and 60 percent (see appendix D for details). As in previous NHES administrations, one goal of the NHES:2001 was to produce reliable estimates for race/ethnicity subdomains (in particular, Blacks and Hispanics). The initial sample design for the NHES:2001 was based on using the approach used in previous studies to improve the precision of estimates for Blacks and Hispanics; specifically, the probability of selecting telephone exchanges with high concentrations of Blacks and Hispanics should be twice the probability of selecting exchanges with lower minority concentrations. However, a subsequent examination of this method and evaluation of alternative methods led to the decision to use a different approach for the NHES:2001.

¹¹ A tritone is the three-note sound heard when dialing a nonworking telephone number.

¹² See chapter 4 for a discussion of these procedures.

A re-evaluation of the approach used in previous NHES studies was warranted for several reasons:

- Since the original evaluation of the oversampling method (based on the NHES:1989 field test), the method of sampling telephone numbers had changed from the modified Mitofsky-Waksberg method to the list-assisted method.¹³
- Demographic changes, especially the distribution and concentration of race/ethnicity subgroups, could affect the effectiveness of oversampling.
- Changes in residency rates could affect the effectiveness of oversampling, particularly if there are disproportionate changes across strata. (A *residency rate* is the number of residential telephone numbers divided by the total number of telephone numbers.)
- An alternative under consideration was differential sampling of telephone numbers based on whether or not they are listed in the White pages directory (i.e., “listed” vs. “unlisted” numbers).
- The sampling frame used to select the sample of telephone numbers had been enhanced to include information about the percent Asian in the exchange. In light of the interest in the ability to produce reliable estimates of characteristics of Asian Americans, an evaluation of the effect of the alternatives on the expected yield for Asians was warranted.

For the evaluation, several alternative stratification schemes were considered. The alternative definitions of a “high-minority” stratum considered were:

- At least 10 percent Black or at least 10 percent Hispanic;
- At least 20 percent Black or Hispanic;
- At least 20 percent Black or at least 20 percent Hispanic;
- At least 30 percent Black or Hispanic; and
- At least 30 percent Black or at least 30 percent Hispanic.

Additionally, alternatives combining minority stratification with differential sampling of listed versus unlisted telephone numbers were considered. The evaluation compared the expected precision of estimates across alternatives, holding the total cost fixed. It was determined that among the alternatives considered, stratification involving both minority strata and the listed status of the telephone number was optimal, and that the alternative in which “high minority” is defined as “at least 20 percent Black or at least 20 percent Hispanic” was optimal. Additionally, the high minority stratum was found to have a higher concentration of Asians than the low minority stratum. Therefore, oversampling in the high

¹³In the modified Mitofsky-Waksberg procedure, telephone numbers are grouped in 100-banks that are treated as primary sampling units (PSUs). One telephone number in each PSU is randomly selected (the prime number) and is dialed. If the prime number is residential, then the PSU is retained in the sample, otherwise the PSU is eliminated. The screening of PSUs continues until the required number of residential PSUs is identified. See Brick and Waksberg (1991) for further information. The change to the list-assisted method eliminated the need to screen prime numbers and gives an unclustered sample, resulting in a reduction in sample variance.

minority stratum was expected to raise the sample yield for Asians (as compared to an equal probability design), even though Asians are not explicitly considered in the definition of “high minority.”

As discussed below, race/ethnicity distributions were available on the sampling frame. However, the listed status of telephone numbers was not available on the frame. The standard procedure is to match the sample of telephone numbers to White and yellow pages directory listings to obtain the listed status of each sampled telephone number. Therefore, in order to stratify on both minority concentration and listed status, it was necessary to select the sample of telephone numbers in two phases. The first phase involved minority stratification only. The listed status was obtained for each first-phase telephone number, and the second phase involved subsampling from the first-phase sample using strata defined by the combination of minority stratum and listed status.

It should be noted that the listed status used for stratification for the second phase selection of telephone numbers is different from the “listed stratum” (discussed earlier) that was used to restrict the sampling frame. At the second-phase selection, the listed status used for stratification was the listed status of the particular telephone number; at the first-phase selection, the listed stratum to which the frame was restricted was the set of 100-banks containing at least one listed telephone number. For sake of illustration, suppose the telephone number (301) 555-1234 was not listed in the White or yellow pages directory, but the number (301) 555-1256 (which is in the same 100-bank as the former number) was listed in a White pages directory. The 100-bank (301) 555-12xx (where the last two digits xx are any two digits 00 through 99) would be in the listed stratum, and all numbers in this 100-bank would be eligible for selection in the first phase. If the number (301) 555-1234 had been selected in phase one, then it would have been included in the unlisted stratum for the phase two selection.

Much of the sample design for the NHES:2001 was done prior to the evaluation of alternatives for oversampling race/ethnicity subgroups. Because the precision of estimates for the White, non-Hispanic subgroup far exceeded requirements in the original design and the final design was expected to reduce the precision of estimates from this subgroup alone, it was not necessary to reproduce all of the tabulations in this report based on the original design with new tabulations based on the final design. Therefore, this report contains some tabulations based on the original design and some based on the final design. Specifically, all tabulations in appendix D are based on the original sample design (i.e., prior to the evaluation of alternatives for oversampling race/ethnicity groups). Some of the tabulations in this chapter, although initially created using the original sample design, have been updated to reflect the final sample design. For tabulations presented in this chapter that were based on the original design but were not updated to reflect the final design, footnotes have been included to indicate that the sample is based on assumptions of the original sample design.

Sampling Frame

The sampling frame for the NHES:2001 was the Marketing System Group's (MSG's) GENESYS frame of all telephone numbers in 100-banks with one or more listed telephone numbers for the fourth quarter of 2000. MSG is a commercial firm that has produced samples of telephone numbers for previous NHES studies. The sampling frame contains estimates from the 1990 census of the race/ethnicity distributions of persons in the telephone exchange.¹⁴

Number of Sampled Telephone Numbers

The number of telephone numbers to be sampled was determined by incorporating information on precision requirements and estimated residency rates and unit response rates. The following assumptions of residency and unit response rates applied:¹⁵

- About 47 percent of telephone numbers sampled within the listed stratum were expected to be residential.
- A 76 percent unit response rate to the household screening interview was assumed.

The original sample design called for a sample of about 60,000 completed household screening interviews. However, as a result of the oversampling research, it was determined that for the same cost, a sample of about 63,000 completed household screening interviews could be obtained if stratification by listed status of the telephone number was used in addition to the minority stratification.

In order to attain the sample sizes and optimal allocation under the stratification based on minority concentration and listed status, it was estimated that a total of 206,182 telephone numbers would need to be sampled for the NHES:2001. The sampling rate in the high minority concentration stratum was nearly twice that of the low minority stratum. Based on data from MSG's GENESYS third quarter 2000 database, it was determined that in the first phase of selection, 101,170 telephone numbers would need to be sampled from the high minority stratum, and the remaining 105,012 telephone numbers would need to be sampled from the low minority stratum.

¹⁴The 2000 Census data were not available in time for inclusion in the sampling frame for the NHES 2001.

¹⁵Under the original design (with stratification based on minority concentration alone), the assumed residency rate was 44 percent and the expected Screener response rate was 75 percent. The figures cited here accounted for differences in the NHES:1999 in residency and response rates across the minority by listed status subgroups.

In the second phase, within each minority stratum, the sampled telephone numbers were stratified as listed or unlisted according to whether they matched listings in the White pages telephone directory. Within each of the four strata defined by the combinations of minority concentration and listed status, telephone numbers were subsampled at different rates, with the aim of obtaining the final allocation of telephone numbers given in table 3-1. Because higher proportions of minority households are in the unlisted strata¹⁶ (based on estimates from the NHES:1999), within each of the minority strata, telephone numbers in the unlisted substratum were sampled at rates about 30 percent higher than numbers in the listed substratum. All differential sampling, including differential sampling of telephone numbers based on minority concentration and listed status, was accounted for in the calculation of base weights (see chapter 7).

Table 3-1. Expected allocation of final sample of telephone numbers: NHES:2001

Minority stratum	Listed status ²	Final number of telephone numbers in sample ¹
Total	†	179,211
High minority	Listed	22,681
High minority	Unlisted	65,942
Low minority	Listed	28,271
Low minority	Unlisted	62,317

† Not applicable.

¹ Does not include reserve sample.

² Unlisted includes numbers listed in the yellow pages directory but not in the White pages directory.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

In this manner, a sample of 179,211 telephone numbers was selected for the NHES:2001.¹⁷ Assuming that 47 percent of the telephone numbers would belong to households and assuming a Screener unit response rate of 76 percent, it was expected that about 63,000 screening interviews would be completed. However, the actual residency rate was 43 percent, and the Screener unit response rate was 69 percent. The number of households with completed screening interviews was 48,385. The effect of the lower-than-expected residency and unit response rates on expected sample yield is discussed later in this chapter.

¹⁶Here, the terms “listed strata” and “unlisted strata” are used to describe strata created based on the actual White pages-listed status of the individual telephone number. In the earlier discussion of the list-assisted method, the term “zero-listed stratum” was used to refer to 100-banks in which no telephone number in the 100-bank is listed in the White pages.

¹⁷The remaining 26,971 telephone numbers from the first phase sample of 206,182 were held in reserve but not used.

Within-Household Sampling

Persons within households that had a completed Screener were sampled for the ECPP, ASPA, and AELL surveys. One key criterion in the development of the sampling scheme for the NHES:2001 was minimizing respondent burden. Considerations of the numbers of persons within a household sampled for extended interviews and the combinations of extended interviews weighed heavily in the development of the sampling scheme.

Precision Requirements

The general precision requirement for all three surveys was the ability to detect a 10–15 percent relative change for an estimate of between 30 and 60 percent. The following paragraphs provide further detail on more specific requirements for each survey. In the NHES:2001, the overall screening sample is largely determined by the need to produce precise estimates of indicators for children, particularly preschoolers (age 3–not yet in kindergarten)¹⁸ and middle schoolers (6th–8th graders). It is useful to assess how the NHES:2001 sample can be combined with estimates from earlier NHES surveys to examine change over time. In a simple comparison, a t-test statistic is

$$t = \frac{p_1 - p_2}{\sqrt{\frac{d_1 p_1 (100 - p_1)}{n_1} + \frac{d_2 p_2 (100 - p_2)}{n_2}}}$$

where p is the estimated percentage, d is the design effect, n is the sample size, and the subscripts 1 and 2 denote the two time periods. The current survey's sample size requirements for detecting change are highly dependent on the sample sizes and precision achieved in previous surveys. Thus, increasing the sample size in the NHES:2001 drastically above the levels of previous surveys would not have substantially improved the precision of estimates of change over time. However, one important consideration was that if larger sample sizes were anticipated for future surveys, then having larger sample sizes in the NHES:2001 would facilitate the detection of change over time in the future.

Of course, the t-statistic is only one of the many methods that can be used to detect and characterize change over time with data from the NHES. Regression analysis or simple trend analyses of the various surveys over time are other ways of analyzing these data. For nearly all the methods,

¹⁸Throughout this report, the subgroup of children age 3 through 6 not yet enrolled in kindergarten is referred to as “preschoolers (3–not yet in kindergarten)” or simply “preschoolers.”

increasing sample sizes drastically over those in previous survey administrations does not result in large increases in the power or the precision of the estimates.

Bearing in mind the effects of sample sizes from previous administrations on the capacity to detect change over time, the sample size requirements for key estimates were derived. For the ECPP and ASPA surveys, key sample size determinants were the requirements to detect changes in estimates of type of care arrangement by age/grade groupings and by race/ethnicity. The age/grade groupings considered were infants (0–2 years), preschoolers (3–not yet in kindergarten), elementary schoolers (kindergarten–5th graders), and middle schoolers (6th–8th graders). The race/ethnicity categories considered were White, non-Hispanic; Black, non-Hispanic; and Hispanic. As a result, target sample sizes of about 5,500 for infants, 4,600 for preschoolers, 6,750 for elementary schoolers, and 6,060 for middle schoolers were established. Based on these sample size requirements, middle schoolers and preschoolers needed to be sampled at the highest rates. Details of the derivation of these sample sizes are provided in appendix D.

For adults, key sample size determinants were the requirements to detect changes in estimates of participation in adult education activities (overall) and participation by type of adult education. In addition, the requirements to estimate participation by race/ethnicity and by educational attainment (less than high school or high school and higher) were also considered. Based on these requirements, a target sample size of about 18,750 adults was established. Adult education participants were sampled at a higher rate than nonparticipants in order to improve the precision of estimates of characteristics of participants. Also, adults with less than a high school diploma were sampled at a higher rate for the same reason. Details of the derivation of sample sizes for adults are given in appendix D.

The sample requirements for the extended interviews were determined based on a set of assumptions about extended interview unit response rates. Specifically, the assumed unit response rates were 90 percent for the ECPP and ASPA interviews and 81 percent for the AELL interview.

Sampling Scheme for Within-Household Sampling

The sampling scheme for within-household sampling was designed to satisfy the sample requirements discussed above while keeping the respondent burden to a minimum. The following were the primary goals and features of the sampling scheme for within-household sampling in NHES:2001:

- Sample no more than three persons per household.

- Because sample requirements were most stringent for middle schoolers and preschoolers, one middle schooler and one preschooler would be sampled in every household that had such children.
- Because the numbers of adults, elementary schoolers, and infants identified in all screened households would exceed the sample requirements, at most two of an adult, a elementary schooler, or an infant in any given household would be sampled; that is, there would be no household in which an elementary schooler, an infant, and an adult would all be sampled.
- Because adults with less than a high school diploma who participate in adult education were of particular interest, they would be sampled at a higher rate than other adults.
- In a subsample of households without children, two adults with an educational attainment of less than a high school diploma were eligible to be sampled.

In order to carry out this sampling scheme, several flags and/or random numbers were set prior to screening (i.e., at the time the sample of telephone numbers was drawn). The first specified whether adults in the household were to be enumerated. Each telephone number received one of three possible designations:

- (1) Household designated for adult enumeration;
- (2) Household designated for adult enumeration only if there were no eligible children in the household; or
- (3) Household was not designated for adult enumeration.

This flag was set such that households with eligible children were designated for adult enumeration at approximately two-thirds the rate of households without eligible children (about 50 percent vs. 75 percent).

The Screener contained a “screen-out” question to determine whether there were any eligible children in the household. The response to that question and the values of the aforementioned sampling flags determined the extent of the household enumeration. Based on the proposed sampling scheme discussed below, in 25 percent of households without children, no enumeration was required. This equated to slightly more than 20 percent of *all* screened households. As a result, it was expected that about 10,300 households would be screened out. That is, in about 10,300 households, no enumeration was required and no one sampled for an extended interview.

Exhibit 3-2 shows all possible combinations of children in each domain for households with eligible children with their respective domain probabilities of selection. A random number designated whether or not to sample an elementary schooler, if the household had exactly one elementary schooler

and no other children. A second random number designated whether to sample an elementary schooler and/or an infant, if the household had at least one elementary schooler and a preschooler, an infant, or both. A third random number designated whether to sample an elementary schooler, an infant, or an adult in households where there was at least one middle schooler and at least one preschooler, and an elementary schooler, an infant, or both. A fourth random number designated whether to sample an adult in households that did not meet the requirements for the third random number. This fourth number also contained the information to oversample adults with less than a high school diploma.

In households in which an adult was to be sampled, among adults with less than a high school diploma, adult education participants had 3.5 times the probability of selection of nonparticipants. Among adults with at least a high school diploma, adult education participants were given a probability of selection about 1.8 times as large as the probability of selection assigned to nonparticipants. In addition, adults with less than a high school diploma were given a probability of selection 3 times as large as adults with a high school diploma or higher.

Exhibit 3-2. Overview of the sampling scheme for selecting children based on household composition: NHES:2001

Household composition				Domain probability of selection			
Middle schooler in house-hold	Elementary schooler in household	Preschooler in household	Infant in household	Middle schooler	Elementary schooler	Preschooler	Infant
			√	0	0	0	1
		√		0	0	1	0
	√			0	0.7 ¹	0	0
	√			0	1 ¹	0	0
		√	√	0	0	1	1
	√		√	0	0.5	0	1
	√	√		0	0.5	1	0
	√	√	√	0	0.5	1	0.5
√				1	0	0	0
√			√	1	0	0	1
√		√		1	0	1	0
√		√	√	1	0	1	0.5
√	√			1	0.5	0	0
√	√		√	1	0.25	0	0.75
√	√	√		1	0.5	1	0
√	√	√	√	1	0.25	1	0.25

¹ In households with exactly one elementary schooler and no other children, the child was selected with probability 0.7. In households with two or more elementary schoolers and no other children, one child was selected with probability 1.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Exhibit 3-3 shows all possible combinations of household compositions for sampling adults, with the respective domain probabilities of selection for adults. The maximum rate at which adults in

households without children were sampled was 75 percent. That is, in 25 percent of households without children, no enumeration was required. For ease of presentation, exhibit 3-3 does not reflect further subsampling that was done in order to attain the desired sampling rates for adults by adult education participation status. Further details about the differential sampling of adults are given in appendix D.

Exhibit 3-3. Overview of the sampling scheme for selecting adults based on household composition: NHES:2001

Household composition			Domain probability of selection	
Child in household	Adult with less than high school diploma	Adult with high school diploma or higher	Adult with less than high school diploma	Adult with high school diploma or higher
No		√	0	0.5
No	√		0.75 ¹	0
No	√	√	0.5625	0.1875
Yes		√	0	0.33333
Yes	√		0.5	0
Yes	√	√	0.375	0.125

¹ In households without children with more than one adult with less than a high school diploma, if the household is designated for sampling adults with less than a high school diploma, then two adults were sampled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Expected Yield

This section presents the expected yield for each extended interview survey. Much of this development was done under the original design, i.e., stratification based on minority concentration alone, and a target of 60,000 screened households. Thus, some of the tabulations in this section are based on this design; notes or footnotes to that effect are given when that is the case.

ECPP and ASPA Surveys

The ECPP and ASPA interviews were conducted with the parents of a sample of children newborn through 8th grade. Estimates from the October 1997 Current Population Survey were used to determine the sampling rates for sampling children for the ECPP and ASPA interviews and to develop the sampling scheme.

Tabulations of the October 1997 CPS data showed that about 31 percent of households were expected to have at least one eligible child. Estimates of the percentage of households with eligible children or youth by age/grade group are given in table 3-2. The estimates in this table indicate that the

subdomain with the lowest prevalence in households was the “preschoolers” subdomain. However, as discussed in appendix D, relative to the sample size requirements, the proportion of households with middle schoolers was also low. Thus, the sampling scheme for NHES:2001 involved sampling one middle schooler and one preschooler in every household in which a child in either domain was present.

**Table 3-2. Percentage of telephone households with eligible children, by age/grade group:
CPS:1997**

Household composition	Percent of households
Households with children newborn through grade 8.....	31.3
Households with at least one child less than 3 years.....	9.8
Households with at least one child age 3 years through not yet in kindergarten	7.8
Households with at least one child enrolled in grades kindergarten through 2.....	10.9
Households with at least one child enrolled in grades 3 through 5.....	10.5
Households with at least one child enrolled in grades 6 through 8.....	10.1

NOTE: Because some households contain children in more than one age/grade group, these percentages sum to greater than 31.3 percent (the overall percentage of households with eligible children).

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

The percentage distribution of household compositions for households with eligible children is given in table 3-3. This table shows that nearly half (46.7 percent) of all households with children would have exactly one eligible child. Table 3-4 shows the distribution of children in U.S. households drawn from the October 1997 Current Population Survey (CPS). Table 3-5 shows the expected number of screened households based on the distribution of household composition shown in table 3-4. The majority of screened households (about 41,196 households) were expected to have no eligible children or youth. Thus, the sampling scheme for within-household sampling was developed such that the screened households with children (about 18,804 households) would provide the sample sizes needed to meet the precision requirements while holding the respondent burden to a minimum.

Table 3-3. Distribution of the number of eligible children per household, among households with eligible children: CPS:1997

Household composition	Percent of households with children	Subcategory percent
Households with exactly one eligible child	46.7	†
Households with exactly one eligible child 0 through 2 years.....	†	26.1
Households with exactly one eligible child 3 years through not in kindergarten.....	†	11.8
Households with exactly one eligible child enrolled in kindergarten through grade 2	†	15.8
Households with exactly one eligible child enrolled in grades 3 through 5.....	†	18.3
Households with exactly one eligible child enrolled in grades 6 through 8.....	†	28.1
Households with exactly two eligible children	36.6	†
Households with more than two eligible children.....	16.7	†

† Not applicable.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

Table 3-4. Distribution of household compositions (expressed as the percentage of households with eligible children): CPS:1997

Household composition	Distribution of households by presence of children enrolled in grades kindergarten through 8			
	No infants or preschoolers (age 0–not in K)	At least one infant (ages 0–2) but no preschooler (age 3–not in K)	At least one preschooler (age 3–not in K) but no infant (ages 0–2)	At least one infant (ages 0–2) and at least one preschooler (age 3–not in K)
Households with no middle schoolers				
No children in elementary school	0.00	14.10	6.28	5.44
At least one child in elementary school	25.50	6.52	7.51	2.40
Households with one middle schooler				
No children in elementary school	13.10	0.87	0.95	0.19
At least one child in elementary school	10.49	1.04	1.13	0.29
Households with two middle schoolers				
No children in elementary school	2.05	0.16	0.07	0.01
At least one child in elementary school	1.28	0.12	0.16	0.09
Households with more than two middle schoolers				
No children in elementary school	0.11	0.03	0.01	[a]
At least one child in elementary school	0.07	0.01	[a]	[a]

[a] indicates that the estimated percentage of households with the specified composition is less than 0.01 percent.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

In table 3-6, the expected numbers of children sampled for the ECPP and ASPA surveys under the original sample design (60,000 screened households) are given, by household composition.

Nearly half of all sampled children were expected to be sampled from households with no infants or preschoolers.

Table 3-7 shows the expected numbers of sampled children and the expected numbers of completed ECPP and ASPA interviews, by age/grade grouping. Under the original sample design (60,000 screened households), a total of about 9,124 [= (10,138)*(0.9)] ECPP interviews and about 11,532 [= (12,813)*(0.9)] ASPA interviews were expected to be completed, for a total of 20,656 interviews completed with parents of children. Based on the optimal allocation for the strata defined by both minority concentration and listed status, the revised sample design was expected to yield larger numbers of completed interviews. (See table 3-9.)

Table 3-5. Expected number of screened households under the original NHES:2001 sample design, by household composition: CPS:1997

Household composition	Distribution of households by presence of children enrolled in grades kindergarten through 8			
	No infants or preschoolers (age 0–not in K)	At least one infant (ages 0–2) but no preschooler (age 3–not in K)	At least one preschooler (age 3–not in K) but no infant (ages 0–2)	At least one infant (ages 0–2) and at least one preschooler (age 3–not in K)
Households with no middle schoolers				
No children in elementary school	41,196	2,652	1,182	1,026
At least one child in elementary school	4,800	1,224	1,410	450
Households with one middle schooler				
No children in elementary school	2,460	162	180	36
At least one child in elementary school	1,974	198	216	54
Households with two middle schoolers				
No children in elementary school	384	30	12	0
At least one child in elementary school	240	24	36	18
Households with more than two middle schoolers				
No children in elementary school	18	6	0	0
At least one child in elementary school	12	0	0	0

NOTE: The distribution in this table assumes 60,000 screened households—the target under the original sample design—for the NHES:2001. That number was applied to the percentage distribution from table 3-4.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

Table 3-6. Expected number of children sampled for the ECPP and ASPA interviews under the original NHES:2001 sample design, by household composition: CPS:1997

Household composition	Distribution of households by presence of children enrolled in grades kindergarten through 8				Total
	No infants or preschoolers (age 0–not in K)	At least one infant (ages 0–2) but no preschooler (age 3–not in K)	At least one preschooler (age 3–not in K) but no infant (ages 0–2)	At least one infant (ages 0–2) and at least one preschooler (age 3–not in K)	
Total	10,108	5,325	4,299	3,218	22,950
Households with no middle schoolers					
No children in elementary school	0	2,652	1,181	2,047	5,880
At least one child in elementary school	3,900	1,837	2,117	901	8,755
Households with at least one middle schooler					
No children in elementary school	2,868	396	389	92	3,745
At least one child in elementary school	3,340	440	612	178	4,570

NOTE: The distributions in this table assume 60,000 screened households—the target under the original sample design—for the NHES:2001. Numbers given in this table are expected numbers of sampled children; they do not reflect nonresponse to the extended interviews. They were calculated by applying the within household sampling algorithm to estimates from the expected counts given 3-5.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

Table 3-7. Expected number of sampled children and completed interviews under the original sample design, by age/grade grouping: CPS:1997

Age/grade subdomain	Expected number of sampled children	Expected number of completed interviews
ECPP		
Total	10,138	9,124
Infants (ages 0–2 years)	5,525	4,973
Preschoolers (age 3–not yet in kindergarten).....	4,613	4,152
ASPA		
Total	12,813	11,532
Elementary schoolers (kindergarten–grade 5)	6,752	6,077
Middle schoolers (grades 6–8).....	6,061	5,455

NOTE: The distributions in this table assume 60,000 screened households—the target under the original sample design—for the NHES:2001. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

AELL Survey

Persons 16 years or older who were not enrolled in 12th grade or below, not institutionalized, and not on active duty in the U.S. Armed Forces were eligible for the AELL-NHES:2001. Because sampling adults for AELL interviews was required in only about 31 percent of screened households, adults were enumerated during the screening interview only for a subsample of the households. This approach was expected to result in the screening out of about 10,300 households, or slightly more than 20 percent of screened households. A methodological study involving a screener experiment (Brick, Collins, and Chandler 1997) demonstrated that with a fairly high screen-out rate, this approach could be expected to result in significantly higher unit response rates compared with enumerating adults in all households; however, because the screen-out rate for NHES:2001 was relatively low, the results of the screener experiment study were not expected to apply to the NHES:2001.

Table 3-8 shows the expected number of adults sampled for an AELL interview, by number of adults in the household and presence of eligible children. Based on the sampling scheme described above, it was expected under the original sample design that 9,231 adults would be sampled as adult education participants and 9,519 adults would be sampled as nonparticipants. In the NHES:1999, about 23 percent of those sampled as adult education nonparticipants who completed extended interviews were found to be participants, and about 15 percent of persons sampled as participants who completed extended interviews were identified as non-participants. Similar percentages of sampled adults were “switchers” in the NHES:1995. Taking into account the NHES:1999 “switching” rates and assuming unit response rates of 85 percent for adults sampled as participants and 77 percent for adults sampled as nonparticipants (for a unit response rate of 81 percent for the AELL interview overall), it was expected that about 7,477 AELL interviews would be completed with participants and about 7,710 AELL interviews would be completed with nonparticipants. Based on the optimal allocation for the strata defined by both minority concentration and listed status, the revised sample design was expected to yield larger numbers of completed interviews (see table 3-9).

Table 3-8. Expected number of adults sampled for AELL interviews under the original sample design, by number of adults and presence of eligible children in household: CPS:1997

Number of adults in household	Children in household?	Expected number of sampled adults		
		Sampled as adult education participants	Sampled as nonparticipants	Total
1.....	Yes	387	394	781
1.....	No	2,670	2,735	5,405
2.....	Yes	1,437	1,450	2,887
2.....	No	3,446	3,586	7,032
3.....	Yes	199	210	409
3.....	No	754	786	1,540
4.....	Yes	60	65	125
4.....	No	212	220	432
5 or more	Yes	21	24	45
5 or more	No	45	49	94
Overall.....		9,231	9,519	18,750

NOTE: The distributions in this table assume 60,000 screened households—the target under the original sample design—for the NHES:2001.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

Summary of the Sample Design

Table 3-9 summarizes the expected numbers of completed interviews for the NHES:2001. These figures are given for the original sample design (minority stratification only) as well as the revised sample design (stratification on both minority concentration and listed status). Furthermore, to account for the effect of the lower-than-expected residency and unit response rates, these expected numbers were revised during data collection, and the revised figures are given in the last column of table 3-9.

As shown in table 3-9, the expected numbers of completed interviews were revised to 6,866 for ECPP, 9,852 for ASPA, and 11,134 for AELL. The actual numbers of completed interviews were 6,749 for ECPP, 9,583 for ASPA, and 10,873 for AELL (see chapter 5, specifically, table 5-6). The differences between the expected and actual numbers of completed interviews were mainly due to the completion of fewer Screeners than expected. Although the sample yield for children and adults was lower than expected, the lower yield did not affect the ability to detect differences between 1999 and 2001 beyond acceptable levels for key statistics that were used in the sample design. However, the reduction in sample size may have affected the ability to detect differences in other statistics that were not used to design the sample.

To facilitate comparison with previous NHES administrations, expected numbers of persons sampled for extended interviews in the NHES:2001 are given in table 3-10, along with numbers of

persons sampled for extended interviews in the NHES:1991, NHES:1993, NHES:1995, NHES:1996, and NHES:1999. Appendix D contains details about the expected precision of estimates from the three NHES:2001 surveys, based on the expected sample sizes under the original sample design.

Table 3-9. Expected numbers of completed interviews in the NHES:2001: CPS:1997

Sample population	Expected number of completed interviews		
	Original sample design ¹	Revised sample design ²	Final revised sample design ³
Household Screeners	60,000	63,120	48,000
ECPP			
Total.....	9,124	9,426	6,866
Infants (0–2 years old)	4,973	5,138	3,742
Preschoolers (age 3–not yet in kindergarten).....	4,152	4,289	3,124
ASPA			
Total.....	11,532	11,914	9,852
Elementary schoolers (kindergarten–grade 5).....	6,077	6,278	5,192
Middle schoolers (grades 6–8).....	5,455	5,636	4,660
AELL			
Adult education participants with less than a H.S. diploma.....	1,652	1,695	1,212
Adult education nonparticipants with less than a H.S. diploma.....	1,566	1,607	1,149
Adult education participants with a H.S. diploma or higher	6,703	6,878	4,918
Adult education nonparticipants with a H.S. diploma or higher	5,255	5,392	3,855
Total adults with less than a H.S. diploma.....	3,218	3,302	2,361
Total adults with a H.S. diploma or higher	11,958	12,271	8,773
Total adult education participants	8,355	8,574	6,130
Total adult education nonparticipants	6,821	6,999	5,004
Total adults	15,176	15,573	11,134

¹ The original sample design was based upon minority stratification only.

² The original sample design was revised to reflect stratification by minority concentration and listed status.

³ During data collection, the sample design was revised to reflect actual residency and unit response rates.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Commerce, U.S. Census Bureau, Current Population Survey (CPS), October 1997 School Enrollment Supplement data file (special tabulations).

Table 3-10. Comparison of expected sample sizes to previous survey administrations: NHES:2001

Sample	Survey administration					
	NHES: 1991	NHES: 1993	NHES: 1995	NHES: 1996	NHES: 1999	NHES: 2001
Total	34,118	27,437	40,319	26,435	36,125	41,701
Number of completed Screeners.....	60,314	63,884	45,465	55,838	55,929	60,000
Number of persons sampled for an extended interview						
Infants (0–2 yrs.).....	†	†	4,341	†	3,435	5,525
Preschoolers (3–not yet in K).....	9,925 ¹	5,635	4,372	3,594 ⁴	4,316	4,613
Grades K–2	9,967 ¹	7,270 ²	5,227	4,460	4,841	3,376
Grades 3–5	†	2,882	1,841 ³	4,847	4,788	3,376
Grades 6–12	†	11,650	†	10,934 ⁵	10,631 ⁵	6,061
Adults	14,226	†	24,538	2,600	8,114	18,750
Adult education participants	12,464	†	14,355	†	4,542	9,231
Adult education nonparticipants	1,730	†	10,183	†	3,572	9,518

† Not applicable; persons in this category were not eligible for extended interviews.

¹ The sample size for “preschoolers” is actually strictly 3–5 years old, regardless of enrollment status; this sample size includes 2,959 ineligible children. The sample size for “grades K–2” is actually strictly 6–9 years old, regardless of enrollment status or grade; this sample size includes 1,798 ineligible children and 22 of unknown age.

² The sample size for grades K–2 includes 158 children who were enrolled in transitional kindergarten, prefirst, special education, or ungraded.

³ The sample size for grades 3–5 includes only 3rd grade; this sample size includes 36 children enrolled in special education or ungraded.

⁴ The sample size for preschoolers includes children up to age 7 who were not enrolled.

⁵ The sample size for grades 6–12 includes 5 children whose grade was unknown and 9 children who were enrolled in special education or ungraded.

⁶ This sample size reflects only middle schoolers (grades 6–8).

NOTE: The distributions in this table for NHES:2001 assume 60,000 screened households—the target under the original sample design. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 1991–2001.

4. DATA COLLECTION

This chapter provides an overview of the data collection procedures for the NHES:2001 surveys. It describes the recruitment and training of interviewers, interviewing times and case priorities, procedures designed to increase respondent cooperation, special procedures for language problem and refusal cases, and refielding of nonresponse cases.

As noted in chapter 1, the NHES telephone interviews are administered using computer-assisted telephone interviewing (CATI) technology. The CATI system was programmed to automatically guide the interviewers through the complex skip patterns contained in the NHES surveys. This reduces the potential for interviewer error and helps to minimize the time for administering the interviews. CATI also includes an online help feature so interviewers can access more detailed explanations and/or definitions for each item in the surveys at the stroke of a key. CATI technology incorporates online sampling to select appropriate persons for extended interviews during the screening interview, thus reducing additional calls into households. Its scheduling feature allows cases to be automatically fielded for appointments and callback attempts to complete interviews not completed on the first call, and CATI can be programmed to permit adjustments in case management as data collection progresses. Data are entered directly into the CATI database, which also contains the call history of each case, allowing for the assessment of various case management strategies following the close of data collection.

Interviewer Recruitment and Training

Recruitment of interviewers to conduct the NHES:2001 began in November 2001. Westat interviewers with prior NHES experience or with experience on other CATI studies were identified, and as many as feasible were assigned to the NHES:2001. To augment this group, new interviewers were recruited through the personal networks of Westat employees and by means of advertisements placed in local newspapers. A total of 396 interviewers were trained, and 271 of them (68 percent) were experienced.

Training was conducted in groups of about 30 interviewers from December 2000 to the beginning of February 2001. Some training sessions were conducted in December so that interviewers would be available to begin data collection on January 2. December sessions were attended only by experienced interviewers, who received a total of 14 hours of training, 12 hours in December and 2 hours in January just prior to the commencement of interviewing. Later training sessions included both new

interviewers and experienced interviewers who were unable to attend the December classes. January training sessions consisted of 18 hours of instruction to accommodate the new interviewers, all of whom had completed General Interviewer Training and Teltrain (training on the use of the CATI system) prior to attending NHES-specific training.

Interviewer training sessions were conducted in seven of Westat’s Telephone Research Centers (TRCs), those located in Frederick, Rockville, and Chestertown, Maryland; Chambersburg, Pennsylvania; Toms River, New Jersey; Sarasota, Florida; and Greeley, Colorado. December sessions were held in all TRCs except Greeley, which had training in February only. Table 4-1 shows dates of the training sessions and the total number of interviewers trained at each TRC location.

Table 4-1. Location and schedule of interviewer training sessions: NHES:2001

TRC location	Dates	Total number trained
Total trained in all TRCs	12/19–2/4	396
Rockville	12/9, 12/10, 1/2, 1/3 ¹	47
	1/6, 1/7, 1/8, 1/9 ¹	54
Frederick	12/16, 12/17, 1/2	33
	1/2, 1/3, 1/4	24
	1/6, 1/7	29
	1/13, 1/14	24
Chestertown	12/9, 12/10, 1/2	18
	1/6, 1/7	24
Chambersburg	12/9, 12/10, 1/2	28
	1/6, 1/7	14
Toms River.....	12/16, 12/17, 1/2	23
	2/3, 2/4	13
Sarasota	12/16, 12/17, 1/2	24
	1/27, 1/28	18
Greeley	2/3, 2/4	23

¹ These were double sessions in which some sessions were conducted for one large group and others, including the session focusing on the role plays, were conducted for two smaller groups.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

The training sessions included detailed information on the study, interactive lectures familiarizing the interviewers with the questions and the flow of the interviews, and special components emphasizing sets of questions that required more indepth study. Some sessions focused on contact procedures and strategies for gaining respondent cooperation. (See appendix E for the training agendas.) The last part of training employed role-play scripts so that interviewers could practice mock interviews. Interviewers were intensively monitored during this process and began conducting live interviews only after they were judged to be fully ready. Interviewers were also monitored throughout the data collection period, and feedback on interviewing techniques was provided by supervisors and project staff throughout the data collection period.

A total of 396 interviewers completed the NHES:2001 training sessions; all of them reported for work and conducted live interviews. However, 33 interviewers resigned during the first month of data collection, and 4 were released due to inadequate performance. As the type and number of cases changed during data collection, the number of interviewers working the cases was reduced. Later in the data collection period, when the nature of the work changed from primarily initial contact cases to nonresponse cases, some interviewers were released to other studies.

The interviewing staff included 24 interviewers bilingual in English and Spanish. They participated in regular training in English and then were trained on the Spanish CATI approximately 2 weeks after they had been conducting interviews in English. Following Spanish language training, they were able to switch the CATI to either English or Spanish versions to administer interviews. Bilingual interviewers attempted to conduct interviews in all households that were identified as probable Spanish language cases.

All NHES interviewers participated in ongoing coaching sessions to perfect strategies designed to gain respondent cooperation. Some interviewers were slightly more skilled in gaining cooperation than others, and they were given additional training in refusal conversion strategies to persuade respondents who had previously declined to participate to change their minds. The training sessions were conducted by TRC supervisors and lasted approximately 1.5 hours. Training covered such topics as typical respondent concerns and how to address them and discussion and practice of refusal conversion strategies. These specially trained interviewers were then able to access cases in which a household member had previously refused to participate in the study. As the interviewing staff was reduced to reflect the amount and nature of the remaining cases in the second half of the data collection period, virtually all interviewers remaining on the study had been trained in refusal conversion. More information is provided below on the outcome of special strategies used with language problem, refusal, and other nonresponse cases.

Special Precollection Procedures

The sample for the NHES:2001 was drawn by MSG. Details regarding criteria for the sample are given in chapter 3. Before the beginning of data collection, special procedures were implemented to remove some nonresidential and nonworking telephone numbers from the sample, and specific subsampling was done, also described in chapter 3, that reduced the number of telephone numbers from the full sample of 206,182 telephone numbers originally drawn to the final sample of 179,211 telephone numbers that was fielded. In addition, a letter about the study was mailed to potential respondents for whom listed addresses were found.

Identification of business and nonworking numbers

After the 206,182 telephone numbers in the full NHES:2001 sample were drawn by MSG, MSG's Genesys ID-PLUS utility was used prior to the start of data collection to identify business and nonworking telephone numbers. With the ID-PLUS utility, each telephone number was dialed, and any number that evoked the tritone signal on two computerized checks was classified nonworking. In all, 44,051 numbers were identified as nonworking through the ID-PLUS process; 41,665 of the telephone numbers in the final sample of 179,211 were assigned a final disposition code of nonworking as a result. The ID-PLUS process also includes matches to White and yellow pages listings. If a sampled telephone number is listed in the yellow (business listing) pages but not in the White (residential listing) pages, it was classified as a business number. Telephone numbers located in both the business and residential listings are likely used for both home and business purposes and were eligible for the study. A total of 8,879 of the 206,182 telephone numbers in the initial sample were identified as business only, and 8,400 telephone numbers in the final sample of 179,211 were assigned a status of nonresidential as a result of the matches to yellow and White pages listings. For purposes of unit response rates, the tritone and business numbers identified during these initial tests were treated as ineligible numbers.

Advance mailing

In an effort to increase Screener-level unit response, an informational letter was mailed to the households for which an address was obtained for the sampled telephone number from either of two commercial firms. Among the 179,211 telephone numbers in the final sample, the first vendor was able to provide addresses for 45,349 (25 percent); the second vendor provided addresses for an additional 41,082 numbers (23 percent). The 48 percent of sampled telephone numbers for which addresses were obtained

was considerably higher than the 30 percent obtained from the first vendor in the NHES:1999, and this increase was due to the use of the second vendor.

The first-class letter, on U.S. Department of Education letterhead and signed by the NHES COTR, was mailed by the mailing contractor for the U.S. Department of Education. It introduced the survey topics in broad terms, named the sponsoring agency, and briefly explained how the household had been selected. A toll-free number was given so the respondent could call and set an appointment or obtain further information about the study. See appendix F for copies of all letters mailed to respondents during data collection. Commonly asked questions and their answers were printed on the reverse side of the letter. In all, 98,892 telephone numbers were matched with listed addresses; 79,130 telephone numbers with matched addresses were in the final NHES:2001 sample. Tables 4-2 and 4-3 show the results of matching telephone numbers for listed status and for addresses. Fifty-eight percent of the telephone numbers for which a White pages listing was found had mailable addresses, and 84 percent of numbers with a matched address were listed in the White pages directory.

Table 4-2. Percentage of main sample telephone numbers in various listed statuses, by mailable status: NHES:2001

Mailable status of telephone number	Number of cases	Percent in each status			Total
		Listed in yellow pages only	Listed in White pages	Unlisted	
Mailable address.....	73,531	0	58	42	100
Postmaster returned address	5,599	0	70	30	100
No matched address.....	100,081	8	4	87	100

NOTE: The White pages category includes telephone numbers found in both the White and yellow pages. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Table 4-3. Percentage of sampled telephone numbers in various mailable statuses, by listed status: NHES:2001

Listed status of telephone number	Number of cases	Percent in each status			Total
		Matched address	Postmaster returned address	No matched address	
Yellow pages only.....	8,401	0	0	100	100
White pages.....	50,952	84	8	8	100
Unlisted.....	119,858	26	1	73	100

NOTE: The White pages category includes telephone numbers found in both the White and yellow pages.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

To coordinate the arrival of the letter with the initial call into the household, the mailing was to have been conducted in two waves. The first wave was mailed to approximately half of the households in the final sample for which addresses had been obtained, 47,460 households. However, 5,599 letters were returned by the Postmaster, the vast majority containing no forwarding address. The second wave mailing, consisting of 31,670 addresses, was prepared but not actually mailed due to problems with the mailing system at the U.S. Department of Education. The unweighted unit response rate differed for households to which letters were mailed in advance of calling, households with mailable addresses but not actually mailed to, and households for which addresses were sought but could not be obtained (69 and 64 percent compared to 35 percent, table 4-4). “Completed” cases are those for which a screening interview was fully completed. Numbers identified as nonworking and business only through listings and tritone checks are included in the “ineligible telephone number” cases.

Table 4-4. Results of the advance mailing effort at the Screener level: NHES:2001

Screener final result	Mailable address				No mailable address ²	
	Letter mailed		Letter not mailed ¹			
	Number	Percent of eligible telephone numbers	Number	Percent of eligible telephone numbers	Number	Percent of eligible telephone numbers
Total	41,861	100	31,670	100	105,680	100
Complete.....	23,614	69	16,128	64	8,643	35
Refusal.....	5,536	16	4,735	19	3,255	13
Maximum call.....	1,523	4	1,193	5	900	4
Other nonresponse or noncontact	3,694	11	3,115	12	11,728	48
Ineligible telephone number	7,494	†	6,499	†	81,154	†

† Not applicable.

¹ Due to problems with the mailing system at the Department of Education, about half of the cases with mailable addresses were not mailed a letter.

² Includes 5,599 cases for which mailed letters were returned by the Postmaster.

NOTE: Maximum call cases were finalized after having received up to 24 attempts without contact; see discussion on pp. 75-78. “Other nonresponse” includes language problems, no answer cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period). Ineligible telephone numbers are those found to be nonresidential or nonworking, and those Screener cases are not considered in the calculation of unit response rates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Interviewing Times and Case Priorities

Data collection was conducted from January 2 through April 14, 2001. As for the NHES:1999, the interviewing strategy followed for the NHES:2001 was designed with the goal of contacting all cases as quickly as possible in order to use the interviewing staff efficiently and to have sufficient time for repeated call attempts to nonresponding households.

Scheduling of Calls

Data collection for the NHES:2001 took place at seven of Westat's TRCs, those in Rockville, Frederick, and Chestertown, Maryland; Chambersburg, Pennsylvania; Toms River, New Jersey; Sarasota, Florida; and Greeley, Colorado. All of Westat's interviewing centers use a common CATI system and share the same scheduler, database, and computing facilities. Interviewers were assigned to the study to provide coverage at all hours the TRCs were open, 9:00 a.m. to midnight on weekdays, 10:00 a.m. to 9:00 p.m. on Saturdays, and 2:00 p.m. to 10:00 p.m. on Sundays. Unless they specifically requested an appointment at another time, respondents were called only between 9:00 a.m. and 9:00 p.m. in their own time zones, except for Saturdays and Sundays, when calls were made from 10:00 a.m. to 6:00 p.m. and 2:00 p.m. to 9:00 p.m., respectively. One after-midnight working session was held to ensure complete coverage of cases located in Alaska and Hawaii.

Because the NHES is a household survey, the greatest opportunity for respondent contact tends to be during weekday evenings and on weekends, and assignment of interviewer hours took this into consideration. Approximately 30 percent of interviewing labor hours were scheduled on week days (Monday through Friday from 9:00 a.m. to 6:00 p.m.), 40 percent on weekday evenings, and 30 percent on weekends.

Assignment of Cases to Interviewers

The priority with which cases were assigned to interviewers by the CATI scheduler at the outset of data collection for the NHES:2001 differed from NHES collections prior to 1999, in which new cases had the lowest priority. In order to make initial contact with all cases more quickly and to concentrate subsequent efforts on those cases most likely to be productive, cases were prioritized as follows:

- Cases that had appointments for a specific date and time;
- Cases for which the interviewers received a busy signal (reassigned 15 minutes later for up to four attempts within an hour);¹⁹
- Cases that had resulted in noncontact at a scheduled appointment time;
- New cases, until they received one day and one evening call attempts;
- Cases that had unspecified appointment/general callback times during that time period; and
- Cases that were attempted during a previous time period with no contact. (These were tried during other specific time frames according to the “time slice” protocol described below.)

Initially up to eight attempts were made by NHES interviewers to screen households in order to determine the presence of household members eligible for extended interviews, that is, an eligible child or adult. These calls were staggered on different days of the week and at different times of the day over a period of at least 2 weeks. Exhibit 4-1 depicts the calling times or time slices. Six of the time slices were on week days or weekday evenings during the following periods: 9 a.m. to 2 p.m., 2 p.m. to 6 p.m., 6 p.m. to 7:30 p.m., 7:30 p.m. to 9 p.m., 9 a.m. to 6 p.m., and 6 p.m. to 9 p.m. Two were on weekends: Saturday 10 a.m. to 6 p.m., and Sunday 2 p.m. to 9 p.m. (All times are respondent times.) Initially, Westat placed one daytime and one evening call to establish contact with a telephone number. If contact was not made in one of these first two calls, the number was called once in each of the remaining six time slices until contact was made. Therefore, up to six additional calls followed the initial day and evening attempts to complete the Screener. If the Screener was not completed as a result of those eight calls, and the respondent had not refused, the case was assigned the status “maximum call” if contact with a household member had been made, the status of “no answer-answering machine” if only an answering machine but never a person had been reached, or the status of “no answer” if neither a person nor an answering machine had been reached. Maximum call status for extended interviews was reached after 10 attempts, not including the Screener calls. Language problems and refusal cases were handled according to the procedures described below. When these cases were released to interviewers, their priority was set by the TRC operations manager and the project director according to the nature of the work remaining and the availability of specially trained interviewers. Appendix G shows a listing of status classifications (result codes) for both Screener and extended interview cases.

In the NHES:2001, contact via the telephone was often made within one or two telephone call attempts. Almost half of all completed Screeners (21,782 out of 48,385) were completed in one or

¹⁹Additional attempts made for busy signals were not counted as separate call attempts; the entire series counted as one attempt.

two calls. Similarly, only a few calls were required to identify the majority of nonworking and nonresidential numbers. Fifty-one percent of the Screener numbers identified to be nonworking when they were dialed (13,928 out of 27,369) and 63 percent of the numbers identified as business only when they were dialed (11,153 out of 17,713) were finalized within two calls.

Exhibit 4-1. Time slices used for call scheduling: NHES:2001

Time slice description	Day(s) of week	Hours (respondent time)
Weekday, 1st half of the day	Monday through Friday	9:00 a.m. – 2:00 p.m.
Weekday, 2nd half of the day	Monday through Friday	2:00 p.m. – 6:00 p.m.
Weekday, 1st half of evening	Monday through Friday	6:00 p.m. – 7:30 p.m.
Weekday, 2nd half of evening	Monday through Friday	7:30 p.m. – 9:00 p.m.
Weekday, unrestricted day	Monday through Friday	9:00 a.m. – 6:00 p.m.
Weekday, unrestricted evening	Monday through Friday	6:00 p.m. – 9:00 p.m.
Saturday, unrestricted	Saturday	10:00 a.m. – 6:00 p.m.
Sunday, unrestricted	Sunday	2:00 p.m. – 9:00 p.m.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Procedures for Special Circumstances

As in previous years, the NHES:2001 followed specific procedures when special circumstances were encountered during data collection.

Answering Machine Messages

Leaving a message when an answering machine is encountered lets potential respondents know why they are being called and tells them that efforts to contact them will continue. In the NHES:2001, a message was displayed the first time an answering machine was reached at the Screener and extended interview levels and also if the case changed to language problem or refusal status. Three messages were created, one for Screener or extended cases in initial or language problem strategy, one for Screener cases in refusal strategy, and one for extended cases in refusal strategy. Each was worded somewhat differently, but all briefly explained the purpose and the sponsor of the study and also gave the toll-free number for respondents to call for more information or to make an appointment. In 15,532 households with a completed Screener (32 percent), one message was left. In 6,683 households (14 percent),

two or three messages were left. Forty-four households received four messages, one household received five, and one received six. The messages are shown in appendix H.

Later in the data collection period, a fourth answering machine message was left when an answering machine was reached even if the case had not changed status. Monday, March 5, Friday, March 9, Thursday, March 15, Wednesday, March 21, and Friday, March 30 (i.e., one day during weeks 10 through 13 of data collection) were designated “answering machine days.” A message was created and distributed to interviewers, and the message was read whenever a telephone number was answered by a machine on those dates, provided CATI did not display a different message (for instance, one that was appropriate for a case that had changed strategy).

Non-English Language/Language Problem Cases

When English-only interviewers encountered a case in which the respondent indicated he or she did not speak English or had a hearing or speech impairment, they attempted to ascertain whether any adult household member spoke English or could communicate sufficiently clearly to respond to the interview. If they were not successful, the case was coded one of two interim language problem statuses: hearing/speech problem or non-English language case. The latter category was further specified as probable Spanish language or another language by the interviewer. Specially trained interviewers recontacted the hearing/speech problem cases and attempted to complete an interview. Bilingual interviewers recontacted the Spanish language cases. Cases coded as non-English and non-Spanish were available to all interviewers, who recontacted the household in an effort to identify an English- or Spanish-speaking household member. If a Spanish-speaking household member was identified, the case was recoded as a Spanish language case and made available to bilingual interviewers. Based on reports from survey managers and interviewer monitors, this was a relatively rare occurrence. Interviewers were not trained to identify specific languages, and they were more likely to identify another language as Spanish than misidentify Spanish as another language. Non-English/non-Spanish households in which interviews were not completed were coded as nonresponse.

Table 4-5 shows unit response rates for non-English language/language problem Screener cases. Sixty-eight percent of the 3,089 cases in households identified as Spanish-speaking were completed, 64 percent in Spanish and 4 percent in English. Twenty-eight percent of those cases identified as households in which languages other than English or Spanish were spoken were completed, most in English. Thirty-six percent of the 441 cases identified as hearing/speech problems were completed in English.

Occasionally, a trained Spanish-speaking interviewer encountered a household that had never been coded as a language problem but in which Spanish was spoken and English was not. In these cases, the interviewer switched to the Spanish CATI and conducted the interview in Spanish. Those cases were never coded as language problems and do not appear in table 4-5; however, like all completed interviews, they carry a designation as to whether the interview was conducted in English or Spanish.

**Table 4-5. Non-English language/language problem Screener cases, by response status:
NHES:2001**

Problem	Number	Percent
Identified as Spanish language households		
Total	3,089	100
Completed in English.....	138	4
Completed in Spanish	1,965	64
Refusal	315	10
Language problem.....	124	4
Other	547	18
Identified as non-English/non-Spanish language households		
Total	997	100
Completed in English.....	225	23
Completed in Spanish	55	6
Refusal	90	9
Language problem.....	542	54
Other	85	9
Hearing/speech problems		
Total	441	100
Completed in English.....	157	36
Completed in Spanish	0	0
Refusal	80	18
Language problem.....	150	34
Other	54	12

NOTE: Detail may not sum to totals because of rounding. "Other" includes maximum call and no answer-answering machine cases, as well as cases identified to be nonworking or nonresidential on call back.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

The NHES:2001 interviews were conducted only in English and Spanish. Therefore, if a household was composed solely of members who spoke a language other than English or Spanish, no interview was conducted. At the extended interview level, only the sampled respondent himself or herself could respond to the AELL interview. For the ECPP and ASPA interviews, the parent or guardian who was most knowledgeable about the child's care and education was asked to respond. If this parent could not be interviewed in either English or Spanish, interviewers tried to identify another parent or guardian

or other household member who could speak English and was sufficiently knowledgeable to respond to the interview. If such a household member was found, the interview was conducted with him or her.

Refusal Conversion

Refusal cases comprise the majority of overall Screener nonresponse in the NHES. Substantial effort was expended in the NHES:2001 to gain cooperation in households in which a member had refused to participate in the study.

Whenever a refusal occurred, the interviewer recorded demographic information about the refusing respondent and the respondent's reasons for refusing to participate if any had been proffered. Interviewers also rated the strength of the refusal as mild, firm, or hostile. Standard refusal conversion procedures mandated one call back to the household in an attempt to gain cooperation. In the NHES:2001, any mild or firm refusal case was released after a 13-day hold for a conversion attempt. (The hold period was shortened toward the end of data collection to allow all refusal cases to be processed.) TRC supervisors reviewed all cases coded as hostile to determine whether that designation was merited. Any cases rated as hostile that were judged by the supervisor to be inappropriately coded were recoded to firm refusals and were eligible to be released for a conversion attempt. Truly hostile (profane or abusive) refusal cases were never released for conversion.

At the extended interview level, refusal conversion attempts were conducted with the refusing person himself or herself. That is, attempts were made to convert the parent of the sampled child designated as the respondent who refused the ECPP interview or ASPA interview and the adult who refused the AELL interview.

Federal Express/Priority Mail Mailing to Refusal Cases. In order to persuade respondents to change their minds about completing the NHES:2001 surveys, letters were sent to each household that initially refused to participate in the study for which an address had been obtained. Experiments conducted at Westat in connection with past studies indicated that sending refusal conversion letters via Federal Express or Priority Mail significantly increases the conversion rate for these initial refusal cases. It was expected that these types of letters would capture the attention of potential respondents to a greater extent than a first-class letter would. Furthermore, Westat receives a special reduced rate from Federal Express, making such a mailing economical, especially when compared with the labor time for refusal conversion.

The letters were sent from Westat by Federal Express if the address was acceptable to that service and by Priority Mail if they were not (e.g., post office boxes and rural routes). Prior to sending the letters, address files had been updated and addresses that resulted in Postmaster returns from the initial mailing deleted. The letter was printed on U.S. Department of Education stationery and signed by the NHES COTR (see appendix F). It gave a brief explanation of the NHES:2001 study, emphasized the importance of the household's participation, and provided Westat's toll-free telephone number for respondents to call for information about the study or to schedule appointments. For Screener cases, 24,979 refusal conversion letters were sent by Federal Express or Priority Mail; 8,597 refusal cases had no address matched with their telephone number, so they were not sent a letter.

Because the refusal conversion letters were sent to households for which an address had been obtained, those households might have also received a letter from NCES by first-class mail prior to the initial contact with the household. However, the decision was made to send a second letter because the first-class letters may have been thrown away, or one household member may have opened the advance information letter and not conveyed the information to other household members. Refusal cases that had been mailed letters were assigned a high calling priority, just below appointments scheduled for a specific time, to increase the chance of contact the day after the letter was scheduled to arrive.

Table 4-6 shows the results of various refusal conversion efforts in the NHES:2001 for Screener cases. In all, 33,576 cases had least one refusal.²⁰ After the initial refusal, those for which an address was obtained were mailed a Federal Express or Priority Mail letter; 22,180 cases were mailed a letter and 8,599 were not. Fifty-five percent of the refusal cases that were mailed a letter were eventually completed versus 38 percent of the cases that were not mailed a letter. Overall, the unit response rate for Screener cases that ever received a refusal was about 47 percent.

Refielding Second Refusals. In each previous cycle of the NHES, at least some of the "final" Screener refusal cases, those for which two refusals had been received, were refiled for another conversion attempt by the most skilled refusal conversion interviewers. In the NHES:2001, Screener cases that had received two refusals were refiled if neither refusal had been coded hostile. Refielding Screener double refusal cases began February 28, 2001, during week nine of data collection. No cases in which respondents had telephoned or written following the receipt of refusal conversion letters to say

²⁰This is higher than the number of ever-refusal cases in the NHES:1999. In that survey, some initial refusals, those for which the respondent hung up in the introduction and may not have heard the purpose of the study or the sponsoring agency, were "cleaned" of their refusal status and re-released as new cases. Because of declining response rates for all RDD surveys, it was decided that holding all refusals and re-releasing them only to trained refusal converters would be a preferable strategy for the NHES 2001.

they did not want to participate were released again. Cases were held for a period of 13 days before being released for an additional conversion attempt until the last weeks of the data collection period when some cases had a shorter hold period due to lack of time. Table 4-6 also shows the numbers and percentages of refiled second refusals that were completed. Please note that the final results for the refiled cases are included in the columns giving final results for all refusal cases, of which the refiled cases are a subset. Twenty-two percent of the 14,921 refusal cases refiled after having received two refusals were completed (3,187 cases), and 502 cases were identified as ineligible. Screener cases were coded final refusals if a third refusal was received.

Table 4-6. Results of refusal conversion efforts at the Screener level: NHES:2001

Final result	All refusal cases				Cases refiled after two refusals	
	Federal Express or Priority Mail letter		No letter		Number	Percent of eligible telephone numbers
	Number	Percent of eligible telephone numbers	Number	Percent of eligible telephone numbers		
Total	22,180	100	8,599	100	14,921	100
Complete.....	11,643	55	2,801	38	3,187	22
Refusal.....	9,122	43	4,394	59	11,102	77
Other nonresponse or noncontact	351	2	194	3	130	1
Ineligible telephone number	1,064	†	1,210	†	502	†

† Not applicable.

NOTE: The final results for the refiled cases are included in the columns giving final results for all refusal cases, of which the refiled cases are a subset. Other nonresponse includes language problems, no answer cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period). Ineligible telephone numbers are those found to be nonresidential or nonworking, and those Screener cases are not considered in the calculation of unit response rates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Both standard (one call back) and special refusal conversion efforts (mailing and refiled second refusals) were undertaken at the extended interview level for the NHES:2001. As a result, approximately 35 percent of all refusals that were incurred at the extended interview level (38 percent of the 1,099 ECPP refusals, 37 percent of the 1,515 ASPA refusals, and 34 percent of the 3,260 AELL refusals) were completed. Tables 4-7 through 4-9 present the results of refusal conversion strategies at the extended level.

Generally, cases for which two refusals have been received at the extended interview level have not been refiled in prior NHES administrations. However, in an effort to maximize the NHES:1999 unit response rate, extended cases with two refusals that were both coded mild were refiled, and in the NHES:2001, extended refusal cases that were coded either mild or firm were refiled. Another innovation in the NHES:2001 was to send refusal conversion letters by Federal Express or Priority Mail before refiled second refusals to extended cases for which an address had been obtained in an effort to gain respondent cooperation after two refusals.²¹ Tables 4-7 through 4-9 also show the results of this effort. In the refiled effort, nearly twice the percentage of cases to which letters had been mailed completed extended interviews after the second refusal conversion attempt than cases to which letters had not been mailed. For instance, 31 percent of the refiled second refusal AELL cases to which letters were mailed were completed, versus 15 percent of second refusals to which letters were not mailed. As with Screener cases, extended cases that received a third refusal were assigned the final result code of refusal.

Table 4-7. Results of refusal conversion efforts at the extended interview level: ECPP-NHES:2001

Final result	All refusal cases		Cases refiled after two refusals			
			Federal Express or Priority Mail letter		No letter	
	Number	Percent	Number	Percent	Number	Percent
Total	1,099	100	159	100	325	100
Complete or ineligible person	419	38	57	36	63	19
Refusal.....	593	54	98	62	247	76
Other nonresponse.....	78	7	2	1	11	3
Ineligible telephone number	9	<1	2	1	4	1

NOTE: The final results for the refiled cases are included in the columns giving final results for all refusal cases, of which the refiled cases are a subset. Detail may not sum to totals because of rounding. Ineligible persons are those whose age, enrollment status, or grade is outside the study range. Ineligible telephone numbers are those found to be nonresidential or nonworking, and at the extended level these cases were treated as nonresponse. "Other nonresponse" includes language problems, maximum call cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period).

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), 2001.

²¹ A refusal conversion letter was not sent to households with extended interview double refusals if a letter had been sent previously for a Screener refusal.

Table 4-8. Results of refusal conversion efforts at the extended interview level: ASPA-NHES:2001

Final result	All refusal cases		Cases refiled after two refusals			
			Federal Express or Priority Mail letter		No letter	
	Number	Percent	Number	Percent	Number	Percent
Total	1,515	100	230	100	451	100
Complete or ineligible person.....	553	37	82	36	74	16
Refusal.....	859	57	141	61	361	80
Other nonresponse.....	94	6	4	2	11	2
Ineligible telephone number.....	9	<1	3	1	5	1

NOTE: The final results for the refiled cases are included in the columns giving final results for all refusal cases, of which the refiled cases are a subset. Detail may not sum to totals because of rounding. Ineligible persons are those whose age, enrollment status, or grade is outside the study range. Ineligible telephone numbers are those found to be nonresidential or nonworking, and at the extended level these cases were treated as nonresponse. "Other nonresponse" includes language problems, maximum call cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001.

Table 4-9. Results of refusal conversion efforts at the extended interview level: AELL-NHES:2001

Final result	All refusal cases		Cases refiled after two refusals			
			Federal Express or Priority Mail letter		No letter	
	Number	Percent	Number	Percent	Number	Percent
Total	3,260	100	572	100	1,014	100
Complete or ineligible person.....	1,095	34	175	31	155	15
Refusal.....	1,799	55	364	64	793	78
Other nonresponse.....	335	10	27	5	53	5
Ineligible telephone number.....	31	1	6	1	13	1

NOTE: The final results for the refiled cases are included in the columns giving final results for all refusal cases, of which the refiled cases are a subset. Detail may not sum to totals because of rounding. Ineligible persons are those whose age, enrollment status, or grade is outside the study range. Ineligible telephone numbers are those found to be nonresidential or nonworking, and at the extended interview level extended these cases were treated as nonresponse. "Other nonresponse" includes language problems, maximum call cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001.

Procedures for Other Nonresponse Cases

Additional contact attempts were made in an effort to complete nonresponse cases other than refusals, that is, those that were assigned maximum call, no answer-answering machine, and no answer

status. The maximum call condition applied to both Screener and extended interviews, while the no answer conditions applied only to Screeners. Refielding of finalized maximum call cases began in week 7 of data collection (February 16, 2000), after all sampled telephone numbers had been attempted at least twice. Cases were released in waves so they would be held for a time prior to additional contact attempts to reduce the perception of badgering a household. Also, the waiting period allowed time for the telephone company to attach a recording to a nonworking number so that it might be correctly classified or for household members away from home for a period of time to return.

Maximum Call Cases

Cases in maximum call status were those that received eight call attempts during which contact was made with a person yet the interview was not completed. The CATI system utility used for refielding maximum call cases allows for the selection of maximum call cases that had not previously been refielded or the selection of all maximum call cases, including those that had been released previously for additional call attempts. Cases not previously refielded were refielded for additional attempts on a weekly or more frequent basis. Cases that had previously been refielded were released for additional attempts five times during data collection, beginning on March 16; however, at that time, cases that had already received 24 or more attempts were finalized, and therefore, received no more calls. This approach was designed to place the greatest effort on the cases most likely to be productive. Previously refielded maximum call cases were released for 14, 12, or 6 additional call attempts (the number decreased as the close of data collection approached).

Prior to refielding, letters were sent to Screener maximum call cases for which addresses had been obtained. For the first time in the NHES, it was decided to send some letters via Federal Express or Priority Mail and others by first-class mail in 9- by 12-inch envelopes. Both were intended to draw respondents' attention to the letter, but it was expected that the Federal Express/Priority Mail letter might be more effective in that regard. A special flag set in the CATI database ensured that households were not sent both a refusal conversion letter and a maximum call letter, so that members of the household would not feel that they were being harassed. A copy of the maximum call conversion letter can be found with the other letters in appendix F.

Table 4-10 shows the results of refielding maximum call cases at the Screener level. Of the 8,662 Screener maximum call cases refielded, 1,866 were sent a Federal Express or Priority Mail letter, 1,326 were sent a letter by first-class mail, and 2,278 had no matched address and so were not mailed a letter. The unit response rates for the three groups were similar, 30 percent, 26 percent, and 25 percent,

respectively. This suggests that the benefits of mailing to cases of this type may not outweigh the costs involved.

Table 4-10. Results of refiled maximum call Screener cases: NHES:2001

Final result	Maximum call cases					
	Federal Express or Priority Mail letter		First-class letter		No letter	
	Number	Percent of eligible telephone numbers	Number	Percent of eligible telephone numbers	Number	Percent of eligible telephone numbers
Total	1,866	100	1,326	100	2,278	100
Complete.....	527	30	324	26	511	25
Refusal.....	232	13	162	13	500	24
Other nonresponse or noncontact	1,002	57	769	61	1,038	51
Ineligible telephone number	105	†	71	†	229	†

† Not applicable.

NOTE: “Other nonresponse” includes language problems, no answer cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period). Ineligible telephone numbers are those found to be nonresidential or nonworking, and those Screener cases are not considered in the calculation of unit response rates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

For the first time in the NHES, letters were mailed to extended cases in maximum call status prior to refiled. Letters to potential ECPP and ASPA respondents were sent by first-class mail; however, because of the lower estimated unit response rate for the AELL survey, letters to potential AELL respondents were sent via Federal Express or Priority Mail. Results of refiled maximum call cases at the extended interview level are shown in table 4-11 for the ECPP survey, table 4-12 for the ASPA survey, and table 4-13 for the AELL survey. Letters were sent to the households of 414 potential respondents to the ECPP survey and 53 percent of the cases were completed. Another 698 cases that were not mailed letters were called, and 40 percent of these cases were completed. The results are identical for the ASPA survey, with 53 percent of the 575 cases to which a letter was mailed being completed and 40 percent of the 927 cases to which a letter was not mailed being completed. For the AELL survey, a similar unit response rate of 51 percent was attained for the 862 cases mailed a letter, and a somewhat lower unit response rate of 35 percent was achieved for the 1,220 cases not mailed a letter. These findings suggest that the Federal Express/Priority Mail strategy may have been more effective for the AELL survey, for which a lower unit response rate was expected compared to the ECPP and ASPA surveys and

that, in general, mailing may be more effective for extended interview maximum call cases than for Screener maximum call cases.

Table 4-11. Results of refiled maximum call cases: ECPP-NHES:2001

Final result	Maximum call cases			
	First-class letter		No letter	
	Number	Percent	Number	Percent
Total	414	100	698	100
Complete or ineligible person	220	53	280	40
Refusal	58	14	179	26
Other nonresponse	121	29	219	31
Ineligible telephone number	15	4	20	3

NOTE: Ineligible persons are those whose age, enrollment status, or grade is outside the study range. Ineligible telephone numbers are those found to be nonresidential or nonworking, and at the extended interview level these cases were treated as nonresponse. "Other nonresponse" includes language problems, maximum call cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECP) Survey of the National Household Education Surveys Program (NHES), 2001.

Table 4-12. Results of refiled maximum call cases: ASPA-NHES:2001

Final result	Maximum call cases			
	First-class letter		No letter	
	Number	Percent	Number	Percent
Total	575	100	927	100
Complete or ineligible person	306	53	373	40
Refusal	99	17	246	27
Other nonresponse	145	25	283	31
Ineligible telephone number	25	4	25	3

NOTE: Detail may not sum to totals because of rounding. Ineligible persons are those whose age, enrollment status, or grade is outside the study range. Ineligible telephone numbers are those found to be nonresidential or nonworking, and at the extended interview level these cases were treated as nonresponse. "Other nonresponse" includes language problems, maximum call cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001.

Table 4-13. Results of refiled maximum call cases: AELL-NHES:2001

Final result	Maximum call cases			
	Federal Express or Priority Mail letter		No letter	
	Number	Percent	Number	Percent
Total	862	100	1,220	100
Complete or ineligible person	437	51	426	35
Refusal	161	19	361	30
Other nonresponse	239	28	398	33
Ineligible telephone number	25	3	35	3

NOTE: Detail may not sum to totals because of rounding. Ineligible persons are those whose age, enrollment status, or grade is outside the study range. Ineligible telephone numbers are those found to be nonresidential or nonworking, and at the extended interval level these cases were treated as nonresponse. "Other nonresponse" includes language problems, maximum call cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001.

No Answer-Answering Machine Cases

This category of Screener cases includes those for which the only contact has been with an answering machine. These cases were refiled for eight additional call attempts beginning on February 16, after all telephone numbers in the NHES:2001 sample had been attempted at least twice. Like the maximum call cases described above, these cases were refiled in two stages, with those not previously refiled being released first, since they were most likely to be productive. A letter was sent via first-class mail to no answer-answering machine cases for which mailable addresses were available prior to calling those cases. A copy of the letter is shown in appendix F.

The results of the refiled effort are presented in table 4-14, broken out by cases that were mailed a letter by Federal Express/Priority Mail, mailed a first-class letter, or sent no letter. Twenty-eight percent of the 1,912 cases mailed a Federal Express/Priority Mail letter were completed, compared with 27 percent of the 1,098 cases mailed a first-class letter. In contrast, only 15 percent of the 2,762 no-answer answering machine cases that were not mailed a letter were completed. This suggests that mailing to these households may have an effect, but that effect is not dependent on the type of letter. The refiled effort also allowed identification of a total of 1,015 ineligible telephone numbers, most of them from the cases without a mailable address.

Table 4-14. Results of refiled no-answer answering machine Screener cases: NHES:2001

Final result	Federal Express or Priority Mail letter		First-class letter		No letter	
	Number	Percent of eligible telephone numbers	Number	Percent of eligible telephone numbers	Number	Percent of eligible telephone numbers
Total	1,912	100	1,098	100	2,762	100
Complete.....	485	28	264	27	300	15
Refusal.....	235	14	137	14	269	13
Other nonresponse or noncontact	1,015	59	595	60	1,452	72
Ineligible telephone number	177	†	102	†	741	†

† Not applicable.

NOTE: Detail may not sum to totals because of rounding. No answer- answering machine cases are those that had been answered by machines only on any attempts resulting in contacts. "Other nonresponse" includes language problems, no answer cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period). Ineligible telephone numbers are those found to be nonresidential or nonworking, and those Screener cases are not considered in the calculation of unit response rates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

No Answer Cases

No answer Screener cases are those at which neither a person nor an answering machine has been reached. Historically, very few completed Screeners have resulted from refiled these cases, but the process has resulted in the identification of a portion of these numbers as nonworking or nonresidential. Therefore, to ensure that interviewing hours were spent on cases most likely to be productive, approximately one-third of the no answer Screener cases were randomly sampled and only those were refiled.²² These cases were refiled in week nine of data collection, beginning February 22, for an additional eight call attempts. Table 4-15 presents the results of refiled the NHES:2001 Screener no answer cases. Only 2 percent of the 5,103 refiled Screener no answer cases were completed; however, 532 cases (about 10 percent) were identified as ineligible.

²²Weighting procedures at the close of data collection in which each no answer case selected for re-release was given a weighting factor of 3 (the reciprocal of the subselection probability) and cases not subsampled were given a weighting factor of 0 accounted for the subsampling of the cases in the computation of response rates. Weighting procedures are discussed in chapter 7.

Table 4-15. Results of refiled Screener no answer cases: NHES:2001

Final result	Subsampled no answer cases	
	Number	Percent of eligible telephone numbers
Total	5,103	100
Complete	81	2
Refusal	94	2
Maximum call	97	2
No answer	4,253	93
No answer, answering machine	42	1
Other nonresponse	4	<1
Ineligible telephone number	532	†

† Not applicable.

NOTE: Detail may not sum to totals because of rounding. No answer cases are those for which neither a person nor an answering machine had answered on any attempt. Refiled cases were given a weighting factor of three (the reciprocal of the subselection probability) and cases not refiled were given a weighting factor of 0 in computing unit response rates. "Other nonresponse" includes language problems, maximum call cases, and problem cases that could not be resolved during data collection (e.g., household members away for an extended period). Ineligible telephone numbers are those found to be nonresidential or nonworking, and those Screener cases are not considered in the calculation of unit response rates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Results of Refiling Cases

The intensive working of nonresponse cases in the NHES:2001 was beneficial. After initial refusal conversion procedures had been exhausted, second-refusal cases were refiled and 22 percent were completed, giving an overall Screener refusal conversion rate of 51 percent. The overall refusal conversion rate for extended cases ranged from 38 percent for ECPP to 34 percent for AELL. About 25 percent of the refiled Screener maximum call cases were completed, as were 43 percent of the maximum call cases at the extended level. Eighteen percent of the no answer-answering machine Screener cases were completed. As expected, refiled no answer cases (all at the Screener level) was less productive, with 10 percent finalized as ineligible telephone numbers and about 2 percent of the eligible numbers resulting in completed Screeners. Data collection for the NHES:2001 closed on April 14, 2001, with an estimated Screener unit response rate of 69 percent. (See chapter 5 for more details on the unit response rate.)

Final Mailing

On March 20, in the 12th week of data collection, cases still unresolved were selected for an additional mailing, provided they had not already received a refusal conversion letter. This mailing

consisted of a postcard designed to capture the attention of any household member who would see it, provide information about the study, and encourage participation. A copy of the postcard is provided in appendix F.

Weekly Progress in Completing Cases

The goal of the calling strategy for the NHES:2001, as in the NHES:1999, was to attempt initial contact with all cases as quickly as possible. Therefore, as noted above, new cases had relatively high calling priority, rather than the lowest calling priority as in most previous NHES collections. This strategy allowed the “easiest” cases, those with cooperative respondents, to be completed quickly and as many business and nonworking telephone numbers as possible to be identified early in the data collection period, when the interviewing staff was at its peak. As the nature of the work changed to encompass a preponderance of the cases more difficult to complete, it was more appropriate to have the majority of the interviewing staff composed of skilled refusal conversion interviewers and bilingual interviewers, with others released to different studies. Table 4-16 presents the number of cases completed each week of data collection, the number of interviewer hours worked, and the interviewer work hours per completed extended interview.

All sampled telephone numbers had been attempted at least twice by February 4, 2001, the end of the fifth week of data collection. At that point in data collection, Screeners had been completed with 27,596 households, 57 percent of the number eventually completed. Thirty-three Screener cases were in maximum call status, 119 in language problem status, and 3,222 had incurred two refusals. Also, 37,543 cases had been resolved as business or nonworking numbers, and 58,365 cases were in various interim statuses, including 11,542 that had received one refusal. About half of the extended interviews (13,195) had also been completed. During February, some of the “final” refusals were refiled for another conversion attempt; cases that had reached maximum call and no answer status were also refiled.

Table 4-16. Weekly progress in completing cases: NHES:2001

Week	Week ending	Screeners completed		Extended interviews completed ¹		Interview hours	Hours per completed interview ²
		Number	Percent	Number	Percent		
Total		48,385	100	27,935	100	39,744	1.42
1	January 7	2,581	5	1,027	4	1,335	1.30
2	January 14	8,131	17	3,535	13	4,269	1.21
3	January 21	4,904	10	2,581	9	3,605	1.40
4	January 28	6,044	12	3,031	11	3,733	1.23
5	February 4	5,936	12	3,021	11	3,991	1.32
6	February 11	5,170	11	2,695	10	3,968	1.47
7	February 18	4,824	10	2,497	9	3,531	1.41
8	February 25	2,298	5	1,826	7	2,793	1.53
9	March 4	2,429	5	1,345	5	2,370	1.76
10	March 11	1,981	4	1,422	5	2,166	1.52
11	March 18	1,406	3	1,611	6	2,203	1.37
12	March 25	1,211	3	1,137	4	2,104	1.85
13	April 1	763	2	855	3	1,791	2.09
14	April 8	703	1	638	2	1,266	1.98
15	April 15	4	#	465	2	619	1.33
	After data collection ³	†	†	249	1	†	†

† Not applicable.

Rounds to zero.

¹ Includes 730 reinterview cases; therefore, the total shown here exceeds the 27,205 extended interviews in the data files.

² Hours per completed interview equals the number of interviewer labor hours divided by the number of completed extended interviews.

³ Extended interviews completed after April 15 are those not completed at the close of data collection but determined to have sufficient information to be included in the data set following imputation of missing items. Thirty-two ECPP interviews, 79 ASPA interviews, and 138 AELL interviews are included in this total.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

By March 4 (the end of week nine), 42,317 Screeners, 87 percent of the total, had been completed. At that time, the number of cases identified as business or nonworking had reached 42,928, and 23,887 Screener cases were in an interim status, including 2,342 that had received one refusal. Also, 8,154 Screener cases were in final refusal status. (Some had been refiled and had received a third, and absolutely final, refusal.) Seventy-eight percent of the extended interviews (21,558 out of the 27,205 that were eventually completed) were completed at this time. Efforts in the last 5 weeks of data collection focused on working refiled final refusal, maximum call, and no answer Screener cases that had already fulfilled the standard calling protocol of two refusals or eight no contact attempts and completing extended interviews.

Some extended interviews were declared complete even though not all questions had been answered by the respondent. In order to be judged complete, respondents had to have answered questions in all the sections pertaining to the substantive topics of the surveys. Thirty-two ECPP interviews and 79 ASPA interviews were completed through the section on the child's health and disability, including all sections on participation in nonparental care/programs, and the items on parent/guardian household characteristics were set to missing and imputed. One hundred and thirty-eight AELL interviews were declared complete because respondents had answered all the participation questions and reached the section on background information.

Item Clarification Callbacks

There was very little need in the NHES:2001 to call back into households for data retrieval or clarification. Callbacks into households included 11 cases in which it was necessary to resolve questions about the number dialed and reached and to confirm the household membership. One case required a callback to resolve an issue associated with the respondent's winter home versus summer home, to determine whether the telephone number at which the respondent was interviewed was his household at the time of the survey.

In prior NHES surveys, households were called back if the respondent indicated that the telephone number automatically dialed by CATI was not his or her telephone number. In the NHES:2001, however, a question and comments screen was included so the interviewer could record the reason and provide more detailed information if available. Respondents in 11 households indicated that the number dialed by CATI was not theirs. In two cases the number was another in the household. In six cases, telephone numbers had been forwarded to another number. Three respondents reported that the sampled telephone number was not their number, and they were unable to provide an explanation; that is, they gave no indication that they recognized the sampled telephone number. There is evidence to suggest that these situations could be the result of secondary telephone numbers that are assigned by telephone companies and used for billing and accounting purposes only. The households are unaware that these secondary numbers exist.²³ These households may be sampled through this secondary number as well as the telephone numbers they believe they have been assigned. In order to properly account for their dual probability of selection, records for the case were set to indicate the household had another telephone number.

²³ See Marketing Systems Group (1999) for more information.

In approximately 860 interviews, an interviewer received the response “never heard of that person” when he or she called back into a household to administer an extended interview. Although some of these instances were covert refusals, some were caused by incorrect information having been recorded at the time the household was initially screened. Most of these households (87 percent or 747 cases) were called back to investigate the problem. Cases that occurred near the end of data collection were not called back and were finalized as enumeration errors by TRC supervisors. In 16 percent of the refiled interviews, the interviewer reached the respondent and was able to complete the interview. In 40 percent of the cases, the telephone number was identified as nonworking or nonresidential. In 12 percent of the cases, overt refusals were given. If those refusals were mild or firm, the cases were attempted again. As is standard practice, cases with hostile refusals were not called back but were assigned a final refusal code. In 8 percent of the cases, another final disposition code, such as maximum calls or language problem, was assigned. In the remaining 22 percent, it was determined that the person was enumerated incorrectly and was never a household member, and the case was given a final status code of enumeration error. These cases were treated the same as cases in which the sampled person was ineligible. In 171 cases, the Screener was cleaned out entirely and the case was refiled to attempt re-enumeration.

Quality Control Procedures

The initial steps to support quality control of data collection occurred prior to the start of the interviewing. These included careful specification and thorough testing of the CATI system by programming, project, data preparation, and TRC staff; cognitive research; a field test; and a comprehensive training program for data collection staff, all described earlier. In this section, quality control activities that occurred during data collection are described.

Quality Control Throughout the Interviewing Process

During data collection, prompt technical assistance was available for any hardware or software problems that were encountered. Also, specific efforts were focused on promoting excellence in interviewer-respondent interactions, including establishing rapport, securing respondent cooperation, administering interviews clearly, and responding to questions about the study. These efforts included monitoring interviewers as they conducted interviews, providing prompt feedback, individual coaching and group trainings, and holding information meetings to inform interviewers when project staff or TRC supervisors noticed the need for additional prompts or explanations for certain questions.

Triage

During all hours of TRC operation, interviewing was supported by one of 12 specially trained triage supervisors. The triage supervisor was called whenever a problem interfered with the ability to conduct CATI interviewing. At that time, he or she diagnosed the problem and contacted the appropriate support personnel who were contacted via home phones or beeper numbers. Speedy remedy for both hardware and software problems and decisions on project-specific issues were available during all interviewing hours.

Interviewer Monitoring

Westat systematically and rigorously monitored telephone interviewer performance throughout the field period. The purpose of monitoring was to reinforce good interviewing practice and to help build interviewing skills through coaching. Monitors, who included TRC supervisors and project staff, evaluated interviewers on their telephone manner and relationship with respondents, specifically on their level of skill in reading the questions, listening to the comments and questions of respondents and providing accurate probes and replies, correctly recording the information, and gaining respondent cooperation. Monitoring sheets were completed for each monitoring session, which was 15 minutes in length. (See appendix I for a sample monitoring sheet.) All of the TRCs can be monitored from terminals located at the Rockville TRC through Westat's telephone system, so project staff and Westat's most experienced supervisors were able to provide feedback to interviewers no matter where they were located. Monitoring hours were allocated in proportion to interviewer hour allocation; therefore, about 30 percent of the monitoring hours occurred during the daytime, 40 percent during the evenings, and 30 percent on weekends.

Monitoring rates varied across interviewers somewhat based upon experience, performance, and the results of previous monitoring sessions. Overall rates also varied across TRCs, consistent with the number of experienced versus inexperienced interviewers at the particular centers. Most of the TRCs approached the goal of having 10 percent of interviewer hours monitored, and one exceeded that goal. Twelve percent of interviewing hours were monitored at the Chestertown TRC, and 10 percent each were monitored at Toms River and Frederick. Nine percent of the interviewer hours were monitored at Sarasota, 8 percent at Chambersburg and Greeley, and 7 percent at Rockville. On average across all TRCs, 9 percent of interviewer hours were monitored. Table 4-17 presents the number of monitoring sheets and ratio of forms to interviewer air time for each week of the NHES:2001 data collection.

Table 4-17. Number of monitoring sheets and ratio of forms to interviewer air time, by week and cumulatively: NHES:2001

Week number	Week ending	Air time (hours) ¹	Total forms	Monitoring rate ²	Cumulative monitoring rate ²
1	January 7	1,007	613	10	10
2	January 14	3,444	1,530	7	8
3	January 21	2,896	1,685	10	9
4	January 28	2,888	1,916	11	9
5	February 4	2,938	1,510	9	9
6	February 11	3,017	1,815	10	9
7	February 18	2,519	1,486	10	9
8	February 25	1,922	1,301	11	10
9	March 4	1,741	1,055	10	10
10	March 11	1,554	876	9	10
11	March 18	1,559	772	8	10
12	March 25	1,520	569	6	9
13	April 1	1,416	453	5	9
14	April 8	955	246	4	9
15	April 15	432	105	4	9

¹ Air time is rounded to whole numbers.

² Monitoring rate is the ratio of forms multiplied by 0.25 (because monitoring was done in 0.25 hour increments) to air time.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Each week, the TRC operations manager for the study reviewed the statistics on monitoring individual interviewers. If she identified interviewers in need of focused monitoring because of a low monitoring rate in a given week or because of other performance problems such as low productivity or cooperation, she directed TRC supervisors accordingly. Detailed monitoring reports were also provided to NCES on a weekly basis. They showed interviewer hours spent working cases, the total number of monitoring sheets, and the monitoring rate. (The monitoring rate is the number of monitoring sheets divided by 4, to reflect that monitoring was done in one-quarter hour increments, divided by the number of interviewing hours.) The report included weekly statistics and cumulative totals.

Standard Reports

In addition to monitoring statistics, the CATI management system produced weekly reports presenting unit response rates, refusal rates, and refusal conversion rates for each interviewer. These reports were used by TRC supervisors when they gave feedback to the interviewers and guided the supervisors in assigning interviewers to appropriate training. Copies of the reports were also sent to NCES weekly.

Coaching Sessions

During the first few weeks of data collection, TRC supervisors conducted coaching sessions with small groups of interviewers. These sessions included both new and experienced interviewers. Newer interviewers had by then experienced the challenges of interviewing in an RDD survey, and veteran interviewers suggested valuable strategies for meeting some of these challenges. In the coaching sessions, feedback from the monitoring was provided to the interviewers in a direct and positive way. This, in addition to feedback and suggestions given to individual interviewers by supervisors, helped to enhance the quality of interviewer-respondent interaction in the NHES:2001.

Interviewer Meetings

Interviewer meetings led by the TRC supervisors were held from time to time at the direction of the TRC operations manager or the project director. At these meetings, memos containing clarification of questionnaire items or contact procedures were distributed, and general news was circulated and discussed. For example, early in data collection, memos reviewing the proper way to handle range violations and to schedule appointments requested by respondents outside of normal interviewing hours were discussed. Correct probing for parents who did not respond with the child's average grade in school and careful articulation of children's activities for adult supervision were also reviewed. The meetings were scheduled so that all interviewers attended; this ensured that all interviewers received consistent information.

Online Help Screens

Interviewers had two reference sources for use when questions about the survey items arose. Question-by-question specifications were provided in the Interviewer's Manual given to each interviewer at training and reviewed periodically throughout the training sessions. Those specifications were also included in the CATI system. At a keystroke, an interviewer could access the online help screen for the question he or she was administering.

There were 610 CATI help screens in the NHES:2001; 126 of them (21 percent) were never accessed. Of those that were accessed, 317 (52 percent) were accessed 10 times or fewer, and 87 (14 percent) were accessed between 10 and 24 times. Eighty screens were accessed by interviewers 25 times or more, and they are shown in table 4-18. For six questions, the help function was accessed 200 or more

times. Three questions were in the ECPP and ASPA interview (common items), two in the AELL interview, and one household item was asked in all interviews. For another eight items, one in the Screener, three in the ECPP or ASPA interview, three in the AELL interview, and one household question, the help screen was accessed more than 100 times. Some of these questions were about unfamiliar issues or terms, for instance, questions about the Dependent Care Tax Credit (accessed 304 times), the Lifetime Learning and Hope Scholarship tax credits (accessed 659 times), and receipt of WIC/food stamps/Medicaid/CHIP (accessed 255 times). Other help screens were likely accessed in order for interviewers to clarify or confirm respondents' definitions of terms, for instance, the list of disabilities, (accessed 580 times) and questions about autism and ADHD (accessed 669 times). The question in the AELL interview about informal learning at work was accessed 280 times, suggesting some respondent confusion with this concept.

Table 4-18. Number of times CATI help screens were accessed, by item: ECPP-NHES:2001, ASPA-NHES:2001, and AELL-NHES:2001

CATI screen	Item	Number of times help accessed
Screener		
S1.....	Introduction	68
S7.....	Attending or enrolled in school	31
S8.....	Child is home schooled	25
S18.....	Adult took courses in past 12 months	182
ECPP/ASPA common items		
PA4.....	Hispanic origin	61
PT1.....	Developmental delay	61
PT5.....	Disabilities (other than infants)	580
PT6.....	Autism and ADHD	669
PT7.....	Disabilities (infants)	63
PT8.....	Receipt of services from school district/health agency/doctor or clinic/other	97
PT9.....	Services provided through IFSP or IEP	160
PU7/PV6.....	Mom's/Dad's highest grade/year of school completed	132
PU9/PV8.....	Mom/Dad worked last week for pay	29
PU12/PV11.....	Months Mom/Dad worked in past 12 months	43
PU16/PV15.....	Mom/Dad enrolled in school or job training	44
PU18/PV17.....	Child care needs affected Mom's/Dad's work schedule	85
PU20/PV19.....	Mom's/Dad's employer has dependent care account	35
PU24/PV23.....	Mom/Dad heard of Dependent Care Tax Credit	304
PU25/PV24.....	Mom/Dad used Dependent Care Tax Credit	32
PV26.....	Care from biological father	72
ECPP		
ED1.....	Receives care from relative	42
EG1.....	Receives center-based care	29
EG26.....	Center-based program provides health exams/sick child care	71
EH2.....	Any of child's care arrangements are Head Start	48
EH4.....	Ever attended Head Start	36
EH6.....	Other programs since September	25
EI1.....	Rating characteristics of care arrangements	42
EI5.....	Importance of characteristics in arrangement selection	42
EI6.....	Good choices for child care nearby	78
EJ1.....	Support for families of preschoolers	53
EK3.....	Family learning activities with preschoolers	71
ASPA		
SE3.....	Teachers/school contacted family about child's behavior problems	29
SF1.....	Receives care from relative	51
SH1.....	Receives center-based care	77
SH32.....	Rating aspects of center-based program	29

See notes at end of table.

Table 4-18. Number of times CATI help screens were accessed, by item: ECPP-NHES:2001, ASPA-NHES:2001, and AELL-NHES:2001—Continued

CATI screen	Item	Number of times help accessed
SI1	Participates in before- or after- school activities	60
SI2	Types of before- or after- school activities	131
SI3	Weekly participation in before- or after- school activities	54
SI9	Participation covers hours needed for adult supervision	97
SI12	Weekly hours in after school programs	25
SJ1	Self-care	92
SK4	Other programs since start of school year	43
SL5	Would choose nonparental care	33
SM2	Preferred after-school arrangement	71
SM4	Obstacle to program enrollment	30
SM7	Good choices for before-school care nearby	36
SM8	Good choices for after-school care nearby	33
SM9	Importance of characteristics in arrangement selection	59
AELL		
AA1	Highest grade or year of school completed	43
AA7	Self-employed in last 12 months	34
AD3	Enrolled in post-baccalaureate, masters, doctoral program	88
AD18	Semester/quarters enrolled in credential program	26
AD19	Courses taken in credential program	25
AD22	Technology methods used in credential program	60
AE1	Enrolled in voc/tech program	53
AF1	Apprenticeship program	83
AG1	Participation in formal courses	30
AG2	Other types of formal courses	53
AH2	Reasons for taking work-related course	36
AH6	Earning CEUs for work-related course	61
AH8	Technology methods used in work-related course	73
AI5	Earning CEUs for personal development course	38
AI7	Technology methods used in personal development course	40
AJ1	Informal learning methods	280
AK5	Hispanic origin	45
AK7	Long-term physical, mental, or emotional problem	74
AK16	Employer name and industry	34
AK22	Supervisory role at job	77
AK23	Certification for job	81
AK24	Certification to practice a trade/profession	102
AK25	Continuing education requirements	119
AK26	Currently member of labor union	41
AK32	Heard of Lifetime Learning/HOPE tax credits	659
AK33	Use of Lifetime Learning tax credit	103
AK34	Use of HOPE tax credit	46

See notes at end of table.

Table 4-18. Number of times CATI help screens were accessed, by item: ECPP-NHES:2001, ASPA-NHES:2001, and AELL-NHES:2001—Continued

CATI screen	Item	Number of times help accessed
Household		
PW4/AL4.....	Number of additional home use phones	28
PW10/AL10.....	Receipt of TANF/state welfare in past 3 years	113
PW11/AL11.....	Current receipt of TANF/state welfare	35
PW16/AL16.....	Receipt of WIC/Food/Medicaid/CHIP in last 12 months	255
PW17/AL17.....	Household income range	50

NOTE: Includes only those screens accessed 25 times or more.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECP) Survey of the National Household Education Surveys Program (NHES), 2001; Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001; and Adult Education and Lifelong Learning (AELL) Survey of the NHES, 2001.

Interview Administration Time

The time it takes respondents to complete survey interviews is thought to be an important factor in unit response rates and response quality.²⁴ A survey must balance the need to include all the analytic variables pertinent to its topic with the desire to avoid both response burden and response fatigue for survey respondents. Interview administration times for each of the interviews in the NHES:2001, the Screener, the ECPP interview, the ASPA interview, and the AELL interview, were automatically recorded on the CATI database. The data include the time it took to administer the entire completed interview as well as the time for specific interview paths and specific sections; therefore, the relative burden of various sections of the interviews can also be assessed.

The timings recorded by the CATI system for each interview are automatic and triggered by the accessing of certain CATI screens. If an interruption in the survey process occurs due to the respondent having to leave the phone for a few minutes, for instance, to answer the door, there is no way for the interviewer to record why the interview is taking longer than usual. Monitoring of the interviews during data collection revealed that these interruptions occasionally occur.

Screener Administration Time

Tables 4-19 through 4-23 show the administration times in minutes for the NHES:2001 Screener and three extended interviews. The administration times for completed Screeners categorized by

²⁴Bogen 1996 reviews various studies on this topic.

the sampling status of the extended interviews that were generated in the household show a relatively small respondent burden (table 4-19). Overall, the mean Screener administration time was 3.5 minutes. The average Screener administration time was 3.1 minutes in households in which no member was sampled for an extended interview, slightly less than half of the households contacted. The next lowest Screener administration time was in households in which only an adult was sampled for an AELL interview, 3.2 minutes. Households without children had a higher probability of selection for an AELL interview, which would bring the average administration time down for Screeners resulting in a person sampled for an AELL interview only. It took about one-half a minute longer to administer the Screener in households sampled for only ECPP interviews (3.7 minutes) and somewhat longer in households in which children were sampled for an ASPA interview (4.0). It should be kept in mind that up to two children could have been sampled in a household in which an ECPP or ASPA interview was generated, depending upon the ages of the children in the household. The highest Screener administration times were recorded in households in which members were sampled for all three extended interviews, 5.9 minutes. In these households, all members (not just children) would have been enumerated and questions identifying a parent respondent for the ECPP and ASPA interviews would have been administered.

Table 4-19. Mean, median, and quartile administration time of completed Screeners, by extended interview sampling status: NHES:2001

Completed Screeners by sampling status	Number	Interview length in minutes				
		Mean	Standard deviation	Quartiles		
				75th percentile	Median	25th percentile
Overall	48,385	3.5	1.6	4.1	3.2	2.4
No one sampled	22,903	3.1	1.6	3.7	2.9	2.0
Sampled for ECPP interview	3,475	3.7	1.5	4.3	3.4	2.7
Sampled for ASPA interview.....	6,045	4.0	1.6	4.6	3.7	3.0
Sampled for ECPP and ASPA interviews.....	1,894	4.6	1.9	5.2	4.1	3.4
Sampled for AELL interview	10,740	3.2	1.3	3.6	2.9	2.4
Sampled for ASPA and AELL interviews	1,373	4.5	1.7	5.1	4.1	3.5
Sampled for ECPP and AELL interviews.....	1,729	4.7	1.6	5.4	4.4	3.7
Sampled for ECPP, ASPA, and AELL interviews.....	226	5.9	2.1	6.9	5.3	4.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

ECPP Administration Time

The mean time to administer the ECPP survey was 20.0 minutes (table 4-20); however, the average timings varied by interview path. The infant path averaged 16.9 minutes for administration time; and the preschool path, 23.5 minutes. The most time-consuming segments²⁵ of the ECPP interview collected information about nonparental care arrangements, either relative care, nonrelative care, or center-based programs (4.1, 4.5, and 5.3 minutes, respectively, table 4-21). Eleven of the 18 segments in the ECPP interview took 2 minutes or less to administer.

Table 4-20. Mean, median, and quartile administration time of completed extended interviews, by interview type: ECPP-NHES:2001, ASPA-NHES:2001, and AELL-NHES:2001

Completed extended interviews	Number	Interview length in minutes				
		Mean	Standard deviation	Quartiles		
				75th percentile	Median	25th percentile
Interview totals						
ECPP interview	6,749	20.0	8.4	24.9	19.3	14.0
ASPA interview	9,583	23.0	8.2	27.0	21.8	17.7
AELL interview	10,873	17.4	9.1	21.9	15.1	10.5
ECPP interview by path						
Infant	3,599	16.9	7.4	21.1	16.0	11.7
Preschool.....	3,150	23.5	8.1	27.8	22.7	18.1
ASPA interview by path						
Elementary/middle school.....	9,388	23.2	8.2	27.2	21.9	17.9
Home school	195	13.8	5.5	16.7	13.3	10.7
AELL interview by participation status						
Participants.....	6,103	22.5	8.8	26.8	20.5	16.1
Nonparticipants	4,770	10.8	3.9	12.4	10.1	8.3

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), 2001; Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001; and Adult Education and Lifelong Learning (AELL) Survey of the NHES, 2001.

It should also be noted that when more than one child was sampled from a household as subjects for ECPP or ASPA interviews, some data items were collected only once per household. Similarly, when a respondent to an ECPP or ASPA interview was also sampled for an AELL interview,

²⁵ A “segment” is a section of the interview.

some items about the respondent were asked only in the first extended interview. This reduces respondent burden but affects the administration times for the segments of the interviews that collect parent/respondent information and household information by slightly suppressing the mean time to complete interviews.

Table 4-21. Mean, median, and quartile administration time of completed interviews, by interview segment: ECPP-NHES:2001

ECPP interview segment	Number	Interview length in minutes				
		Mean	Standard deviation	Quartiles		
				75th percentile	Median	25th percentile
Demographic characteristics (INTRO-PA10).....	6,749	1.9	1.0	2.2	1.7	1.3
Current school status (PB1-PB7).....	6,749	#	0.1	0.0	0.0	0.0
Early childhood care and programs						
Participation in any relative care arrangement (EDINTRO-ED4OV).....	6,749	0.7	0.5	0.9	0.6	0.5
Relative care arrangements (ED5-ED28).....	1,579	4.1	2.3	4.9	3.5	2.7
Participation in any nonrelative arrangements (EEINTRO-EE4OV).....	6,749	0.6	0.4	0.7	0.5	0.4
Nonrelative arrangements (EE5-EE32).....	1,126	4.5	1.8	5.1	4.2	3.5
Participation in any center-based programs (EGINTRO-EG4).....	6,749	0.5	0.4	0.6	0.5	0.3
Center-based programs (EG5-EG32).....	2,532	5.3	1.9	5.9	4.9	4.1
Program confirmation/continuity and (Early) Head Start (EH1-EH7).....	6,749	0.2	0.4	0.3	0.2	0.0
Past arrangements/programs (EH7-EH11).....	6,749	0.6	0.7	0.6	0.4	0.3
Perceptions of quality/factors in parental choice (EI1-EI6).....	6,749	3.0	1.7	3.9	3.1	1.8
Training and support for families of preschoolers (EJINTRO-EJ1).....	6,749	0.3	0.2	0.3	0.3	0.2
Home activities (EKINTRO-EK4).....	6,749	1.0	0.7	1.4	0.9	0.5
Emerging literacy and numeracy (ELINTRO-EL8) ...	4,421	1.3	0.4	1.5	1.2	1.1
Health and disability (PTINTRO-PT10).....	6,749	1.2	0.7	1.4	1.0	0.8
Mother items (PUINTRO-PU38).....	4,298	3.1	1.3	3.7	2.9	2.3
Father items (PVINTRO-PV27).....	3,463	2.1	0.9	2.3	1.9	1.5
Household characteristics (PWINTRO-PW18OV).....	6,749	2.3	0.8	2.6	2.1	1.8

Rounds to zero.

NOTE: Times of less than 0.1 are not reported. Timing is based on all cases that got into the segment of the interview.

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), 2001.

ASPA Administration Time

Table 4-20 presents the average administration time for the ASPA interview. At 23 minutes, it was the longest NHES:2001 survey. Table 4-22 shows mean administration times for each segment. In this survey, also, the segments in which information about the nonparental care arrangements was collected took the most time to administer. For relative care, the timing was 5.2 minutes; for nonrelative care, 5.3 minutes; and for center-based programs, 6.9 minutes. Twelve of the 21 segments took less than 2 minutes to administer.

Table 4-22. Mean, median, and quartile administration time of completed interviews, by interview segment: ASPA-NHES:2001

Interview segment	Number	Interview length in minutes				
		Mean	Standard deviation	Quartiles		
				75th percentile	Median	25th percentile
Demographic characteristics (INTRO-PA10).....	9,583	2.2	1.1	2.6	2.0	1.6
Current school status (PB1-PB7).....	9,583	#	#	#	#	#
Home schooling (SC1-SC4).....	195	3.8	2.3	4.5	3.3	2.5
School characteristics (SD1-SD12).....	9,398	1.5	0.7	1.7	1.3	1.1
Student academic performance and behavior (SE1-SE7).....	9,398	1.1	0.5	1.2	0.9	0.7
Before- and after-school arrangements						
Participation in any relative care arrangement (SFINTRO-SF2).....	9,388	0.7	0.5	0.7	0.6	0.5
Relative care arrangements (SFI2-SF29).....	1,717	5.2	2.5	6.3	4.5	3.5
Participation in any nonrelative care arrangement (SGINTRO-SG2).....	9,388	0.4	0.3	0.4	0.4	0.3
Nonrelative care arrangements (SG3-SG29).....	624	5.3	2.8	6.0	4.6	3.6
Participation in any center-based program (SH1-SH2).....	9,388	0.5	0.4	0.6	0.4	0.4
Center-based programs(SH3-SH36).....	1,813	6.9	3.8	8.1	6.0	4.7
Before- and after-school activities						
(SIINTRO-SI14).....	9,388	1.7	1.5	2.7	1.3	0.4
Self-care (SJ1-SJ16).....	9,388	0.9	1.1	0.8	0.4	0.3
Program confirmation (SK1).....	5,022	0.4	0.7	0.3	0.3	0.2
Program continuity/past arrangements (SK2-SK9).....	9,388	0.7	0.8	0.9	0.5	0.3
Parental care (SL1-SL5).....	9,388	0.8	0.9	1.5	0.2	0.1
Perceptions of quality and factors in parental choice (SM1-SM9).....	9,388	2.4	1.6	3.3	2.4	0.9
Health and disability (PTINTRO-PT10).....	9,583	1.0	0.7	1.2	0.7	0.6

See notes at end of table.

Table 4-22. Mean, median, and quartile administration time of completed interviews, by interview segment: ASPA-NHES:2001—Continued

Interview segment	Number	Interview length in minutes				
		Mean	Standard deviation	Quartiles		
				75th percentile	Median	25th percentile
Mother items (PUINTRO-PU38).....	8,171	3.2	1.3	3.8	3.0	2.5
Father items (PVINTRO-PV27)	6,311	2.0	0.9	2.3	1.9	1.5
Household characteristics (PWINTRO-PW18OV).....	9,583	2.3	0.8	2.6	2.1	1.8

Rounds to zero.

NOTE: Times of less than 0.1 are not reported. Based on all cases that got into the segment of the interview.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001.

AELL Administration Time

Overall, the Adult Education interview took 17.4 minutes to administer (table 4-20). Table 4-23 shows that the most time-consuming segments were those containing questions on college or university degree programs (6.1), vocational or technical degree programs (6.0 minutes), and work-related courses (7.5 minutes). Most of the other segments, 10 out of the 16, took less than 2 minutes to administer.

Table 4-23. Mean, median, and quartile administration time of completed interviews, by interview segment: AELL-NHES:2001

Interview segment	Number	Interview length in minutes ¹				
		Mean	Standard deviation	Quartiles		
				75th percentile	Median	25th percentile
Initial background (INTRO1-AA11).....	10,873	1.7	0.9	1.9	1.5	1.3
English as a second language (INTRO3-AB24) ...	1,645	1.3	2.0	0.9	0.7	0.5
Basic skills and GED preparation (AC1-AC22) ...	2,067	1.2	1.8	0.9	0.6	0.5
Credential programs:						
Participation in college or university degree programs (AD1-AD3)	10,873	0.3	0.5	0.3	0.2	0.2
College or university degree programs (AD4-AD33)	1,208	6.1	2.7	7.0	5.4	4.4
Participation in vocational or technical degree programs (AE1-AE3)	10,873	0.2	0.3	0.2	0.1	0.1

See notes at end of table.

Table 4-23. Mean, median, and quartile administration time of completed interviews, by interview segment: AELL-NHES:2001-Continued

Interview segment	Number	Interview length in minutes ¹				
		Mean	Standard deviation	Quartiles		
				75th percentile	Median	25th percentile
Vocational or technical degree programs (AE4–AE31)	270	6.0	2.5	7.2	5.5	4.4
Apprenticeship programs (AF1–AF9)	10,873	0.2	0.5	0.2	0.1	0.1
Participation in formal courses (AG1–AG7)	10,873	2.6	2.5	3.5	1.7	0.8
Work-related courses (INTRO4–AH20)	3,785	7.5	4.3	10.2	6.2	4.0
Personal interest/development courses (INTRO5–AI16)	2,695	3.2	1.6	4.0	2.8	2.1
Work –related informal activities (AJ1–AJ2OV3)	10,873	1.5	0.8	1.7	1.3	1.0
Remaining background						
Demographics (AK1–AK10)	10,873	1.2	0.7	1.3	1.0	0.8
Employment characteristics (AK11–AK24OV)	10,873	2.7	1.6	3.5	2.7	1.4
Additional information (AK25–AK34)	10,873	0.8	0.5	0.9	0.7	0.6
Household characteristics (HHINTRO-AL17OV2)	10,016	1.6	0.8	1.9	1.5	1.2

¹ Based on all cases that got into the segment of the interview.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001.

Data Editing

The final product of the NHES CATI data collection process is the delivery of edited data files and associated documentation. In order to ensure that the data are complete and of high quality, a series of data editing procedures were conducted. Data editing (correcting interviewer, respondent, and program errors) was performed both during administration of the interview and after completion of the interview, when updating processes were performed by data preparation staff. The latter process can potentially introduce errors in other items. Therefore, extensive *post* data collection data editing procedures were conducted. These procedures included checking data alignment, confirming that data were within the defined range of values for each item, performing logic, integrity and structural edits, reviewing cross tabulations between data items, and reviewing frequency distributions for individual data

items to ensure skip patterns were followed appropriately. After imputation of missing values was completed, these procedures were repeated to ensure that no errors were introduced during imputation.

Data Alignment

At the conclusion of data collection, alignment edits were run against the entire database to ensure appropriate alignment of data. These edits verified that character data were left justified (“John “) and numeric data were right justified (“ 200.5”). This permitted clean frequency review by representing all identical values together. For example, “ 1” and “1 “ were represented in the database as “ 1”.

Range Edits

The ranges of responses for closed-ended items in the NHES CATI were determined by the permissible response codes. For open-ended items that required an entry by the interviewer (such as ages, dates, number of hours worked for pay, etc.), there was not a specific set of responses. Therefore, reasonable ranges were defined in the Data Dictionary and applied to these items. Definitions of hard and soft ranges were reviewed after the field tests. A few (e.g., transit time to before- and after-school arrangements and cost of arrangements) found to be overly restrictive were modified prior to the start of data collection. See appendix J for the range and logic edit specifications.

Range edits included both “hard” and “soft” ranges. A **soft range** was one that represented the reasonable expected range of values, but did not include all possible values. Responses outside the soft range triggered a message during data collection that the response was *unlikely*. The interviewer confirmed the response with the respondent and reentered it. For example, the number of hours each week a preschool-aged child attended a center-based program had a soft range of 1 to 50. A value outside this range may have been entered and confirmed as correct by the interviewer as long as it was within the hard range of values (1 to 70). A **hard range** represented the finite set of parameters for the values that could be entered into the CATI system. Responses outside the hard range triggered a message to the interviewer that the response was *unacceptable*. The interviewer, even with confirmation, could not exceed hard ranges. For example, the hard range of possible values for the number of adults in a child’s center-based program room or group was 1 to 10. It is extremely rare that a single center-based room or group would contain more than 10 adults. If the respondent reiterated that more than 10 adults were present, the interviewer recorded a response of “don’t know” (shift-8) to permit the interview to continue and then

recorded the out-of-range response in comments. All comments and problem sheets were reviewed by data preparation staff who had the ability to override hard ranges to input the value.

Logic Edits

Logic edits involved the comparison of two or more items. They were used to examine the relationships between responses to be sure that they did not conflict with one another, and that the response to one item did not make the response to another item unlikely. If a difference among responses was encountered during administration of the interview, an error message was displayed and the interviewer attempted to reconcile the difference while on the telephone with the respondent. Logic edits were implemented in the CATI system using “confirmation screens” and “until statements.” **Confirmation screens** displayed the discrepant items again and prompted the interviewer to reconfirm the responses. New values may have been entered or the old responses retained by pressing “enter” at each entry field. An example of a confirmation screen is the age/grade edit check. If a child was attending a grade that was outside the normal range of grades for his age, the interviewer was prompted to read the child’s age and grade again and correct any errors (if they existed). **Until statements** were somewhat stricter than confirmation screens. With until statements, the interviewer was unable to leave a screen until he/she entered a response that met the consistency edit criteria. Questions in which a number and a unit were collected were programmed using until statements that required an entry within the hard range for each unit before the screen could be exited. For example, if an ECPP respondent verified that the cost of relative care to the household was really \$11 per hour, the until statement edit did not permit entry of such an amount and time unit. The interviewer entered “don’t know” and recorded the out-of-range response in comments to continue with the interview. Comments were reviewed and updates posted to the data after the interview was complete.

After data collection and editing by data preparation staff, the logic edits were rerun for all completed cases as part of a batch program. Any cases that violated the batch edits were written to an error report that was reviewed by data preparation staff, and corrective action was taken. These batch edits were also programmed in SAS and were run on the post-imputation data to verify that item imputation was consistent with the range and logic guidelines.

Batch Data Integrity Edits

Batch data integrity edits were run after interview administration was complete. They checked complicated skip patterns and consistency among data items copied from one interview to another. These data integrity edits were used by data preparation staff to be sure all post-interview updates were done correctly and that a change to one item did not adversely affect others. They are outlined in appendix J.

The batch logic edits and data integrity edits were run periodically during data collection to assist in cleaning efforts. They were also run after imputation of the data, during the file preparation process.

Structural Edits

The relationships of database records were often dependent on values of variables contained in other database records. Structural edits ensured the structural integrity of the database (i.e., all database records that should have existed did exist, and those that should not have existed did not exist) by checking these variable values and the existence/nonexistence of concomitant records. The structural edits were run against completed interviews only. They were grouped into four logical categories: edits that verified interview completeness, edits that confirmed the presence of appropriate person records, edits that verified parent relationships in the household, and edits that verified consistency of common items. The specification for the structural edits is included in appendix J. Appendix J also contains the NHES:2001 database design diagram that displays the database hierarchy graphically. It may be helpful to refer to the diagram when reviewing the structural edits.

Frequency and Cross-Tabulation Review

The frequencies of responses to all data items (both individually and in conjunction with related data items) were reviewed during and after data collection to ensure that appropriate skip patterns were followed. Members of the data preparation team checked each item to make sure the correct number of responses was represented. If a difference was discovered, the problem case was identified and reviewed. If data were incorrectly stored in the database, the audit trail for the interview (which provided a keystroke-by-keystroke record of all responses entered) was retrieved to determine the appropriate response. If the audit trail revealed no additional information, an item clarification callback (attempting to

recontact the respondent and administer the missing items) was made or the item was coded as “not ascertained.” Not ascertained responses were later imputed. (Imputation is discussed in chapter 6.)

Frequency Review of Text Items

The “Other, Specify” open-ended text responses (identified by variable names that end in “OS”) were reviewed to determine if they should have been coded into one of the existing response categories. If so, the recoding was done. Review of the open-ended text responses revealed questions in the ECPP and ASPA interviews that had text items recorded frequently enough to warrant the creation of new response categories. These included the unit for cost of care items, the main reason for choosing parental care, services for disabilities, the method parent is using to look for work, how the respondent learned about the nonrelative arrangement or center-based program (ECPP), activities done within care arrangements (ASPA), and obstacles to enrolling the child in before- or after-school programs (ASPA). Newly added response categories are indicated by italics on the questionnaires in appendix A.

Problem Areas and Suggestions for Improvements in Future Surveys

The NHES:2001 survey instruments (with the exception of the ASPA interview) were largely a remeasure of key indicators from past NHES collections. Therefore, this NHES collection had the benefit of the resolution of problems identified in the past. Still, there were some problem areas that could be considered for improvement in future surveys. These include enumeration errors, issues with household membership of relative care providers, and collection of current arrangements after arrangement confirmation.

Enumeration Errors

Inaccuracies in the enumeration of household members in the Screener is a recurring difficulty in RDD household surveys and occasionally causes problems for correctly sampling individuals for extended interviews and/or administering extended interviews on later callbacks into the household. In the NHES:2001 Screener, full enumeration of members was only done in households selected for an AELL interview. Complete household composition and the relationship of each member to the sampled child was collected early in the first ECPP or ASPA interview administered. At that point, the information gathered in the Screener was verified with the extended interview respondent, and additional household members were enumerated, if necessary. When the household was called back, sometimes persons listed

in the Screener enumeration, perhaps even the sampled child or adult or the person previously identified as the appropriate person to respond to an interview about a child, were claimed not to be members of the household. The NHES:2001 CATI employed contact procedures that were developed in the NHES:1999 to determine the household situation and take corrective action. In the case of a sampled child or adult, the interviewer ascertained whether the person in question had been a member of the household on the date the household was screened. An appropriate final status code that indicated household membership on the screening date was assigned to the case. If the child or adult had not been a household member on the screening date or was declared to be unknown, the case was coded a problem and the household was called back in an effort to resolve the problem. In cases in which the designated respondent to the ECPP or ASPA interview was not a household member, but the sampled child was, a new respondent in the household was identified. In the case of other persons claimed not to be household members, the new information was deemed to be correct, and a flag was set to mark the person-level record for deletion so it was not included in household counters or the delivery files.

These difficulties are inevitable, and no change to the enumeration procedure used in the NHES:2001 is recommended. The standard enumeration includes a verification question and interviewers are carefully trained on enumeration procedures. Fully enumerating only a portion of households in the Screener also reduces screening burden and likely leads to a higher Screener unit response rate. Furthermore, the callback contact procedures described above automate many of the processes for identifying nonhousehold members and selecting new respondents to child interviews.

Household Membership of Relative Care Providers

If relative care was provided in the child's home, the ECPP or ASPA respondent was asked if the relative care provider lived in the household. If the response was yes, the household composition database records were checked to verify that a household member with that relationship to the child was enumerated. If no such relative was enumerated, a warning message was displayed and the interviewer was instructed to collect the relative's name, age, and sex in an online comment. Data preparation staff reviewed the comments and added the household member after the interview was completed (incrementing household composition counters as appropriate). It is possible in some of these cases that the respondent may have interpreted the word "household" as "family" and that relatives were added as household members when they did not actually reside in the household. There is no way to anticipate respondent interpretation; continuing with the current procedure is recommended. The interviewer can record any special circumstances in the online comment, and data preparation staff can determine if adding a household member is truly warranted after interview completion.

Collection of Current Arrangements After Arrangement Confirmation

The arrangement confirmation screens in the ECPP and ASPA interviews were designed to display all weekly care arrangements collected in earlier sections of the interview and to permit addition, modification and deletion of current, regular care arrangements. Unfortunately, respondents reported current, regular care arrangements in later sections, particularly in those questions pertaining to arrangements since September/the school year started (PCOTHER) and what the child was doing while the mother was at work or school (MOMCARE and MOMCARWH).

During data collection, it was decided that these additional arrangements (approximately 250 for ECPP and 250 for ASPA) would not be added to the arrangement segments for various reasons. First, there was concern that respondents may have been confused by the care coverage questions (“What is (CHILD) usually doing or how is (he/she) usually cared for during most of the hours when (you/(CHILD’S) mother/stepmother/foster mother) (are/is) at (work) (or) (school or training)?”). Second, some of these arrangements may have taken place on weekends (when a mother was working), and these weekend arrangement hours would then be mixed with arrangement hours that were strictly limited to before- and after-school care (for ASPA). Third, over 100 variables would have been potentially affected by the addition of these new arrangement records and would have required imputation. Such extensive imputation for a single case was methodologically suspect. Fourth, each case would have to be reviewed on an individual basis, a very labor- and time-intensive project. In the end, it was decided that the addition of such arrangements would not represent a substantial increase in the number of arrangements within the various types and was not warranted. The data based on these items is on the data file and can be used as an analyst might choose. If these questions are retained in future administrations, we recommend the same approach to handling new arrangements. In addition, the wording and structure of the questions should be examined to increase their clarity for respondents.

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5. UNIT RESPONSE

This chapter describes the unit response rates for the NHES:2001. It includes the rates for the Screener and for each of the three extended interviews, the ECPP interview, the ASPA interview, and the AELL interview.

Definition of Unit Response Rates

A unit response rate is the ratio of the number of units with completed interviews (for example, the units could be telephone numbers, households, or persons) to the number of units sampled and eligible for the interview. In some cases, these rates are easily defined and computed, while in other cases the numerators or denominators of the ratio must be estimated.

For reporting the results from the NHES:2001, the overall unit response rate²⁶ indicates the percentage of possible interviews that were completed taking all survey stages into account, while the unit response rate²⁷ measures the percentage of interviews that were completed for a specific stage of the survey. For example, household members were identified for interviews in a two-stage process. Screener interviews were conducted to enumerate and sample household members, and then questionnaires were administered for the sampled members. If the responding household member failed to complete the first-stage Screener, no members could be sampled for other interviews. Under this design, the unit response rate for the second stage (ECPP, ASPA, or AELL interviews) is the percentage of sampled persons who completed these interviews. The overall unit response rate is the product of the first- and second-stage unit response rates; i.e., the Screener unit response rate multiplied by the extended interview unit response rate.

Unit response rates can be either unweighted or weighted. The unweighted rate, computed using the raw number of cases, provides a useful description of 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 denominator, gives a better description of the success of the survey with respect to the sampled population since the weights allow for inference of the sample data (including response status) to the population. Both rates are usually similar unless the probabilities of selection and the unit response rates in the categories with different selection probabilities

²⁶In previous NHES publications, this was referred to as simply the response rate.

²⁷In previous NHES publications, this was referred to as the completion rate.

vary considerably. All of the unit response rates discussed in this chapter are weighted unless noted specifically in the text, since the main purpose of this chapter is to describe the success of the survey with respect to the survey population.

Screener Unit Response Rates

The first panel of table 5-1 shows the disposition of the 179,211 telephone numbers that were in the final sample for the NHES:2001. The three major categories of response status are those identified as numbers for residential households, those identified as nonresidential numbers (primarily nonworking and business telephone numbers), and those numbers that, despite numerous attempts, could not be identified as residential or nonresidential.

Table 5-1. Number of telephone numbers dialed, by residential status and weighted and unweighted Screener unit response rates: NHES:2001

Screener response category	Number	Percentage of all numbers	Percentage of residential numbers
Total	179,211	100.0	
Identified as residential			100.0
Responded.....	48,385	27.0	72.5
Did not respond.....	18,309	10.2	27.5
Identified as nonresidential	95,147	53.1	†
Unknown residential status	17,370	9.7	†
Estimated screener unit response rates ¹		Weighted rate (percent) ¹	Unweighted rate (percent) ¹
Survival analysis unit response rate		69.2	67.6
Business office method unit response rate		67.5	65.6
CASRO unit response rate		67.0	65.5
Conservative unit response rate		60.5	57.6
Liberal unit response rate		73.2	72.6

† Not applicable.

¹ All of the unit response rates use the weighted number of responding households (for weighted rates) or the unweighted number of responding households (for unweighted rates) as the numerator. The denominators vary but are all estimated totals. For the survival analysis method unit response rate, the proportion of unknown residential status numbers included in the denominator was estimated using survival analysis methods that incorporate information about the cases (including listed status, interviewers' coding of answering machine call results, and the number of call attempts the telephone number received). For the estimated unit response rate using the business office method, the proportion of unknown residential status numbers included in the denominator was based upon the proportion identified in checks with telephone business offices. For the CASRO (Council of American Survey Research Organizations) unit response rate, the proportion of unknown residential status numbers included in the denominator was based upon the residency rate for the numbers with known residential status. For the conservative unit response rate, all of the unknown residential status numbers were included. For the liberal unit response rate, none of the unknown residential status numbers was included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

About 37 percent of the telephone numbers were identified as residential through contact with the households. This percentage is lower than that reported for previous NHES studies.²⁸ Assuming that 27.9 percent of the telephone numbers with unresolved residential status were residential (discussed below), the total estimated percentage of numbers that were residential is 46 percent.²⁹

The percentage of telephone numbers with unknown residential status was about 10 percent—higher than the 8 percent found in the NHES:1999, the 6 percent found in the NHES:1995 and the NHES:1996, and the 3 to 5 percent found in previous NHES studies. Virtually all of the unknown residential status numbers were called 14 times or more as in previous NHES studies (see chapter 4 for more details on this issue), with the exception of no answer cases, which were subsampled for refielding. As a result, the percentage in this category is not the result of fewer calls to the numbers than in previous NHES studies. In the NHES:2001, 10,325 of the telephone numbers with unknown residential status were no answer numbers that were not refiled after seven calls, instead a subsample of one-third of the no answer numbers was refiled.³⁰ Even if all no answer cases had been refiled, the percentage of telephone numbers with unknown residential status would have been about 8 percent. Piekarski, Kaplan, and Prestegaard (1999) describe changes in the telephone system that are related to the increase in the proportion of telephone numbers with unresolved residency status, including factors related to the competition for local exchange service in the market. They note that while the number of telephone households increased only 11 percent from 1988 to 1998, the number of telephone numbers that could be dialed in a telephone survey³¹ increased by 80 percent. Even accounting for the increase in the number of households with more than one telephone number and the increased demand for business telephone numbers, many of these newly created numbers are not assigned to any user.

The lower panel of table 5-1 shows five estimated unit response rates for the Screener based upon different assumptions about the telephone numbers with unknown residential status. Each of these rates is described below, along with the rationale for its use. Each of these approaches uses the same numerator, the number of households (weighted or unweighted, for the weighted and unweighted rates, respectively) that completed the Screener. Variability in the estimates arises because it is not possible to identify precisely the residential status for each telephone number. The difference among the rates is in the allocation of the numbers in the unknown residential status category that is used in the calculation of

²⁸In the NHES:1999, about 43 percent of all sampled telephone numbers were identified as residential.

²⁹This estimated residency rate is a weighted estimate.

³⁰See chapter 4 for further information about the refielding of cases.

³¹The number of telephone numbers that could be dialed is the number of prefixes (area code and first three digits of the telephone number) that are assigned for POTS (plain old telephone service) multiplied by 10,000.

the denominator of the unit response rate. The numbers estimated to be residential according to each method are shown in table 5-2.

The survival approach uses information about cases for which no answer was obtained in the estimation of their residency rate. Specifically, the listed status, interviewers' codings of answering machine call attempts, and the total number of call attempts are used in the estimation of the residency rate based on survival analysis methods. Estimates based on the survival method suggest that 27.9 percent of telephone numbers with unresolved residency status in the NHES:2001 are residential. Therefore, the denominator of the unit response rate based on the survival method is all the telephone numbers that were known to be residences plus 27.9 percent of the numbers with an unresolved residential status. The estimated Screener unit response rate based on the survival method is 69 percent. If the raw count of telephone numbers was not weighted, the Screener unit response rate using the survival method would have been 68 percent. Because the survival method uses more information about the telephone numbers and their call histories, it is a more accurate approach for estimating unit response rates in RDD surveys. See Brick, Montaquila, and Scheuren (2002) for further details about the survival method.

The business office method derives its name from the technique used to estimate the denominator of the rate. A random sample of 350 telephone numbers with unresolved residency status were selected in the NHES:1995 and the numbers were classified by local telephone companies. The telephone companies were asked to first classify the numbers as working or not working. The companies were asked to further identify working numbers as residential or business numbers. As a result of this process, it was estimated that 40.5 percent of the numbers were residential. This percentage is nearly identical to the result from a study conducted at the end of the NHES:1991. Therefore, the denominator of the unit response rate based on the business office method is all the telephone numbers that were known to be residences plus 40.5 percent of the numbers with an unresolved residential status. The estimated Screener unit response rate using the business office method is 68 percent. Some research suggests that the business office approach may be inaccurate due to the reporting practices of the phone companies (Shapiro et al. 1995).

The other three unit response rates shown in table 5-1 were computed by allocating different proportions of the numbers with unknown residency status into the residential category. The CASRO (Council of American Survey Research Organizations) rate is computed by allocating the numbers with unknown residential status in the same proportion observed in the numbers with known residential status, which, in the NHES:2001, was 44.2 percent (table 5-2). Evidence from the business office method described above suggests that the residency rate for numbers with unknown residential status is lower

than implied by the CASRO rate calculation. Therefore, the CASRO rate is not recommended for unit response rate calculations for the NHES. The CASRO rate is 67 percent.

Table 5-2. Number and percentage of telephone numbers with unknown residential status assumed to be residential under each of the methods of estimating unit response rates: NHES:2001

Method of estimating unit response rates	Number	Percent
Total phone numbers with unknown residential status	17,370	100.0
Total assumed to be residential using survival method	4,846	27.9
Total assumed to be residential using business office method	7,035	40.5
Total assumed to be residential using CASRO method	7,681	44.2
Total assumed to be residential using conservative method	17,370	100.0
Total assumed to be residential using liberal method	0	0.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

The conservative and liberal unit response rates define the lower and upper bounds of the unit response rate. The conservative unit response rate is computed assuming that all of the numbers with unknown residential status are actually residential numbers. The conservative unit response rate is 61 percent. The liberal rate is computed assuming that all of the numbers with unknown residential status are actually nonresidential. The liberal unit response rate is 73 percent. As noted above, the variability in the estimates arises because it is not possible to identify precisely the residential status for each telephone number. For the remainder of the report, a Screener unit response rate of 69 percent, based on the survival method, will be cited.

The overall NHES:2001 Screener unit response rate of 69 percent is lower than the 74 percent Screener unit response rate attained in the NHES:1999 and nearly the same as the 70 percent attained in the NHES:1996. In the NHES:1999, adults were enumerated during the screening interview only in a subsample of the households. This approach was similar to that used in the NHES:1991 and in the NHES:1995. By comparison, full household enumeration was used in the NHES:1996. A methodological study involving a screener experiment (Brick, Collins, and Chandler 1997) demonstrated that the “screen-out” approach is expected to result in significantly higher unit response rates compared with enumerating adults in all households. Although subsampling for adult enumeration was used in the NHES:2001, the proportion of households not designated for adult enumeration was much lower than in the NHES:1999, so the benefits of the screen-out approach that were observed in the previous methodological study were not obtained in the NHES:2001 because few households were screened out.

Table 5-3 provides a further breakdown of the responding and nonresponding residential telephone numbers. The responding numbers are classified by whether or not any other interviews were scheduled for the household, and the nonresponding numbers are classified by the reason for nonresponse. About 74 percent of all the nonresponse in the Screener was due to an adult household member refusing to answer the screening items. The next largest category is the 18 percent classified as maximum calls, which includes those households that never completed the Screener after numerous calls. (These cases could have received up to 29 calls; 84 percent received between 14 and 29 calls.) While these households did not explicitly refuse to participate, potential respondents were not available to complete the screening items despite many attempts to reach them. Language problems accounted for 6 percent of nonresponse. The language problem cases are discussed in more detail below.

Table 5-3. Number and percentage of known residential telephone numbers, by Screener unit response status: NHES:2001

Screener response category	Number	Percent
Responding residential phone numbers	48,385	100.0
Households with no extended interviews scheduled.....	22,903	47.3
Households with at least one extended interview scheduled.....	25,482	52.7
Not responding residential phone numbers	18,309	100.0
Refusals.....	13,526	73.9
Maximum calls.....	3,298	18.0
Language problems.....	1,141	6.2
Other problems.....	344	1.9

NOTE: "Other problems" include household members being unavailable in field period and household members being too sick to respond.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Spanish Language Cases

As discussed in chapter 4, language problem cases were divided into Spanish language cases, other non-English language cases, and other language problems (e.g., hearing and/or speech disabilities). The NHES:2001 interviews were conducted in Spanish by bilingual interviewers and the unit response rate for households identified as Spanish language is similar to that for the survey as a whole.

Records for all completed interviews contain a variable indicating whether the interview was conducted in English or Spanish; a total of 1,861 completed extended interviews were conducted in Spanish. In the NHES:2001, 3,089 Screener cases were designated as Spanish language cases by

interviewers and, among these, 2,103 were completed (see table 4-5). The unweighted unit response rate for these cases was 68 percent, approximately the same as the unit response rate for the study overall. Most of these Screeners (93 percent) were completed in Spanish.

Distribution of Household Members Sampled for Extended Interviews

Table 5-4 shows the number of screened households in which household members were sampled for extended interviews. In the NHES:2001 sample, 7 percent of households had only an ECPP interview scheduled; 13 percent had only an ASPA interview scheduled; 22 percent had only an AELL interview scheduled; 4 percent had both ECPP and ASPA interviews scheduled; 4 percent had both ECPP and AELL interviews scheduled; 3 percent had both ASPA and AELL interviews scheduled; less than 1 percent had ECPP, ASPA, and AELL interviews scheduled; and 47 percent had no extended interview scheduled.

Table 5-4. Number and percentage of households responding to the Screener, by type of extended interviews scheduled: NHES:2001

Type of interview scheduled	Number of households	Percent of households
Total	48,385	100.0
ECPP interview only	3,475	7.2
ASPA interview only	6,045	12.5
AELL interview only	10,740	22.2
ECPP and ASPA interviews	1,894	3.9
ECPP and AELL interviews	1,729	3.6
ASPA and AELL interviews	1,373	2.8
ECPP, ASPA, and AELL interviews	226	0.5
No extended interview	22,903	47.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Profile of Screener Unit Response Rates

In most RDD surveys, it is difficult to obtain and examine the characteristics of households that do not respond to the screening interview. Consequently, the ability to examine nonresponse bias at this stage of the survey is limited. In this section unit response rates are given by characteristics of the

telephone number, by characteristics of the geographic area of the households (the ZIP code that has the most households associated with telephone numbers in the exchange) based on the 1990 Census, and by whether an answering machine message was left during the study.

Table 5-5 gives the distribution of the telephone numbers and the estimated unit response rate by the characteristics of the areas. For example, unit response rates were lowest in the Northeast and highest in the Midwest. Households that had a phone number listed as residential had a higher unit response rate than those that were not listed, and households with mailable addresses that were sent an advance mailing responded more often than those that were not sent an advance mailing (either because no mailing address was available for the telephone number or because they were in a sample release wave that was not sent advance mailings, as discussed in chapter 4).

This univariate profile of Screener unit response rates by the characteristics of the areas is difficult to interpret because there are so many characteristics to consider. In addition, some of the characteristics are correlated, and the univariate profile does not explore these relationships. Consequently, a multivariate analysis was performed to examine the interrelationship of the characteristics and the unit response rates.

The goal of the multivariate analysis was to determine if groups of households had extremely different unit response rates. Nonresponse bias in the estimates may appear when the characteristics of the respondents and nonrespondents are different. By identifying groups with different unit response rates, the characteristics of the respondents and nonrespondents can be used as an indicator of the potential for nonresponse bias and thus using these characteristics to form cells for nonresponse adjustment may reduce nonresponse bias (Little 1986). The characteristics of the telephone numbers and of the geographic areas corresponding to the telephone numbers sampled were used to identify groups with different unit response rates. The variables included in the analysis were characteristics of the telephone numbers and their geographic areas that were available and thought to be correlated with the unit response rate.

The analysis was done using a categorical search algorithm called Chi-Square Automatic Interaction Detection (CHAID). This algorithm is very similar to the continuous search algorithms LISREL and AID (Automatic Interaction Detector), which have been used for a number of years, but it is designed especially to handle categorical data like those available for the NHES:2001. CHAID first identifies the characteristic of the data that is the best predictor of response. Then, within the levels of

Table 5-5. Number of telephone numbers dialed in the Screener, by response status, weighted unit response rate, and characteristic of the geographic area based on the telephone exchange: NHES:2001

Characteristic	Total	Residential, responded	Residential, did not respond	Non- residential	Unknown residential status	Estimated unit response rate (percent) ¹
Total.....	179,211	48,385	18,309	95,147	17,370	69.2
Census region						
Northeast.....	31,846	8,815	4,019	15,265	3,747	65.2
South.....	68,256	18,515	6,861	36,591	6,289	69.4
Midwest.....	37,554	9,905	3,127	21,392	3,130	73.1
West.....	41,555	11,150	4,302	21,899	4,204	68.4
Listed status						
Not listed.....	119,858	21,133	9,260	75,204	14,261	61.9
Listed residential.....	50,952	27,252	9,049	11,542	3,109	73.9
Listed business.....	8,401	0	0	8,401	0	†
Mailable status						
Mailable address, mailed to.....	41,848	23,609	7,594	7,494	3,151	74.7
Mailable address, not mailed to.....	31,575	16,083	6,270	6,497	2,725	70.4
No mailable address.....	105,788	8,693	4,445	81,156	11,494	54.6
Answering machine message indicator						
Message left.....	42,122	22,271	10,985	6,360	2,506	66.6
No message left.....	137,089	26,114	7,324	88,787	14,864	71.5
Percent White						
Less than 20 percent.....	10,553	2,641	1,366	5,621	925	62.3
20 to 49 percent.....	28,067	6,794	3,165	15,171	2,937	63.4
50 to 79 percent.....	60,603	15,993	6,266	32,192	6,152	67.4
80 to 89 percent.....	23,100	6,458	2,308	11,944	2,390	68.9
90 percent or more.....	56,888	16,499	5,204	30,219	4,966	72.3
Median home value						
1st decile.....	18,003	4,321	1,291	11,261	1,130	74.8
2nd decile.....	17,890	4,951	1,506	10,192	1,241	74.2
3rd decile.....	17,761	5,112	1,633	9,548	1,468	73.0
4th decile.....	17,760	5,096	1,764	9,426	1,474	71.9
5th decile.....	17,741	5,201	1,806	9,124	1,610	71.2
6th decile.....	17,807	5,189	1,844	8,953	1,821	70.1
7th decile.....	17,915	4,937	1,913	9,141	1,924	68.5
8th decile.....	18,009	4,831	2,144	9,032	2,002	65.4
9th decile.....	18,103	4,723	2,356	8,855	2,169	62.7
10th decile.....	18,222	4,024	2,052	9,615	2,531	60.4
Percent renters						
Less than 50 percent.....	128,965	37,208	13,086	66,927	11,744	70.7
50 to 59 percent.....	21,641	5,308	2,208	11,873	2,252	66.2
60 to 69 percent.....	11,523	2,491	1,135	6,705	1,192	63.8
70 to 89 percent.....	14,602	2,926	1,611	8,267	1,798	58.0
90 percent or more.....	2,480	452	269	1,375	384	54.7
Percent owners						
Less than 50 percent.....	28,452	5,832	2,998	16,265	3,357	60.1
50 to 69 percent.....	60,145	16,221	6,322	31,606	5,996	68.0
70 to 79 percent.....	49,131	14,414	5,015	25,198	4,504	71.1
80 percent or more.....	41,483	11,918	3,974	22,078	3,513	71.5
Percent age 65 and older						
Less than 20 percent.....	123,720	33,841	12,789	65,105	11,985	69.3
20 percent or more.....	55,491	14,544	5,520	30,042	5,385	68.8

† Not applicable.

¹ The estimated unit response rate is the survival method unit response rate, i.e., the number of completed interviews divided by the sum of the number of completed interviews, nonresponses, and 27.9 percent of the unresolved telephone numbers, weighted by the probability of selection.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

that characteristic, CHAID identifies the next most likely response predictor(s), etc., until a tree is formed with all potential response predictors. The final result is a division of the entire data set into cells by attempting to determine sequentially the cells that have the greatest discrimination with respect to the unit response rates. In other words, it attempts to divide the data set into groups so that the unit response rate within cells is as constant as possible, and the unit response rate between cells is as different as possible. This automatic procedure was done by specifying that the minimum number of households in any group had to be greater than or equal to 100 and the split of the variables into subgroups had to be statistically significant using a chi-square test at the 95 percent significance level.

Since many of the variables in the CHAID model, such as median home value, have multiple response categories, the program must take this into account. The CHAID software does this in two ways. First, it allows the data set to be split into more than one subgroup at a time. For example, Census region categories are split differently within different median home value categories. Second, the procedure follows a relatively complex procedure to check all binary splits of the data and equalize the chance of selecting variables irrespective of the number of response categories that variable may have.

An example may help to explain the methods used in CHAID. All of the characteristics in the model are tested, and the one with the response categories having the largest discrimination with respect to the unit response rates is identified.³² Table 7-2 (in chapter 7) contains the summary of this analysis as it relates directly to weighting the data. In this example, the mailable status of the telephone number was the variable chosen as most associated with response propensity and four response categories for this variable were retained. Note, for example, that within mailable status categories the data were tested again; among cases for which a mailable address was obtained (whether or not the mailing was returned), the indicator of whether an answering machine message was left was then used to split the data. Among cases for which a mailable address was not obtained, median home value was then used to split the data. The process continued until the final 31 cells shown in the table were formed. Although the variables median income, minority status, metropolitan status, percent age 65 and older, percent with income of \$75,000 or more, percent Black, percent Hispanic, and percent college graduates were considered in the CHAID analysis, they were not selected as discriminators of response propensity in this multivariate analysis, given the other characteristics.

³²Variables identified in previous analyses as being associated with response propensity were selected from among the variables available for both responding and nonresponding units. In an RDD survey, little information is available for nonresponding units, limiting the selection of characteristics for the CHAID analysis. Information associated with key characteristics of interest, such as participation in early childhood programs, activities, or adult education, and correlates of these such as maternal employment or educational attainment, are not available for nonrespondents and therefore cannot be used for nonresponse adjustment purposes.

In a study conducted using data from the 1997 National Survey of America's Families, Groves and Wissoker (1999) found that there is a slight tendency for households with higher socioeconomic status to require more effort to complete an interview. As described above and depicted in chapter 7, some characteristics of the geographic area associated with socioeconomic status, including median home value and percent homeowners, were used in forming cells for Screener nonresponse adjustment.

The range of unit response rates among the 31 cells suggested that the key characteristics identified by CHAID should be used in creating weighting adjustments. The results indicated that the nonresponse bias may be reduced by using these categories for weighting adjustments. As a result, these 31 cells were used in the adjustment for Screener nonresponse, as discussed in chapter 7. Clearly, some nonresponse bias exists, but these results suggest that the weighting adjusts for some of the important characteristics associated with the nonresponse bias.

Extended Interview Unit Response Rates

During the screening interview, all children were enumerated in households with eligible children; adults were enumerated in only a subsample of households. After the enumeration, children or adults within the household were selected for the ECPP-NHES:2001, ASPA-NHES:2001, and/or AELL-NHES:2001 surveys. The person who was identified as the most knowledgeable about the sampled child's care and education (nearly always a parent and most often the child's mother) became the respondent for the ECPP or ASPA interview. The AELL interview was conducted with the sampled adult.

The numbers of children enumerated and sampled, and those with completed interviews for each survey in the NHES:2001, are given in table 5-6. Of the enumerated 27,661 children eligible for sampling for ECPP or ASPA interviews, a sample of 7,973 children was selected for the ECPP interview, and a sample of 11,135 children was selected for the ASPA interview. About 0.8 percent of the sampled children were either enumerated in error or not actually in the age and grade range for the survey as reported by the ECPP or ASPA interview respondent. These children were classified as ineligible. For the ECPP survey, complete interviews were obtained for 6,749 of the sampled children for an estimated 87 percent unit response rate and an estimated overall unit response rate of 60 percent. The primary source of unit nonresponse for the ECPP interview was the inability to make contact with the parent/guardian respondent (49.2 percent of nonresponse). Other reasons for ECPP interview nonresponse were refusal of the parent/guardian to respond (43.8 percent of nonresponse), language

problems (1.9 percent of nonresponse), and other miscellaneous reasons such as the parent/guardian being unavailable for an interview during the field period (5.1 percent of nonresponse).³³

For the ASPA survey, complete interviews were obtained for 9,583 of the sampled children for an estimated 86 percent unit response rate and an estimated overall unit response rate of 60 percent. The primary source of unit nonresponse for the ASPA interview was the inability to make contact with the parent/guardian (48.1 percent of nonresponse). Other reasons for ASPA interview nonresponse were refusal of the parent/guardian to respond (45.2 percent of nonresponse), language problems (2.1 percent of nonresponse), and other miscellaneous reasons such as the parent/guardian being unavailable for an interview during the field period (4.5 percent of nonresponse).

Table 5-6 also gives the numbers of adults enumerated and sampled and the final status of the AELL interview. Adults were enumerated in only a subsample of households. Of the 59,393 enumerated adults, 13,858 were sampled for AELL interviews. Almost all of those sampled were eligible for the interview; those classified as ineligible were either in the military or currently enrolled in high school. A total of 10,873 adults completed the AELL interview, for an estimated unit response rate of 77 percent and an estimated overall unit response rate of 53 percent. For the AELL interview, the bulk of the nonresponse was due to refusal of the sampled adult to respond (50.4 percent of nonresponse). Other reasons for AELL interview nonresponse were inability to make contact with the sampled adult (36.1 percent of nonresponse), language problems with the sampled adult (3.8 percent of nonresponse), and other miscellaneous reasons such as the sampled adult being unable to respond due to illness (9.6 percent of nonresponse).

The unit response rates for the NHES:2001 surveys are lower than those attained in earlier NHES surveys. In past surveys, unit response rates for surveys of parents of sampled children have generally been 89 to 90 percent (although the ECE-NHES:1991 achieved an unusually high rate of 95 percent). Among adults sampled for AE surveys, unit response rates have generally been 80 to 85 percent. The lower rates observed in the NHES:2001 are a reflection of the increasing difficulty in obtaining cooperation in RDD surveys, which is believed to be due in part to the prevalence of call screening devices (Brock Roth, Montaquila, and Brick 2001).

³³Inability to make contact with the parent or guardian means that, despite repeated attempts, it was not possible to reach the parent/guardian respondent. The parent/guardian being unavailable during the field period means that either the parent/guardian himself/herself or another member of the household stated that the person identified as the respondent would not be available for an interview prior to the end of the data collection period.

Table 5-6. Number of enumerated children and adults, completed interviews, and weighted unit response and overall unit response rates, by type of extended interview: NHES:2001

Type of interview	Number	Estimated unit response rate (percent)	Estimated overall unit response rate (percent) ¹
ECPP interview			
Enumerated	9,184	†	†
Sampled for ECPP	7,973	†	†
Sampled for ECPP and eligible for ECPP	7,828	†	†
Did not respond.....	1,098	†	†
Sampled as ECPP, completed as ECPP	6,730	†	†
Sampled as ASPA, completed as ECPP	19	†	†
Sampled as ECPP, completed as ASPA	25	86.6	59.9
ASPA interview			
Enumerated	18,477	†	†
Sampled for ASPA.....	11,135	†	†
Sampled for ASPA and eligible for ASPA	11,075	†	†
Did not respond.....	1,517	†	†
Sampled as ASPA, completed as ASPA	9,558	†	†
Sampled as ECPP, completed as ASPA	25	†	†
Sampled as ASPA, completed as ECPP	19	86.4	59.7
AELL interview			
Enumerated	59,393	†	†
Sampled	13,858	†	†
Eligible.....	13,833	†	†
Did not respond.....	2,960	†	†
Completed.....	10,873	77.2	53.4

† Not applicable.

¹ The estimated overall unit response rate is computed by multiplying the Screener unit response rate of 69.2 percent by the appropriate extended interview unit response rate. Due to rounding, the product of the reported Screener unit response rate and the reported extended interview unit response rate may not match the estimated overall unit response rate given.

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), 2001, Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001, and Adult Education and Lifelong Learning (AELL) Survey of the NHES, 2001.

Profile of Extended Interview Unit Response Rates

The unit response rates for the extended interviews can be examined by variables available for both respondents and nonrespondents. The variables examined here were considered because they have been associated with extended interview unit response rates in previous NHES surveys. The variables shown for the ECPP interview are Census region (based on the telephone number) and enrollment status of the sampled child, which was collected during the Screener. Table 5-7 shows the number of sampled children by response status and unit response rate for each of these variables. The unit response rates are quite consistent across all enrollment status categories and across Census regions, with the exception of a higher unit response rate in the Midwest region.³⁴

Table 5-7. Number of sampled ECPP interviews, by response status and weighted unit response rates: NHES:2001

ECPP interviews	Total	Responded	Did not respond	Ineligible	Estimated unit response rate (percent)
Total	7,973	6,755	1,098	120	86.6
Census region					
Northeast	1,391	1,155	216	20	84.9
South	2,929	2,487	399	43	86.1
Midwest.....	1,636	1,430	183	23	89.1
West	2,017	1,683	300	34	86.0
Enrollment status of child (Screener)					
Not enrolled.....	5,750	4,845	787	118	86.6
Nursery/Preschool	2,220	1,910	310	0	86.6
Unknown.....	3	0	1	2	0

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), 2001.

For the ASPA interview, three variables about each sampled child were used for examining the response profile: Census region, grade of the child, and type of school (i.e., regular school vs. homeschool). Census region was obtained based on the telephone number, and grade and type of school were obtained in the Screener. The distribution of cases for these variables and the estimated unit response rate are shown in table 5-8. There is little variation in the unit response rates for region or for

³⁴ As noted in the discussion of Screener-level nonresponse adjustment, little information is available on nonresponding households in an RDD survey. For the extended-level nonresponse adjustment, some information about sampled household members (for example, enrollment status) was available from the completed Screener and was included in the nonresponse adjustments.

students whose grade is known. The conditional unit response rates by type of school are more variable, with a higher rate for homeschoolers.

Table 5-8. Number of sampled ASPA interviews, by response status and weighted unit response rates: NHES:2001

ASPA interviews	Total	Responded	Did not respond	Ineligible	Estimated unit response rate
Total	11,135	9,577	1,517	41	86.4
Census region					
Northeast	2,062	1,764	293	5	86.2
South	4,186	3,578	593	15	85.7
Midwest.....	2,212	1,971	235	6	89.4
West	2,675	2,264	396	15	84.3
Grade of child (Screener)					
Kindergarten.....	894	762	131	1	84.9
1st grade.....	936	810	126	0	86.9
2nd grade.....	872	768	102	2	88.2
3rd grade	918	771	144	3	85.7
4th grade.....	1,008	878	125	5	85.9
5th grade.....	1,041	898	141	2	87.2
6th grade.....	1,827	1,558	267	2	85.5
7th grade.....	1,846	1,614	228	4	88.3
8th grade.....	1,750	1,493	242	15	85.2
Other ¹	5	4	1	0	75.9
Unknown.....	38	21	10	7	67.3
School (Screener)					
Regular school.....	10,866	9,348	1,480	38	86.3
Homeschool	221	197	23	1	91.2
Unknown.....	48	32	14	2	67.3

¹ "Other" included ungraded and special education.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001.

For the AELL interview, four variables were considered in examining the response profile: Census region (based on the telephone number), sex (from the Screener), adult education participation status as reported by the Screener respondent (who may or may not have been the sampled adult), and an indicator of whether the sampled adult was the Screener respondent. The results are given in table 5-9. There was some variation in unit response rates across regions; specifically, the unit response rate in the Midwest was higher than in the other regions. The unit response rate for females was higher than that for

males, and the unit response rate for adults reported by the Screener respondent to be adult education participants was higher than the unit response rate for those reported to be nonparticipants. Sampled adults who were the Screener respondents completed the AELL interview at higher rates than those who were not the Screener respondents.

Table 5-9. Number of sampled AELL interviews, by response status and weighted unit response rates: AELL-NHES:2001

AELL interviews	Total	Responded	Did not respond	Ineligible	Estimated unit response rate (percent)
Total	13,858	10,873	2,960	25	77.2
Census region					
Northeast	2,476	1,900	570	6	74.5
South	5,210	4,064	1,137	9	76.1
Midwest.....	2,892	2,356	534	2	81.0
West	3,280	2,553	719	8	77.2
Sex (Screener)					
Female.....	7,690	6,224	1,458	8	80.1
Male	6,168	4,649	1,502	17	73.9
Adult education participation status (Screener)					
Participant	6,615	5,348	1,251	16	79.6
Nonparticipant.....	7,243	5,525	1,709	9	75.7
Screener respondent					
Sampled adult.....	8,525	7,369	1,151	5	87.2
Person other than sampled adult.....	5,333	3,504	1,809	20	66.0

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001.

Nonresponse Bias

The estimates from the NHES:2001 are subject to potential bias because of nonresponse to the Screener and the extended interview components. Generally speaking, the best approach to minimizing nonresponse bias is to plan and implement data collection procedures aimed at achieving high unit response rates. For the NHES:2001, such procedures included extensive training of the interviewers, advance mailings to the respondents, effective call scheduling strategies, and, where necessary, refusal conversion methods that included recontacting households by both telephone and mail if mailable

addresses could be obtained (see chapter 4). However, because some nonresponse occurs even with the best strategies, weighting adjustments are necessary to minimize potential nonresponse bias.

The term bias has a specific technical definition in this context. Bias is the expected difference between the estimate from the survey and the actual population value. For example, if all households were included in the survey (i.e., if a census was conducted rather than a sample survey), the difference between the estimate from the survey and the actual population value (which includes the responses of persons who did not respond to the survey) is the bias due to 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.

Nonresponse bias, the bias due to the failure of some persons or households in the sample to respond to the survey, can be substantial when two conditions hold. First, the differences between the characteristics of respondents and nonrespondents must be relatively large. For example, consider estimating the percentage of adults who participated in an adult education activity in the past year. If the participation rate is nearly identical for both respondents and nonrespondents, then the nonresponse bias of the estimate will be negligible.

Second, the nonresponse rate must be relatively high. If the nonresponse rate is very low relative to the magnitude of the estimates, then the nonresponse bias in the estimates will be small, even if the differences in the participation rates or other characteristics between respondents and nonrespondents are relatively large. For example, if the nonresponse rate is only 2 percent, then estimates of totals that compose 20 or 30 percent of the population will not be greatly affected by nonresponse, even if the differences in these characteristics between respondents and nonrespondents are relatively large. It is important to realize that this condition requires the nonresponse rate to be large relative to the size of the estimates. If the estimate is for a small domain or subgroup, then even a relatively low rate of nonresponse can result in important biases if the differences between respondents and nonrespondents are large.

The bias of an estimate can be expressed mathematically to show the relationships between the bias and the two factors discussed above. The bias is given by

$$\text{Bias}(\hat{y}_r) = p_n \{E(\hat{y}_r - \hat{y}_n)\},$$

where \hat{y}_r is the estimated characteristic based on the respondents only, p_n is the nonresponse rate, \hat{y}_n is the estimated characteristic based on the nonrespondents only, and E is the expectation operator for averaging over all possible samples (Cochran 1977).

A nonresponse bias analysis was undertaken to examine nonresponse and the potential bias associated with nonresponse in the NHES:1999 (Nolin et al. 2000). This study involved an examination of unit response rates as a whole and for various subgroups, an analysis to determine characteristics that are associated with Screener nonresponse, an examination of the potential usefulness of household-level data from an external source in reducing nonresponse bias, and a comparison of estimates based on adjusted and unadjusted weights. A nonresponse bias analysis was not done for NHES:2001, but such an analysis would likely result in the same conclusion of no bias as in NHES:1999 because the differences in unit response rates by interviewee characteristics are similar and because the NHES:2001 and NHES:1999 survey administrations are very similar in terms of their target populations, contact procedures, and salience. Thus, the results of the NHES:1999 nonresponse bias study can be used to assess the potential for nonresponse bias in the NHES:2001.

The analysis of nonresponse bias showed no evidence of bias in estimates from the NHES:1999 Parent, Youth, and Adult Education surveys. The statistical adjustments used in weighting may have corrected at least partially for biases that might have existed due to differential nonresponse. Of course, nonresponse bias may still be present in other variables that were not studied. In the NHES:2001, the largest component of nonresponse was nonresponse to the Screener. With the use of a CHAID analysis to create the nonresponse adjustment cells that were used to adjust for Screener nonresponse, there is evidence from the NHES:1999 nonresponse bias analysis study to suggest that there is little nonresponse bias attributable to Screener nonresponse.

6. ITEM RESPONSE AND IMPUTATION

Introduction

In the NHES:2001, 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. Some item nonresponse arises when an interview is interrupted and not continued later, leaving items at the end of the interview blank. Item nonresponse may also be encountered because responses provided by the respondent are not internally consistent, and this inconsistency is not discovered until after the interview is completed. In such cases, one of the items that were not internally consistent was set to missing.

For most of the data items collected in the NHES:2001, the item response rate was very high. The median item response rate for items from the ECPP interview was 99 percent; for the ASPA interview data, 98 percent; and for the AELL interview, 99 percent. Despite the high item response rate, numeric and categorical data items with missing data on the file were imputed. (In general, character string variables, such as countries of origin, languages, or “other/specify” responses were not imputed.³⁵) The imputations were done for two reasons. First, complete responses were needed for the variables used in developing the sampling weights. Second, users compute estimates employing a variety of methods and having complete responses aids in conducting analysis.

Methodology

The methodology used for imputation in the NHES:2001 was very similar to that used in previous NHES survey administrations. The imputation procedures were developed based on the procedures for imputing items in the NHES:1995 surveys, the NHES:1996 surveys, and the NHES:1999 surveys.

A hot-deck procedure was used to impute missing responses (Kalton and Kasprzyk 1986). In this approach, the entire file was sorted into cells defined by characteristics of households or respondents that are likely to be associated with differences in response propensities. These

³⁵The exceptions were some character string variables in the AELL interview (e.g., major field of study, industry) that were coded into new variables (e.g., major field of study codes, industry codes). In cases where the original string variable was missing, the string variable was imputed and then coded into the new variable. The restricted data files contain the imputed character strings and the public files contain the coded variables based upon these imputed strings.

characteristics, or boundary variables, were used to group respondents into those most likely to have the same response or the same response propensity for the data item to be imputed. Two types of boundary variables were used. “Hard” boundary variables were considered to be so important that the donor and the recipient were required to match exactly. For other sort variables, called “soft” boundary variables, the values did not have to match exactly. In effect, the hard boundary variables were matching variables and the soft boundary variables were used to order the cases within the matching variables. The variables used as sort variables in the imputation of items in the NHES:1995, the NHES:1996, and the NHES:1999 were considered in order to arrive at a final set of standard imputation sort variables for each of the NHES:2001 surveys.

The WESDECK software was used to implement the hot-deck imputation procedure. WESDECK is a proprietary SAS macro developed by Westat to form hot-deck cells, impute using the hot-deck method, and generate output to verify the imputation.

The standard set of sort order variables³⁶ for the household-level items collected in the ECPP, ASPA, and AELL surveys consisted of:

- CENREG—the Census region in which the household was located;
- HINCOME and HINCMRNG—household income category (broad and specific, respectively);
- KIDINHH—a variable derived specifically for imputation from the age (AGE) of household members indicating whether or not children under age 18 resided in the household; and
- HOWNHOME—whether the home was rented versus owned or other arrangement.

The standard sort order variables for the person-level items on the ECPP and ASPA interview files were:

- MAINRSLT—the final completion code for the interview;
- ALLGRADR—a variable derived specifically for imputation that indicates the grade/grade equivalent of the sampled child;
- SEX—sex of the sampled child;
- PARGRADS—a variable derived specifically for imputation that indicates the highest education level attained by either parent in the household as less than high school diploma, high school diploma but no bachelor’s degree, or college graduate. This variable was derived from MOMGRADE, MOMDIPL, DADGRADE, and DADDIPL; and

³⁶Some sort order variables were created specifically for imputation and do not appear on the data files.

- HHPARNS—a variable derived specifically for imputation from HHMOM and HHDAD indicating whether there were two parents in the household or not.

The standard sort order variables for the person-level items from the AELL interview file were:

- PARTIC—a variable derived specifically for imputation that indicates whether the adult participated in any adult education activities (including full-time credential) in the last year;
- EDUC—a variable derived specifically for imputation that indicates whether or not the adult has at least a high school diploma or the equivalent;
- AGECAT—a variable derived specifically for imputation from AGE for the respondent with the categories 18 through 29 years, 30 through 49 years, and 50 or older;
- ARACETH—a variable derived specifically for imputation that classifies the respondent as Black, non-Hispanic; Hispanic; or other; and
- HINCMRNG—the household income range.

For items that were sometimes skipped, a “trigger” variable was included as one of the hard boundary variables. The trigger variable ensured that the skip pattern in the questionnaire was maintained. The trigger variable could be either a single variable or a set of conditions that determine whether the respondent is eligible for the particular question, i.e., whether the variable in question should be answered or skipped. In some cases, an item was originally coded –1 (inapplicable) because of nonresponse to a component of the trigger, but the item became applicable as a result of the imputed value for the trigger component. In such cases, the item was recoded from –1 to –9 and imputed. If, on the other hand, the trigger indicated that the item should have been skipped, the variable was set equal to –1 (if it was not already equal to –1) in the program that prepared the data for imputation prior to imputation of that variable.³⁷

All of the observations were sorted into cells defined by the responses to the sort variables, and then divided into two classes within the cell depending on whether or not the item was missing. For an observation with a missing value, a value from a randomly selected donor (observation in the same cell but with the item completed) was used to replace the missing value. This method is called a hot-deck procedure because actual values are imputed from donors selected from the current data set. After the imputation was completed, edit programs were run to ensure the imputed responses did not violate skip

³⁷In order to maintain the correct skip patterns during imputation, variables were imputed in “rounds.” That is, before a set of variables could be imputed, the trigger variables for that set had to be imputed. Thus, the process of recoding and imputing described here was done in a sequential manner.

patterns or edit rules. If any violations occurred, the program was adjusted and imputation was rerun, or if only a few cases were affected, they were manually imputed.

Items in repeating segments³⁸ (i.e., arrangement-level items such as NCCOST1-NCCOST3 on the ECPP and ASPA data files and course-level items such as WRCURR1-WRCURR4 on the AELL data file) were imputed without regard to the segment number. That is, all segments were combined prior to imputation. In the absence of a compelling reason to distinguish among segments, this approach allowed for a larger donor pool to be used.

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. There were 37 items in the ECPP file with response rates of less than 90 percent, 89 such items in the ASPA file, and 56 such items in the AELL file. The comparisons revealed similar item distributions pre- and post-imputation. 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 90 percent).

For each data item for which any values were imputed, an imputation flag variable was created. 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, 3, or 4. The value of the imputation flag indicates the specific procedure used to impute the missing value. The imputation flag was typically set to 1 if the missing value was imputed using the standard hot-deck approach. In some cases, variables had to be recoded to be consistent with the skip patterns of the questionnaire prior to being imputed using the standard hot-deck approach; for these cases, the imputation flag was set to 2. For items that were imputed manually, the flag was set to 3. The imputation flag was set to 4 for cases in which the original response had been "don't know." The flag value of 4 was set so that users can consider "don't know" responses to items separately from other nonresponse if they wish. This convention was especially useful for the political knowledge items in the NHES:1996 and NHES:1999 surveys. However, it may provide some analytic utility in the analysis of variables in the items concerning where the sampled child spends time after school (SCAHOMI, SCAHOMO, SCARELA, SCAFRND, SCANEIG, SCAPUBL, SCACENT, SCAOUT, SCASCHL, SCAPLOTH) and what the child spends most after-school hours doing (SCAEDUC, SCACOMP, SCAREAD, SCAART, SCACHOR, SCAOUTPL, SCAINPLA, SCAPHON,

³⁸ A "segment" is a section of the interview.

SCAEAT, SCATV, SCATALK, SCAOTH) in the ASPA interview. (This list of variables is provided for illustrative purposes only and is not all-inclusive.)

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 computation of the reliability of the estimates produced from the data set. For example, some users might wish to analyze the data with the missing values rather than the imputed values. If there is no imputation flag corresponding to the variable, no values for that variable were imputed. If the imputation flag corresponding to the variable is equal to 1, 2, 3, or 4, the user can replace the imputed response with a missing value to accomplish this goal. This method could also be used to replace the imputed value with a value imputed by some 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 could be imputed using multiple imputation methods (Rubin 1987) or imputed so that the Rao and Shao (1992) variance procedures could be used.

Manual Imputation

For some items, the missing values were imputed manually rather than using the hot-deck procedure. In the NHES:2001, hand imputation was done (1) to impute certain person-level demographic characteristics; (2) to impute whether a child is homeschooled, whether the child attends regular school for some classes, and the number of hours the child attends regular school; (3) to correct for a small number of inconsistent imputed values; and (4) to impute for a few cases when no donors with matching sort variable values could be found. Tables 6-1, 6-2, and 6-3 show the variables from the ECPP, ASPA, and AELL surveys, respectively, for which manual imputation was conducted and the percent of values manually imputed.

Some person-level characteristics from the Screener and from the Demographic Characteristics section of the ECPP and ASPA interviews and the Initial Background and Remaining Background sections of the AELL interview were imputed manually because these variables typically involve complex relationships and/or constraints that would have required extensive programming in order to impute using a hot-deck procedure. The same is true of the items indicating whether a child is homeschooled, whether the child attends regular school for some classes, and the number of hours the

child attends regular school. Furthermore, the reasonableness of imputed values for person-level characteristics can often be assessed by examining the values of these variables for other members of the household. For example, while there is an increasing incidence of mixed-race households, the race of household members tends to be the same in most cases. Education is also correlated among adults within households. The use of the manual imputation approach in this situation permits the review of the characteristics of household members when imputing the missing values on the person-level variables.

For hand imputation of the person-level demographic items and of the homeschooling items, three sort variables were used. State was used as the first sort variable; that is, whenever possible, all values were imputed from within-state donors. Because there is some geographic clustering of subpopulations within states, the three-digit ZIP code of the household was used as the second sort variable. Third, cases were sorted by the person identification number. Because all household members share the first eight digits of their identification numbers, this resulted in all household members being grouped together.

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 in some cases to reimpute for a very small number of cases. The distribution of the item was used to arrive at the new values; 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 few cases when no donors with matching hard boundary variable values could be found. For these cases, when relaxing the hard boundary variable requirements still did not produce a donor, manual imputation was done. The distribution of the item was used to assign imputed values; 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 following is a description of the specifications used to manually impute specific items.

Age and year of birth. In the ECPP and ASPA interviews, year of birth (CDOBYYY) had to have been given by the respondent in order for the interview to be conducted; thus, AGE2000 was available for every child with a completed ECPP or ASPA interview. Relationship to the child sampled for an ECPP or ASPA interview was used as a hard boundary variable in the imputation of age for adults in the households in which there was a completed ECPP or ASPA interview. When the age of a parent was missing and the age of the other parent was available, the other parent was used as the donor. When there was only one parent in the household and his or her age was missing, age was imputed from the

previous single-adult household with a child the same age as the oldest child in the missing-variable household (within the same state, and within the same three-digit ZIP code, if possible).

When the value of age for an adult was missing and there was no ECPP or ASPA interview in the household, the age of the missing person was imputed as the median age of the adult household members. When the adult for whom the age was missing was the only adult in the household, the age of the adult in the previous single-adult household within the same state and within the same three-digit ZIP code was used.

For adults sampled for an AELL interview with missing year of birth (ADOBY), year of birth was updated based on reported age or imputed after imputing age, such that the year of birth was consistent with age. Month of birth (ADOBMM and CDOBMM) was imputed from the nearest eligible donor who was born in the same year or within 5 years, within the three-digit ZIP code and state.

Sex. Sex (SEX and SEX_n) was imputed in two ways. First, deductive imputation was used when the information in the household suggested an appropriate answer. For example, if there were two household members and one reported that he or she was married, and one was male and the other was missing on sex, the latter person was imputed as female. For cases in which an appropriate answer could not be deduced, the value of sex was imputed as either male or female with equal probability.

Race (including “other” race) and Hispanic origin. Race and Hispanic origin (CRACE, CHISPAN, ARACE, and AHISPANI) were imputed in different ways, depending on the information available about the household members. First, when race and Hispanic origin were available for other household members, this information was used to impute race and Hispanic origin for the person for whom the data were missing. The household member enumerated immediately before the person with the missing value was used as the donor. (If the person with the missing value was enumerated first, then the next person in the household was used as the donor.) When race and/or Hispanic origin were not available for any household members, the first enumerated household member in the previous within-state, within three-digit ZIP code household was used as the donor.

Country of birth and first language. The country of birth and first language variables (CBORNUS, CSPEAK, MOMBORN, MOMLANG, MOMSPEAK, DADBORN, DADLANG, DADSPEAK, ABORNUS, IBLANG, and IBSPEAK) were imputed using the same procedure as described above for race and Hispanic origin.

Marital status. In the imputation of marital status (AMARSTAT, ALIVWITH, MOMSTAT, MOMLIVW, MOMPART, DADSTAT, DADLIVW, and DADPART), the number of adults in the household (classified as “one adult” or “more than one adult”) was used as a hard boundary.

Active duty status and household residency. In order to avoid imputing a sampled adult to be ineligible for the AELL interview, active duty military status (XACTVDUT) was imputed to “not currently serving on active duty in the U.S. Armed Forces” and household residency (LIVENOW) was imputed to “adult is living here (in this household).”

Homeschooling. The homeschooling variable HOMESCHL was imputed for persons age 5 through age 15 who did not have a grade or grade equivalent. For persons under age 5, the value of the homeschooling question was set to -1. (This is an update, not an imputation. Updates are discussed further below.) For persons ages 5 and above who were missing HOMESCHL, the value of the homeschooling question HOMESCHL was imputed to “no.” It was expected that this would have a negligible effect on the distribution of HOMESCHL. Furthermore, there were numerous opportunities throughout the instrument for the respondent to indicate that questions were not applicable if the child was solely homeschooled (e.g., questions on school characteristics). Thus, imputing HOMESCHL to “no” seems reasonable. Other homeschool variables, such as whether the child receives all schooling at home (HOMEALL) and the number of hours per week the child goes to school for instruction (HOMSCHR), were imputed using the WESDECK procedure.

Grade in school/highest grade completed/high school diploma. In the ECPP and ASPA interviews, if the respondent refused to provide or could not provide GRADE, the interviewer asked for a more knowledgeable respondent; thus, GRADE was never missing for a sampled child. Grade equivalent (GRADEEQ) and highest grade completed for parents or adults (MOMGRADE, DADGRADE, IBGRADE) were imputed using age as an additional sort variable. When the person with the missing value was age 25 or younger, the donor was of the same age, unless there was no donor of the same age available; in this case, the donor was within 1 year of age in either direction. When the person was over age 25 and was married, the educational attainment of the spouse was used; otherwise, the donor was the person closest in age to the recipient within the state and ZIP code whose possession of a high school diploma or not was the same as the person with the missing variable, if available. When grade in school did not need to be imputed but a following item was missing (e.g., MOMDIPL), the donor was the person with the same grade or educational attainment who was closest in age within state and three-digit ZIP code.

Same school. The variable that indicates whether two children in the family attend the same school, SSAME, was used for convenience to avoid administering some school items twice to the parent respondent for two children who attend the same school. It was created to trigger a skip in order to reduce respondent burden; however, it was not intended to be used for analytic purposes. It was imputed to “no” because if the value of SSAME was missing, the items in question would have been administered the second time in the interview.

Relationship. When a household member’s relationship to the sampled child was missing, the variable RELATN_n was imputed manually. The age, gender, and relationship of all household members to the subject child, as well as the mother’s (or female guardian’s) and father’s (or male guardian’s) marital status and related variables were examined to determine the likely relationship of the person missing on that variable.

Updates and Imputations

Some of the values that changed during the manual imputation process were actually updates. This occurred when a value was missing on one data file but was available from another source in the database. For example, when an adult had a missing value on the variable IBDIPL (high school diploma), the database was checked to see if that person was the mother or father of a sampled child and, if so, the value of MOMDIPL or DADDIPL (as appropriate) was used to update IBDIPL. Conversely, when IBDIPL was available for the mother or father but MOMDIPL or DADDIPL had missing values, the value of IBDIPL was used to update MOMDIPL or DADDIPL. Very few values were updated in this way. This process is not considered imputation because the response is obtained from the household, and these updates are not reflected in the imputation flags.

If the response could not be obtained from either interview in the household, one variable (e.g., IBDIPL) was imputed, and the imputed value was then copied into the other variable (e.g., MOMDIPL). Likewise, the value of the imputation flag for the first variable was copied into the value of the imputation flag for the second variable because the process involved some imputation, not just updating.

Item Response Rates

For most of the data items collected in the NHES:2001, the item response rates were very high. However, for certain subgroups, the item response rates for some items varied considerably. It is recommended that analysts examine the item response rates for the items in their analyses for the subgroups under consideration.

The tables in this chapter show the item response rates³⁹ for items on the public data files. The number of cases for which each item was attempted and the percentage of cases for which a valid response was obtained are shown, as well as the percent of imputed cases that were manually imputed. Tables 6-1, 6-2, and 6-3 show the item response rates for items on the ECPP, ASPA, and AELL files, respectively. For the ECPP, ASPA, and AELL surveys, the median item response rates were 99.29 percent, 98.35 percent, and 99.34 percent, respectively.

As shown in table 6-1, most items on the ECPP public use data file have item response rates over 90 percent. Among items with response rates of less than 90 percent are those pertaining to the offering of flexible benefits accounts for child care expenses (MOMACUSE, DADACCT, and DADACUSE); income items (HINCOME and HINCMEXT); items that apply to only a small number of cases, such that a very small number of nonresponding cases has a substantial effect on the item response rate (NCWKMO2, NCDAYWK2, NCCOST3, NCUNIT3, NCCSTHH3, NCCOST2, NCUNIT2, RCWKMO1, CPDAYWK1, CPHRWK1, AGE9, PCENDYY2, RCWKMO2, NCWKMO1, NCDAYWK1, NCCSTHN2, CPWKMO1, PCHDCOS3, NCCSTHN3, CPBELIE3, and CPDENTA3); and followup questions about arrangements reported late in the interview (MOMADAYS, MOMBHOUS, MOMBWEEK, MOMBDAYS, MOMAHRS, MOMBHRS). Household income items traditionally generate high nonresponse because many people are sensitive about providing information about their household income, and prefer to respond with a general income range.

Items with response rates of less than 90 percent on the ASPA public file (table 6-2) include the same classes of items having response rates of less than 90 percent on the ECPP file (listed above), as well as items pertaining only to homeschoolers (HSPAPLCU, HSACTVSU, HSACTVS, HSSTPLC, HSPAPLC, HSSTPLCU, HSSTWEBU, HSMATLS, HSSTWEB, HSMATLSU, HSCURRU, HSPAWEB, HSATTND, HSCURR, and HSPAWEBU). For the ASPA survey, there is one other set of variables worth noting. During the preparation of the data file, an unintended skip in the ASPA questionnaire was detected for a set of parental care items (PABHOME, PAAHOME, PAAHMIN, PAAHMOUT,

³⁹ All item response rates reported here are unweighted.

PAARELA, PAAFRND, PAANEIG, PAAPUBL, PAACENT, PAAOUT, PAASCHL, PAAPLOTH, PAAEDUC, PAACOMP, PAAREAD, PAAART, PAACHOR, PAAOUTPL, PAAINPLA, PAAPHON, PAAEAT, PAATV, PAATALK, PAAACTIV, and PAAOTHER). Consequently, the item PABHOME was not asked about children with no before-school arrangements if they also had before- or after-school activities that were used to cover hours when parents needed adult supervision for them (ASCOVER = 1). This question should have been asked for all children who had no arrangements before school, regardless of the status of their before- or after-school activities. All remaining items in the list above were skipped if children had no after-school arrangements and had before- or after-school activities that were used to cover hours when adult supervision was needed.

Items with response rates of less than 90 percent on the AELL public file (table 6-3) include income and earnings items (HINCMRNG, HINCM50K, EARNAMT, EARNUNT, HINCOME, and HINCMEXT); items that apply to only a small number of cases (e.g., items pertaining to the second and third credential program and the second vocational program); and items pertaining to hours of instruction (BSHRYR, APCLSHR, CRCLSHR1, VOCRDHR1). As noted previously, income and earnings items traditionally generate high nonresponse because many people are sensitive about providing information about their income and earnings. 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. The relatively high nonresponse to items pertaining to hours of instruction is likely the result of respondents' inability to recall the hours spent in instruction.

Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
SEX1	O/HH MEM - #1'S SEX	5,244	100.00	0.00
SEX2	O/HH MEM - #2'S SEX	2,642	100.00	0.00
SEX4	O/HH MEM - #4'S SEX	472	100.00	0.00
SEX5	O/HH MEM - #5'S SEX	203	100.00	0.00
SEX6	O/HH MEM - #6'S SEX	78	100.00	0.00
RELATN6	O/HH MEM - #6'S RELATION TO CHILD.....	78	100.00	0.00
SEX7	O/HH MEM - #7'S SEX	36	100.00	0.00
RELATN7	O/HH MEM - #7'S RELATION TO CHILD.....	36	100.00	0.00
AGE8	O/HH MEM - #8'S AGE	14	100.00	0.00
SEX8	O/HH MEM - #8'S SEX	14	100.00	0.00
RELATN8	O/HH MEM - #8'S RELATION TO CHILD.....	14	100.00	0.00
SEX9	O/HH MEM - #9'S SEX	6	100.00	0.00
RELATN9	O/HH MEM - #9'S RELATION TO CHILD.....	6	100.00	0.00
AGE10	O/HH MEM - #10'S AGE	2	100.00	0.00
SEX10	O/HH MEM - #10'S SEX	2	100.00	0.00
RELATN10	O/HH MEM - #10'S RELATION TO CHILD.....	2	100.00	0.00
AGE11	O/HH MEM - #11'S AGE	1	100.00	0.00
SEX11	O/HH MEM - #11'S SEX	1	100.00	0.00
RELATN11	O/HH MEM - #11'S RELATION TO CHILD.....	1	100.00	0.00
CBORNUS	PA5-CHILD'S BIRTH COUNTRY.....	6,749	100.00	0.00
ENROLL	PB1-CHILD ENROLLED/ATTENDING SCHOOL.....	3,150	100.00	0.00
HOMESCHL	PB2-CHILD BEING SCHOOLED AT HOME	349	100.00	0.00
HOMEALL	PB4-FULL OR PARTIAL HOMESCHOOL.....	9	100.00	0.00
HOMSCHR	PB5-HRS/WK HOMESCHOOLED CHILD IN SCHOOL	1	100.00	0.00
GRADE	PB6-GRADE/YR CHILD IS ATTENDING.....	1,831	100.00	0.00
GRADEEQ	PB7-GRADE EQUIV/HOMESCHOOL SP ED/UNGRD	17	100.00	0.00
RCTYPE4	ED5-RELATIVE WHO CARES FOR CHILD-4	8	100.00	0.00
RCAGE4	ED5OV-AGE OF RELATIVE CAREGIVER-4.....	8	100.00	0.00
RCPLACE4	ED6-LOCATION OF RELATIVE CARE-4.....	8	100.00	0.00
RCINHH2	ED7-REL CARE PROVIDER LIVES IN HH-2.....	96	100.00	0.00
RCINHH4	ED7-REL CARE PROVIDER LIVES IN HH-4.....	3	100.00	0.00
RCHOMM4	ED8-MINUTES TO GO TO RELATIVE'S HOME-4	5	100.00	0.00
RCWEEK3	ED9-REL CARE REG SCHED ONCE/WEEK-3.....	54	100.00	0.00
RCWEEK4	ED9-REL CARE REG SCHED ONCE/WEEK-4.....	8	100.00	0.00
RCMONTH2	ED10-REL CARE REG SCHED ONCE/MONTH-2	89	100.00	0.00
RCMONTH4	ED10-REL CARE REG SCHED ONCE/MONTH-4	5	100.00	0.00
RCMONTH3	ED10-REL CARE REG SCHED ONCE/MONTH-3	19	100.00	0.00
RCHR4	ED12-# OF HRS/WK RECEIVES REL CARE-4	3	100.00	0.00
RCWKMO3	ED13-# OF WKS/MO RECEIVES REL CARE-3.....	13	100.00	0.00
RCWKMO4	ED13-# OF WKS/MO RECEIVES REL CARE-4.....	2	100.00	0.00
RCDAYWK3	ED14-# OF DAYS/WK RECEIVES REL CARE-3	13	100.00	0.00
RCDAYWK4	ED14-# OF DAYS/WK RECEIVES REL CARE-4	2	100.00	0.00
RCHRWK3	ED15-# OF HRS/WK RECEIVES REL CARE-3	13	100.00	0.00
RCHRWK4	ED15-# OF HRS/WK RECEIVES REL CARE-4	2	100.00	0.00
RCKIDS3	ED17-NUM OF CHILDREN CARED FOR BY REL-3	48	100.00	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCKIDS4	ED17-NUM OF CHILDREN CARED FOR BY REL-4	5	100.00	0.00
RCADLTS2	ED18-NUM OF ADULTS GIVING REL CARE-2.....	267	100.00	0.00
RCADLTS4	ED18-NUM OF ADULTS GIVING REL CARE-4.....	5	100.00	0.00
RCSTRTM3	ED19-AGE REL CARE BEGAN/MONTHS-3	48	100.00	0.00
RCSTRTM4	ED19-AGE REL CARE BEGAN/MONTHS-4	5	100.00	0.00
RCSTRTY3	ED19-AGE REL CARE BEGAN/YEARS-3	48	100.00	0.00
RCSTRTY4	ED19-AGE REL CARE BEGAN/YEARS-4	5	100.00	0.00
RCSPEAK2	ED20-LANGUAGE SPOKEN MOST BY REL-2	267	100.00	0.00
RCSPEAK3	ED20-LANGUAGE SPOKEN MOST BY REL-3	48	100.00	0.00
RCSPEAK4	ED20-LANGUAGE SPOKEN MOST BY REL-4	5	100.00	0.00
RCBELIE3	ED21-REL SIMILAR REARING BELIEFS-3.....	48	100.00	0.00
RCBELIE4	ED21-REL SIMILAR REARING BELIEFS-4.....	5	100.00	0.00
RCSICK3	ED22-REL RULES ABT CARE WHEN CHLD SICK-3.....	48	100.00	0.00
RCSICK4	ED22-REL RULES ABT CARE WHEN CHLD SICK-4.....	5	100.00	0.00
RCCANCE4	ED23-NUMBER OF DAYS REL CANCELS-4.....	5	100.00	0.00
RCFEE2	ED24-ANY FEE FOR REL CARE-2	267	100.00	0.00
RCFEE3	ED24-ANY FEE FOR REL CARE-3	48	100.00	0.00
RCFEE4	ED24-ANY FEE FOR REL CARE-4	5	100.00	0.00
RCREL2	ED25A- REL HELPS PAY FOR REL CARE-2.....	25	100.00	0.00
RCREL3	ED25A- REL HELPS PAY FOR REL CARE-3.....	4	100.00	0.00
RCWELF2	ED25B-WELFARE HELPS PAY FOR REL CARE-2.....	25	100.00	0.00
RCWELF3	ED25B-WELFARE HELPS PAY FOR REL CARE-3.....	4	100.00	0.00
RCEMPL2	ED25C-EMPL HELPS PAY FOR REL CARE-2.....	25	100.00	0.00
RCEMPL3	ED25C-EMPL HELPS PAY FOR REL CARE-3.....	4	100.00	0.00
RCOTHER2	ED25D-OTHER HELPS PAY FOR REL CARE-2.....	25	100.00	0.00
RCOTHER3	ED25D-OTHER HELPS PAY FOR REL CARE-3.....	4	100.00	0.00
RCCOST3	ED26-AMT HH PAYS FOR REL CARE-3	4	100.00	0.00
RCUNIT3	ED26-UNIT OF TIME/REL CARE COST-3	4	100.00	0.00
RCCSTHH3	ED27-AMOUNT FOR CHILD ONLY OR OTHERS-3.....	4	100.00	0.00
RCCSTHN2	ED270V-# OF CHILDREN AMOUNT IS FOR-2	6	100.00	0.00
RCCSTHN3	ED270V-# OF CHILDREN AMOUNT IS FOR-3	2	100.00	0.00
NCNOW	EE1-RECEIVES CARE FROM A NONRELATIVE	6,749	100.00	0.00
NCPLACE2	EE5-LOCATION OF NONRELATIVE CARE-2	69	100.00	0.00
NCPLACE3	EE5-LOCATION OF NONRELATIVE CARE-3	10	100.00	0.00
NCINHH1	EE6-NONREL CARE PROVIDER LIVES IN HH-1.....	229	100.00	0.00
NCINHH2	EE6-NONREL CARE PROVIDER LIVES IN HH-2.....	21	100.00	0.00
NCINHH3	EE6-NONREL CARE PROVIDER LIVES IN HH-3.....	5	100.00	0.00
NCHOMM2	EE7-MINUTES TO GO TO NONREL'S HOME-2	48	100.00	0.00
NCHOMM3	EE7-MINUTES TO GO TO NONREL'S HOME-3	5	100.00	0.00
NCWEEK2	EE8-NONREL CARE REG SCHED ONCE/WEEK-2	69	100.00	0.00
NCWEEK3	EE8-NONREL CARE REG SCHED ONCE/WEEK-3	10	100.00	0.00
NCMONTH3	EE9-NONREL CARE REG SCHED ONCE/MONTH-3	2	100.00	0.00
NCDAYS2	EE10-# DAYS/WK RECEIVES NONREL CARE-2	47	100.00	0.00
NCDAYS3	EE10-# DAYS/WK RECEIVES NONREL CARE-3	8	100.00	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCHRS2	EE11-# HRS/WK RECEIVES NONREL CARE-2	47	100.00	0.00
NCHRS3	EE11-# HRS/WK RECEIVES NONREL CARE-3	8	100.00	0.00
NCHRWK2	EE14-# OF HRS/WK RECEIVES NONREL CARE-2	9	100.00	0.00
NCKIDS2	EE16-# OF CHILDRN CARED FOR BY NONREL-2	56	100.00	0.00
NCKIDS3	EE16-# OF CHILDRN CARED FOR BY NONREL-3	8	100.00	0.00
NCADLTS2	EE17-NUM OF ADULTS GIVING NONREL CARE-2	56	100.00	0.00
NCADLTS3	EE17-NUM OF ADULTS GIVING NONREL CARE-3	8	100.00	0.00
NCSTRTM3	EE18-AGE NONREL CARE BEGAN/MONTHS-3	8	100.00	0.00
NCSTRTY3	EE18-AGE NONREL CARE BEGAN/YEARS-3	8	100.00	0.00
NCALKNE2	EE19-ALREADY KNEW CARE PROVIDER-2	56	100.00	0.00
NCALKNE3	EE19-ALREADY KNEW CARE PROVIDER-3	8	100.00	0.00
NCFRIEN2	EE20-LEARNED FROM FRIEND/NEIGHBOR-2	56	100.00	0.00
NCFRIEN3	EE20-LEARNED FROM FRIEND/NEIGHBOR-3	8	100.00	0.00
NCPLEMP2	EE20-LEARNED FROM PLACE OF EMPLOYMENT-2	56	100.00	0.00
NCPLEMP3	EE20-LEARNED FROM PLACE OF EMPLOYMENT-3	8	100.00	0.00
NCSCHOO2	EE20-LEARNED FROM PUB/PRIVATE SCHOOL-2	56	100.00	0.00
NCSCHOO3	EE20-LEARNED FROM PUB/PRIVATE SCHOOL-3	8	100.00	0.00
NCCHURC2	EE20-LEARNED FROM CHURCH/SYNAGOGUE-2	56	100.00	0.00
NCCHURC3	EE20-LEARNED FROM CHURCH/SYNAGOGUE-3	8	100.00	0.00
NCSOCWK2	EE20-LEARNED FROM SOCIAL WORKER-2	56	100.00	0.00
NCSOCWK3	EE20-LEARNED FROM SOCIAL WORKER-3	8	100.00	0.00
NCADS2	EE20-LEARNED FROM NEWSPAPER ADS-2	56	100.00	0.00
NCADS3	EE20-LEARNED FROM NEWSPAPER ADS-3	8	100.00	0.00
NCAGENC2	EE20-LEARNED FROM R & R AGENCY-2	56	100.00	0.00
NCAGENC3	EE20-LEARNED FROM R & R AGENCY-3	8	100.00	0.00
NCCARE2	EE20-LEARNED FROM CHLD CARE AGNCY-2	56	100.00	0.00
NCCARE3	EE20-LEARNED FROM CHLD CARE AGNCY-3	8	100.00	0.00
NCKNEW2	EE20-ALREADY KNEW PROVIDER-2	56	100.00	0.00
NCKNEW3	EE20-ALREADY KNEW PROVIDER-3	8	100.00	0.00
NCCHILD2	EE20-PROVIDER CARED FOR OTHER CHILD-2	56	100.00	0.00
NCCHILD3	EE20-PROVIDER CARED FOR OTHER CHILD-3	8	100.00	0.00
NCREFER2	EE20-LEARNED FROM REFERENCE MATERIAL-2	56	100.00	0.00
NCREFER3	EE20-LEARNED FROM REFERENCE MATERIAL-3	8	100.00	0.00
NCBULLE2	EE20-LEARNED FROM BULLETIN BRD/FLYER-2	56	100.00	0.00
NCBULLE3	EE20-LEARNED FROM BULLETIN BRD/FLYER-3	8	100.00	0.00
NCINTR2	EE20-LEARNED FROM INTERNET-2	56	100.00	0.00
NCINTR3	EE20-LEARNED FROM INTERNET-3	8	100.00	0.00
NCSOURC2	EE20-LEARNED FROM OTHER SOURCE-2	56	100.00	0.00
NCSOURC3	EE20-LEARNED FROM OTHER SOURCE-3	8	100.00	0.00
NCRACE2	EE21-CARE PRVDER SAME RACE/BACKGD-2	56	100.00	0.00
NCRACE3	EE21-CARE PRVDER SAME RACE/BACKGD-3	8	100.00	0.00
NCAGE2	EE22-CARE PROVIDER OVER 18 YRS OLD-2	56	100.00	0.00
NCAGE3	EE22-CARE PROVIDER OVER 18 YRS OLD-3	8	100.00	0.00
NCAGEYY1	EE23-AGE OF CARE PROVIDER-1	9	100.00	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCAGEYY2	EE23-AGE OF CARE PROVIDER-2.....	4	100.00	0.00
NCAGEYY3	EE23-AGE OF CARE PROVIDER-3.....	1	100.00	0.00
NCSPEAK2	EE24-LANGUAGE SPOKEN MOST BY NONREL-2	56	100.00	0.00
NCSPEAK3	EE24-LANGUAGE SPOKEN MOST BY NONREL-3	8	100.00	0.00
NCBELIE2	EE25-NONREL SIMILAR REARING BELIEFS-2.....	56	100.00	0.00
NCBELIE3	EE25-NONREL SIMILAR REARING BELIEFS-3.....	8	100.00	0.00
NCSICK3	EE26-NONREL RULES CARE WHEN CHLD SICK-3	8	100.00	0.00
NCCANCE3	EE27-NUMBER OF DAYS NONREL CANCELS-3	8	100.00	0.00
NCFEE2	EE28-ANY FEE FOR NONRELATIVE CARE-2	56	100.00	0.00
NCFEE3	EE28-ANY FEE FOR NONRELATIVE CARE-3	8	100.00	0.00
NCREL2	EE29A-REL HELPS PAY FOR NONREL CARE-2.....	39	100.00	0.00
NCREL3	EE29A-REL HELPS PAY FOR NONREL CARE-3.....	8	100.00	0.00
NCWELF2	EE29B-WELFARE HELPS PAY NONREL CARE-2	39	100.00	0.00
NCWELF3	EE29B-WELFARE HELPS PAY NONREL CARE-3	8	100.00	0.00
NCEMPL2	EE29C-EMPL HELPS PAY FOR NONREL CARE-2.....	39	100.00	0.00
NCEMPL3	EE29C-EMPL HELPS PAY FOR NONREL CARE-3.....	8	100.00	0.00
NCOTHER2	EE29D-OTHER HELPS PAY NONREL CARE-2.....	39	100.00	0.00
NCOTHER3	EE29D-OTHER HELPS PAY NONREL CARE-3.....	8	100.00	0.00
CPPLACE3	EG5-LOCATION OF CENTER-BASED PROGRAM-3	2	100.00	0.00
CPRELG3	EG6-PROGRAM AFFL W/FAMILY'S RELIGION-3	2	100.00	0.00
CPWORK3	EG7-PROGRAM LOCATED PARENT WORKPLACE-3.....	2	100.00	0.00
CPHOMM3	EG8-MINUTES FROM HOME TO PROGRAM-3	2	100.00	0.00
CPWEEK3	EG9-PROGRAM REG SCHED ONCE/WEEK-3	2	100.00	0.00
CPMONTH1	EG10-PROGRAM REG SCHED ONCE/MONTH-1	14	100.00	0.00
CPMONTH2	EG10-PROGRAM REG SCHED ONCE/MONTH-2	9	100.00	0.00
CPDAYS3	EG11-# OF DAYS/WK ATTENDS PROGRAM-3.....	2	100.00	0.00
CPHRS3	EG12-# OF HRS/WK ATTENDS PROGRAM-3.....	2	100.00	0.00
CPWKMO2	EG13-# OF WKS/MO IN PROGRAM-2.....	3	100.00	0.00
CPDAYWK2	EG14-# OF DAYS/WK IN PROGRAM-2	3	100.00	0.00
CPHRWK2	EG15-# OF HRS/WEEK IN PROGRAM-2.....	3	100.00	0.00
CPKIDS3	EG17-# OF CHILDREN IN GROUP-3	2	100.00	0.00
CPADLTS3	EG18-NUM OF ADULTS IN GROUP-3	2	100.00	0.00
CPSTRTM3	EG19-AGE CURRENT PRGM BEGAN/MONTHS-3	2	100.00	0.00
CPSTRTY3	EG19-AGE CURRENT PRGM BEGAN/YEARS-3	2	100.00	0.00
CPFRIEN3	EG20-LEARN FROM FRIEND/NEIGHBOR-3	2	100.00	0.00
CPPLEMP3	EG20-LEARNED FROM PLACE OF EMPLOYMENT-3	2	100.00	0.00
CPSCHOO3	EG20-LEARNED FROM PUB/PRIVATE SCHOOL-3.....	2	100.00	0.00
CPCHURC3	EG20-LEARNED FROM CHURCH/SYNAGOGUE-3.....	2	100.00	0.00
CPSOCWK3	EG20-LEARNED FROM SOCIAL WORKER-3.....	2	100.00	0.00
CPADS3	EG20-LEARNED FROM NEWSPAPER ADS-3.....	2	100.00	0.00
CPAGENC3	EG20-LEARNED FROM R & R AGENCY-3	2	100.00	0.00
CPCARE3	EG20-LEARNED FROM CHLD CARE AGNCY-3.....	2	100.00	0.00
CPKNEW3	EG20-ALREADY KNEW PROVIDER-3	2	100.00	0.00
CPCHILD3	EG20-PROVIDER CARED FOR OTHER CHILD-3.....	2	100.00	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPREFER3	EG20-LEARNED FROM REFERENCE MATERIALS-3	2	100.00	0.00
CPBULLE3	EG20-LEARNED FROM BULLETIN BRD/FLYER-3	2	100.00	0.00
CPINTER3	EG20-LEARNED FROM INTERNET-3	2	100.00	0.00
CPSOURC3	EG20-LEARNED FROM OTHER SOURCE-3	2	100.00	0.00
CPRACE3	EG21-CARE PROVIDER SAME RACE/BACKGD-3	2	100.00	0.00
CPSPEAK3	EG22-LANG PROVIDER SPEAKS MOST W/CHILD-3	2	100.00	0.00
CPPARHR3	EG24-PGM ENCOURAGE PARENTS VOLUNTEER-3	2	100.00	0.00
CPPARWR3	EG25-VOLUNTEER CHILD'S PGM LST MNTH-3	2	100.00	0.00
CPTEST3	EG26A-PGM PRVDS HEAR/SPEECH/VISN TEST-3	2	100.00	0.00
CPPHYSE3	EG26B-PGM PRVDS PHYSICAL EXAMINATIONS-3	2	100.00	0.00
CPDISAB3	EG26D-PGM PRVDS TEST FOR DEVT PROBLEM-3	2	100.00	0.00
CPSICK3	EG26E-PGM PROVIDES SICK CHILD CARE-3	2	100.00	0.00
CPTEACH3	EG27-NUM OF TIMES TEACHER CHANGED-3	2	100.00	0.00
CPFEE3	EG28-ANY FEE FOR PROGRAM-3	2	100.00	0.00
CPREL3	EG29A-REL HELPS PAY FOR PROGRAM-3	1	100.00	0.00
CPWELF3	EG29B-WELFARE HELPS PAY FOR PROGRAM-3	1	100.00	0.00
CPEMPL3	EG29C-EMPL HELPS PAY FOR PROGRAM-3	1	100.00	0.00
CPOTHER3	EG29D-OTHER HELPS PAYS FOR PROGRAM-3	1	100.00	0.00
CPCOST3	EG30-AMOUNT HH PAYS FOR PROGRAM-3	1	100.00	0.00
CPUNIT3	EG30-UNIT OF TIME/PROGRAM COST-3	1	100.00	0.00
CPCSTHH3	EG31-AMOUNT FOR CHILD ONLY OR OTHERS-3	1	100.00	0.00
CPCSTHN2	EG31OV-# OF CHILDREN AMOUNT IS FOR-2	6	100.00	0.00
PCHD2	EH3-REG ARRANGEMENT IS HEAD START	117	100.00	0.00
PCHDTYP2	EH3-ARRANGEMENT IS HEAD START-2	92	100.00	0.00
PCHD3	EH3-REG ARRANGEMENT IS HEAD START	20	100.00	0.00
PCHDTYP3	EH3-ARRANGEMENT IS HEAD START-3	12	100.00	0.00
PCHD4	EH3-REG ARRANGEMENT IS HEAD START	6	100.00	0.00
PCHDTYP4	EH3-ARRANGEMENT IS HEAD START-4	6	100.00	0.00
PCWHO1	EH8-WHO PROVIDED CARE OR PROGRAM-1	197	100.00	0.00
PCWHO2	EH8-WHO PROVIDED CARE OR PROGRAM-2	11	100.00	0.00
PCPLACE2	EH9-CARE TOOK PLACE IN OWN/OTHER HOME-2	6	100.00	0.00
PCSTRTY2	EH10-YEAR PREVIOUS ARRANGEMENT BEGAN-2	11	100.00	0.00
SEX	SEX	6,749	99.99	100.00
RESPSEX	PARENT RESPONDENT'S SEX	6,749	99.99	100.00
DPCOLOR	EL1-CHILD CAN IDENTIFY COLORS	4,421	99.98	0.00
RELATN1	O/HH MEM - #1'S RELATION TO CHILD	5,244	99.98	100.00
RCNOW	ED1-RECEIVES CARE FROM A RELATIVE	6,749	99.97	0.00
CPNNOW	EG1-CHILD ATTENDS CTR BSD PROGRAM	6,749	99.97	0.00
RESRELN	PARENT R'S RELATIONSHIP TO CHILD	6,749	99.97	100.00
HNDWCWHN	PT2-LAST TIME CHILD SAW DOCTOR	6,749	99.96	0.00
CSPEAK	PA6-LANG CHILD SPEAKS MOST AT HOME	4,421	99.95	100.00
FOREADTO	EK1-NUM TIMES READ TO CHILD IN PAST WEEK	6,749	99.94	0.00
FOLIBRAY	EK4-VISITED LIBRARY W/CHILD IN PST MONTH	3,150	99.94	0.00
HDBLNDIM	PT5F_PT7B-BLINDNESS/VISUAL PROBLEM	6,749	99.94	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
HASTORY	EL5-CHILD CAN READ STORY BOOKS	4,421	99.93	0.00
NCPLACE1	EE5-LOCATION OF NONRELATIVE CARE-1	1,116	99.91	0.00
SEX3	O/HH MEM - #3'S SEX	1,114	99.91	100.00
SFATTGRP	EJ1A-ATTENDED SUPPORT GROUP FOR PARENTS	6,749	99.90	0.00
HAPRETND	EL7-CHILD LOOKS AT BOOK/PRETENDS READ	4,185	99.90	0.00
HDDEVEL	PT7D-CHILD HAS SEVERE DEVELOPMENT DELAY	3,599	99.89	0.00
SFATTCLS	EJ1B-ATTENDED PARENTING CLASS	6,749	99.88	0.00
RCPLACE1	ED6-LOCATION OF RELATIVE CARE-1	1,566	99.87	0.00
FOWORDS	EK3B-TAUGHT LTRS/WRDS/NMBRS IN PAST WEEK	3,150	99.87	0.00
FOCRAFTS	EK3D-DID ARTS/CRAFTS IN PAST WEEK	3,150	99.87	0.00
HDOTHER	PT5H_PT7E-HAS OTHR HLTH PROB 6 MOS/ MORE	6,749	99.87	0.00
DADTYPE	SPECIFIC RELATIONSHIP OF FATHER TO CHILD	5,431	99.87	100.00
MOMTYPE	SPECIFIC RELATIONSHIP OF MOTHER TO CHILD	6,540	99.86	100.00
HDDEAFIM	PT5E_PT7A-DEAFNESS/HEARING PROBLEM	6,749	99.85	0.00
HDORTHO	PT5G_PT7C-ORTHOPEDIC IMPAIRMENT	6,749	99.85	0.00
RELATN2	O/HH MEM - #2'S RELATION TO CHILD	2,642	99.85	100.00
DPCOUNT	EL3-HOW HIGH CHILD CAN COUNT	4,421	99.84	0.00
HDDELAY	PT1-CHILD DEVELOPMENTALLY DELAYED	6,749	99.84	0.00
PCEVRHD	EH4-CHILD EVER ATTENDED HEAD START	6,398	99.83	0.00
FOWORDSN	EK3B-TIMES TAUGHT LTRS/WRDS/NMBRS PST WK	2,970	99.83	0.00
DPLETTER	EL2-CHILD RECOGNIZES LETTERS	4,421	99.82	0.00
RELATN3	O/HH MEM - #3'S RELATION TO CHILD	1,114	99.82	100.00
HNDNTIST	PT3-CHILD HAS SEEN DENTIST	3,150	99.81	0.00
HDRETARD	PT5B-CHILD HAS MENTAL RETARDATION	3,150	99.81	0.00
RCKIDS1	ED17-NUM OF CHILDREN CARED FOR BY REL-1	1,518	99.80	0.00
RELATN4	O/HH MEM - #4'S RELATION TO CHILD	472	99.79	100.00
HDDISTRB	PT5D-CHILD HAS EMOTIONAL DISTURBANCE	3,150	99.78	0.00
FOCRAFTN	EK3D-NUM TIMES DID ARTS/CRAFTS IN PST WK	2,500	99.76	0.00
DPNAME	EL4-CHILD CAN WRITE FIRST NAME	4,421	99.75	0.00
AGE1	O/HH MEM - #1'S AGE	5,244	99.75	100.00
RCSPEAK1	ED20-LANGUAGE SPOKEN MOST BY REL-1	1,518	99.74	0.00
CPNEVER	EG2-CHILD EVER GONE CTR BSD PROGRAM	4,210	99.74	0.00
RCTYPE1	ED5-RELATIVE WHO CARES FOR CHILD-1	1,566	99.74	25.00
CPWEEK1	EG9-PROGRAM REG SCHED ONCE/WEEK-1	2,539	99.72	0.00
PPNOWORK	EI4-PARENT DOESN'T WORK/SCHEDULE	1,423	99.72	0.00
PPWORKHO	EI4-PARENT WORKS/STUDIES AT HOME	1,423	99.72	0.00
PCHD1	EH3-REG ARRANGEMENT IS HEAD START	351	99.72	100.00
HDSPEECH	PT5C-CHILD HAS SPEECH IMPAIRMENT	3,150	99.71	0.00
HDAUTISM	PT6A-CHILD HAS AUTISM	3,150	99.71	0.00
DADAGE	FATHER'S AGE	5,431	99.71	100.00
RCTYPE2	ED5-RELATIVE WHO CARES FOR CHILD-2	314	99.68	0.00
RCPLACE2	ED6-LOCATION OF RELATIVE CARE-2	314	99.68	0.00
RCWEEK1	ED9-REL CARE REG SCHED ONCE/WEEK-1	1,566	99.68	0.00
RCWEEK2	ED9-REL CARE REG SCHED ONCE/WEEK-2	314	99.68	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
FOMUSIC	EK3C-TAUGHT CHILD SONGS/MUSIC PAST WEEK	3,150	99.68	0.00
RCADLTS1	ED18-NUM OF ADULTS GIVING REL CARE-1	1,518	99.67	0.00
PPDAYCAR	EI4-PARENT IS HOME DAY CARE PROVIDER	1,423	99.65	0.00
PPSPECL	EI4-CHILD HAS SPECIAL NEEDS	1,423	99.65	0.00
PPDEPEND	EI4-PARENT CARES FOR OTHER DEPENDENTS	1,423	99.65	0.00
PPBARR	EI4-COST/AVAILABILTY/TRANSPORTATION	1,423	99.65	0.00
PPHMWRK	EI4-HELP W/ CHILD'S EDUCATION/HOMEWORK	1,423	99.65	0.00
PPSTHM	EI4-PARENT PREFERS TO STAY HOME	1,423	99.65	0.00
PPBEST	EI4-PARENT CARE BEST FOR CHILD	1,423	99.65	0.00
PPRESPON	EI4-PARENTS ARE RESPONSIBLE FOR CARE.....	1,423	99.65	0.00
PPRELIG	EI4-RELIGIOUS REASONS.....	1,423	99.65	0.00
PPOTHER	EI4-OTHER REASON PARENT CARES FOR CHILD.....	1,423	99.65	0.00
PPKNEW	EI5K-CAREGIVER ALREADY KNEW	1,116	99.64	0.00
CPNAGEYR	EG3-AGE CHILD 1 ST ATTENDED PGM/YEARS	3,010	99.63	0.00
RESPAGE	PARENT RESPONDENT'S AGE.....	6,749	99.63	100.00
FOMUSICN	EK3C-NUM TIMES TAUGHT SONGS/MUSIC PST WK	2,555	99.61	0.00
MOMSPEAK	PU5-LANGUAGE SPOKEN MOST AT HOME BY MOM.....	6,633	99.61	100.00
HNDNTWHN	PT4-LAST TIME CHILD SAW DENTIST.....	2,012	99.60	0.00
CHISPAN	PA4-CHILD IS OF HISPANIC ORIGIN	6,749	99.60	100.00
RCEVER	ED2-EVER RECEIVED CARE FROM A RELATIVE	5,183	99.59	0.00
NCEVER	EE2-EVER RECEIVED CARE FROM A NONREL.....	5,633	99.59	0.00
HOTHNUM	PW2-OTHER PHONE NUMBERS/HOME USE.....	6,749	99.59	0.00
MOMAGE	MOTHER'S AGE	6,540	99.59	100.00
PCHDTP1	EH3-ARRANGEMENT IS HEAD START-1	243	99.59	100.00
MOMBORN	PU6-COUNTRY MOM WAS BORN IN	6,633	99.58	100.00
NCALKNE1	EE19-ALREADY KNEW CARE PROVIDER-1	1,103	99.55	0.00
MOMWORK	PU9-MOM WORKED FOR PAY LAST WEEK	6,633	99.55	0.00
DADPART	PV2-FATHER'S PARTNER LIKE PARENT TO CHLD	446	99.55	100.00
PCANYHD	EH2-ANY ARRANGEMENTS ARE HEAD START	4,296	99.53	0.00
AGE5	O/HH MEM - #5'S AGE	203	99.51	100.00
HFOODST	PW16B-FAMILY RECD FOOD STMP PST 12 MONTH.....	6,749	99.50	0.00
MOMDIPL	PU8-MOM HAS HS DIPLOMA OR GED.....	2,972	99.50	100.00
CPPLACE1	EG5-LOCATION OF CENTER-BASED PROGRAM-1	2,539	99.49	0.00
PCNUM	EH7-NUMBER OF ARRANGEMENTS SINCE SEPT	197	99.49	0.00
DADSPEAK	PV4-LANGUAGE SPOKEN MOST AT HOME BY DAD	5,444	99.49	100.00
MOMLANG	PU4-FIRST LANGUAGE SPOKEN BY MOM.....	6,633	99.49	100.00
HDDOCTOR	PT8C-RECEIVES SERVICES FROM DR/CLINIC	576	99.48	0.00
RCINHH1	ED7-REL CARE PROVIDER LIVES IN HH-1	581	99.48	33.33
HOWNHOM	PW1-OWN HOME, RENT, OR OTHER ARRNGMNT	6,749	99.47	0.00
MOMSTAT	PU1-MOTHER'S MARITAL STATUS	6,633	99.47	100.00
RCDAYS1	ED11-# OF DAYS/WK RECEIVES REL CARE-1	1,475	99.46	0.00
NCWEEK1	EE8-NONREL CARE REG SCHED ONCE/WEEK-1	1,116	99.46	0.00
NCAGE1	EE22-CARE PROVIDER OVER 18 YRS OLD-1	1,103	99.46	0.00
NCSPEAK1	EE24-LANGUAGE SPOKEN MOST BY NONREL-1	1,103	99.46	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
HDLEARN	PT5A-CHILD HAS LEARNING DISABILITY	3,150	99.46	0.00
MOMENROL	PU16-MOM ENROLLED IN SCHOOL	6,633	99.46	0.00
DADACTY	PV14-DAD'S ACTIVITY MOST OF LAST WEEK	185	99.46	0.00
CPSTRTY1	EG19-AGE CURRENT PRGM BEGAN/YEARS-1	2,532	99.45	0.00
PPHEALTH	EI1C-HEALTHY PLACE FOR CHILD	4,353	99.45	0.00
PPSAFE	EI1E-CHILD IS SAFE WITH THE CAREGIVER	4,353	99.45	0.00
HWIC	PW16A-FAMILY RECD WIC PAST 12 MONTHS	6,749	99.44	0.00
MOMLEAVE	PU10-MOM ON LEAVE OR VACATION LAST WEEK	2,827	99.43	0.00
DADBORN	PV5-COUNTRY DAD WAS BORN IN.....	5,444	99.43	100.00
CRACE	PA3-CHILD'S RACE.....	6,749	99.42	100.00
CDOBMM	PA1-MONTH OF BIRTH.....	6,749	99.41	0.00
DADLEAVE	PV9-DAD ON LEAVE OR VACATION LAST WEEK.....	341	99.41	0.00
DADSTAT	PV1-FATHER'S MARITAL STATUS	5,444	99.41	100.00
DADLANG	PV3-FIRST LANGUAGE SPOKEN BY DAD	5,444	99.41	100.00
MOMACTY	PU15-MOM'S ACTIVITY MOST OF LAST WEEK.....	2,350	99.40	0.00
MOMLOOK	PU13-MOM LOOKING FOR WORK PAST 4 WEEKS	2,633	99.39	0.00
HGOVCUR	PW15-FAMLY CUR RECVS MONEY FOR CH CARE	6,427	99.39	0.00
PPLIKE	EI1K-CHILD LIKES THE CAREGIVER	4,353	99.38	0.00
DADWORK	PV8-DAD WORKED FOR PAY LAST WEEK	5,444	99.38	0.00
FORDDAY	EK2 MINS READ TO CHILD IN PAST WEEK	6,347	99.34	0.00
CPDAYS1	EG11-# OF DAYS/WK ATTENDS PROGRAM-1.....	2,525	99.33	0.00
CPSPEAK1	EG22-LANG PROVIDER SPEAKS MOST W/CHILD-1	2,532	99.33	0.00
CPPARWR1	EG25-VOLUNTEER CHILD'S PGM LST MNTH-1	2,532	99.33	0.00
PPSECUR	EI1A-CHILD FEELS SAFE AND SECURE IN CARE.....	4,353	99.33	0.00
HNUMUSE	PW4-# OF OTHER PHONE NUMBERS/HOME USE.....	1,048	99.33	0.00
NCHOMM1	EE7-MINUTES TO GO TO NONREL'S HOME-1	887	99.32	0.00
HDSCHL	PT8A-RECEIVES SERVICES FROM SCHL DIST	576	99.31	0.00
HDSOURCE	PT8D-RECEIVES OTHER SERVICES	576	99.31	0.00
NCREL1	EE29A-REL HELPS PAY FOR NONREL CARE-1.....	993	99.30	0.00
NCEMPL1	EE29C-EMPL HELPS PAY FOR NONREL CARE-1.....	993	99.30	0.00
NCOTHER1	EE29D-OTHER HELPS PAY NONREL CARE-1.....	993	99.30	0.00
RCREL1	ED25A- REL HELPS PAY FOR REL CARE-1.....	423	99.29	0.00
RCWELF1	ED25B-WELFARE HELPS PAY FOR REL CARE-1.....	423	99.29	0.00
RCOTHER1	ED25D-OTHER HELPS PAY FOR REL CARE-1	423	99.29	0.00
PPSHARE	EI1G-CAREGIVER SHARES INFORMATION	4,353	99.29	0.00
PPINTRST	EI1N-IT'S AN INTERESTING PLACE FOR CHILD.....	4,353	99.29	0.00
RCBELIE1	ED21-REL SIMILAR REARING BELIEFS-1	1,518	99.28	0.00
NCFRIEN1	EE20-LEARNED FROM FRIEND/NEIGHBOR-1.....	1,103	99.27	0.00
NCPLEMP1	EE20-LEARNED FROM PLACE OF EMPLOYMENT-1	1,103	99.27	0.00
NCSCHOO1	EE20-LEARNED FROM PUB/PRIVATE SCHOOL-1	1,103	99.27	0.00
NCCHURC1	EE20-LEARNED FROM CHURCH/SYNAGOGUE-1	1,103	99.27	0.00
NCSOCWK1	EE20-LEARNED FROM SOCIAL WORKER-1	1,103	99.27	0.00
NCADS1	EE20-LEARNED FROM NEWSPAPER ADS-1	1,103	99.27	0.00
NCAGENC1	EE20-LEARNED FROM R & R AGENCY-1.....	1,103	99.27	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCCARE1	EE20-LEARNED FROM CHLD CARE AGENCY-1	1,103	99.27	0.00
NCKNEW1	EE20-ALREADY KNEW PROVIDER-1.....	1,103	99.27	0.00
NCCHILD1	EE20-PROVIDER CARED FOR OTHER CHILD-1	1,103	99.27	0.00
NCREFER1	EE20-LEARNED FROM REFERENCE MATERIAL-1	1,103	99.27	0.00
NCBULLE1	EE20-LEARNED FROM BULLETIN BRD/FLYER-1	1,103	99.27	0.00
NCINTR1	EE20-LEARNED FROM INTERNET-1	1,103	99.27	0.00
NCSOURC1	EE20-LEARNED FROM OTHER SOURCE-1.....	1,103	99.27	0.00
MOMCHOIC	PU18-CHLD CARE AFFECTED MOM'S JOB CHOICE.....	3,980	99.27	0.00
PPWARM	EI1B-CAREGIVER IS WARM/AFFECTIONATE	4,353	99.26	0.00
RCKIDS2	ED17-NUM OF CHILDREN CARED FOR BY REL-2	267	99.25	0.00
RCBELIE2	ED21-REL SIMILAR REARING BELIEFS-2.....	267	99.25	0.00
RCSICK2	ED22-REL RULES ABT CARE WHEN CHLD SICK-2.....	267	99.25	0.00
PPRELG	EI5L-AFFILIATED WITH FAMILY RELIGION	2,539	99.25	0.00
DADENROL	PV15-DAD ENROLLED IN SCHOOL.....	5,444	99.25	0.00
AGE2	O/HH MEM - #2'S AGE	2,642	99.24	100.00
COTHRACE	PA3OV-CHILD IS HISP/MIXED RACE.....	1,188	99.24	100.00
PPSAFETY	EI4-CHILD'S SAFETY/SECURITY	1,423	99.23	0.00
PPWANT	EI4-PARENT WANTS TO BE WITH CHILD	1,423	99.23	0.00
FOSTORY	EK3A-TOLD CHILD STORY IN PAST WEEK	3,150	99.21	0.00
PPRESPCT	EI1D-CHILD TREATED WITH RESPECT	4,353	99.20	0.00
PPCLHM	EI5B-PLACE CLOSE TO HOME.....	5,345	99.20	0.00
NCWELF1	EE29B-WELFARE HELPS PAY NONREL CARE-1	993	99.19	0.00
PPENGL	EI5E-CAREGIVER WHO SPEAKS ENGLISH	5,345	99.18	0.00
NCDAYS1	EE10-# DAYS/WK RECEIVES NONREL CARE-1	1,079	99.17	0.00
PPHAPSEE	EI1O-CAREGIVER IS HAPPY TO SEE CHILD	4,353	99.17	0.00
PPBELIEF	EI5G-SHARE CHILDREARING BELIEFS	5,345	99.16	0.00
PPKNOW	EI1I-CAREGIVER KNOWS A LOT ABOUT CHILDREN	4,353	99.15	0.00
DADPUBL	PV13-DAD CHECKED PUBLIC EMPLOY AGENCY	118	99.15	0.00
DADPRIV	PV13-DAD CHECKED PRIVATE EMPLOY AGENCY.....	118	99.15	0.00
DADEMP	PV13-DAD CHECKED W/EMPLOYER DIRECTLY	118	99.15	0.00
DADREL	PV13-DAD CHECKED W/FRIENDS/RELATIVES	118	99.15	0.00
DADANSAD	PV13-DAD PLACE/ANSWER ADS/SENT RESUME	118	99.15	0.00
DADREAD	PV13-DAD READ WANT ADS	118	99.15	0.00
DADOTHER	PV13-DAD DID SOMETHING ELSE TO FIND WORK	118	99.15	0.00
RCSICK1	ED22-REL RULES ABT CARE WHEN CHLD SICK-1.....	1,518	99.14	0.00
RCFEE1	ED24-ANY FEE FOR REL CARE-1	1,518	99.14	0.00
HAFDC3YR	PW10-FAMILY RECD WELFARE IN PAST 3 YRS.....	6,749	99.14	0.00
CPNAGEMO	EG3-AGE CHILD 1 ST ATTENDED PGM/MONTHS	3,010	99.14	15.38
PPDIFCLT	EI2-DIFFICULTY FINDING CHILD CARE.....	4,353	99.10	0.00
HMEDIC	PW16C-FAMILY RECD MEDICAID PAST 12 MONTH	6,749	99.10	0.00
MOMMTHS	PU12-MONTHS MOM WORKED IN PAST YEAR.....	6,633	99.10	5.00
NCSTRTY1	EE18-AGE NONREL CARE BEGAN/YEARS-1.....	1,103	99.09	0.00
NCFEE1	EE28-ANY FEE FOR NONRELATIVE CARE-1	1,103	99.09	0.00
RCHOMM2	ED8-MINUTES TO GO TO RELATIVE'S HOME-2	218	99.08	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
MOMNEW	PU3-MOM'S AGE WHEN FIRST BECAME A MOTHER	6,633	99.08	18.03
PPFLEX	EI5F-CAREGIVER PROVIDES FLEXIBLE HOURS	5,345	99.06	0.00
DADBIDAD	PV26-BIOLOGICAL DAD PROVIDES CARE.....	1,486	99.06	0.00
RCEMPL1	ED25C-EMPL HELPS PAY FOR REL CARE-1	423	99.05	0.00
PPKIDS	EI5D-SMALL NUMBER OF CHILDREN IN GROUP.....	5,345	99.05	0.00
PPRACE	EI5H-CAREGIVER OF SAME RACE/ETHNIC GROUP	5,345	99.05	0.00
MOMGRADE	PU7-HIGHEST GRADE/YR MOM COMPLETED	6,633	99.05	100.00
FOSTORYN	EK3A-NUM TIMES TOLD CHILD STORY/WEEK.....	2,614	99.04	0.00
RCAGEYR	ED3-AGE 1 ST RECEIVED REL CARE/YEARS	2,268	99.03	0.00
DADCHOIC	PV17-CHLD CARE AFFECTED DAD'S JOB CHOICE	5,155	99.03	0.00
DADLIVW	PV10V-DAD CURRENTLY LIVING WITH PARTNER	516	99.03	100.00
CPHRS1	EG12-# OF HRS/WK ATTENDS PROGRAM-1.....	2,525	99.01	0.00
RCHOMM1	ED8-MINUTES TO GO TO RELATIVE'S HOME-1	985	98.98	0.00
PCREASN1	EH11-REASON PREVIOUS ARRANGEMENT ENDED-1.....	197	98.98	0.00
PPSICK	EI5A-PLACE CHILDREN CARE FOR WHEN SICK	5,345	98.97	0.00
CPREL1	EG29A-REL HELPS PAY FOR PROGRAM-1	2,012	98.96	0.00
CPOTHER1	EG29D-OTHER HELPS PAYS FOR PROGRAM-1	2,012	98.96	0.00
CPWELF1	EG29B-WELFARE HELPS PAY FOR PROGRAM-1	2,012	98.96	4.76
RCSTRTY1	ED19-AGE REL CARE BEGAN/YEARS-1	1,518	98.95	6.25
NCAGEMO	EE3-AGE 1 ST RECEIVED NONREL CARE/MNS	1,882	98.94	5.00
AGE4	O/HH MEM - #4'S AGE	472	98.94	100.00
PPCOST	EI5C-A REASONABLE COST.....	5,345	98.93	0.00
RCMONTH1	ED10-REL CARE REG SCHED ONCE/MONTH-1	91	98.90	0.00
NCHRS1	EE11-# HRS/WK RECEIVES NONREL CARE-1	1,079	98.89	0.00
CPLEMP1	EG20-LEARNED FROM PLACE OF EMPLOYMENT-1	2,532	98.89	0.00
CPFEE1	EG28-ANY FEE FOR PROGRAM-1	2,532	98.89	0.00
RCCANCE2	ED23-NUMBER OF DAYS REL CANCELS-2.....	267	98.88	0.00
DADMTHS	PV11-MONTHS DAD WORKED IN PAST YEAR	5,444	98.88	0.00
CPPLACE2	EG5-LOCATION OF CENTER-BASED PROGRAM-2	88	98.86	0.00
CPFRIEN1	EG20-LEARN FROM FRIEND/NEIGHBOR-1	2,532	98.85	0.00
CPSCHOO1	EG20-LEARNED FROM PUB/PRIVATE SCHOOL-1.....	2,532	98.85	0.00
CPCHURC1	EG20-LEARNED FROM CHURCH/SYNAGOGUE-1	2,532	98.85	0.00
CPSOCWK1	EG20-LEARNED FROM SOCIAL WORKER-1.....	2,532	98.85	0.00
CPADS1	EG20-LEARNED FROM NEWSPAPER ADS-1.....	2,532	98.85	0.00
CPAGENC1	EG20-LEARNED FROM R & R AGENCY-1	2,532	98.85	0.00
CPKNEW1	EG20-ALREADY KNEW PROVIDER-1	2,532	98.85	0.00
CPCHILD1	EG20-PROVIDER CARE FOR OTHER CHILD-1.....	2,532	98.85	0.00
CPREFER1	EG20-LEARNED FROM REFERENCE MATERIALS-1	2,532	98.85	0.00
CPBULLE1	EG20-LEARNED FROM BULLETIN BRD/FLYER-1	2,532	98.85	0.00
CPSOURC1	EG20-LEARNED FROM OTHER SOURCE-1	2,532	98.85	0.00
DADLOOK	PV12-DAD LOOKING FOR WORK PAST 4 WEEKS.....	261	98.85	0.00
HDADD	PT6B-CHILD HAS ADD OR ADHD	3,150	98.83	0.00
AGE3	O/HH MEM - #3'S AGE	1,114	98.83	100.00
NCADLTS1	EE17-NUM OF ADULTS GIVING NONREL CARE-1.....	1,103	98.82	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPCARE1	EG20-LEARNED FROM CHLD CARE AGENCY-1	2,532	98.82	0.00
CPINTER1	EG20-LEARNED FROM INTERNET-1	2,532	98.82	0.00
CPHOMM1	EG8-MINUTES FROM HOME TO PROGRAM-1	2,526	98.81	0.00
CPEMPL1	EG29C-EMPL HELPS PAY FOR PROGRAM-1	2,012	98.81	0.00
FAMTCREM	PU24-R HEARD OF CHILD CARE TAX CREDIT	6,633	98.81	0.00
HCHIP	PW16D-FAMILY RECD CHIP PAST 12 MONTHS	6,749	98.80	0.00
MOMPART	PU2-MOTHER'S PARTNER LIKE PARENT TO CHLD.....	501	98.80	100.00
MOMLIVW	PU10V-MOM CURRENTLY LIVING WITH PARTNER	985	98.78	100.00
CPWORK1	EG7-PROGRAM LOCATED PARENT WORKPLACE-1	2,427	98.76	0.00
PPSUPP	EI1L-CAREGIVER SUPPORTIVE OF ME/PARENT	4,353	98.74	0.00
HAWORDS	EL6-CHILD READS WORDS/PRETENDS TO READ	236	98.73	0.00
DADLVEAS	PV18-DAD'S EASE OF LEAVING WORK.....	5,155	98.72	0.00
PPCREAT	EI1M-CREATIVE ACTIVITIES GOING ON	4,353	98.71	0.00
PCPLACE1	EH9-CARE TOOK PLACE IN OWN/OTHER HOME-1	77	98.70	0.00
FAMTCRED	PV23-R HEARD OF CHILD CARE TAX CREDIT	5,444	98.68	1.39
MOMLVEAS	PU19-MOM'S EASE OF LEAVING WORK	3,980	98.67	0.00
CPSTRM1	EG19-AGE CURRENT PRGM BEGAN/MONTHS-1	2,532	98.66	20.59
CPWORK2	EG7-PROGRAM LOCATED PARENT WORKPLACE-2.....	73	98.63	0.00
RCAGEMO	ED3-AGE 1 ST RECEIVED REL CARE/MONTHS	2,268	98.63	9.68
PPATIENT	EI1F-CHILD GETS INDIVIDUAL ATTENTION	4,353	98.62	0.00
MOMVOTEC	PU7OV-MOM HAS VOC/TECH DIPL	1,225	98.61	100.00
MOMHOURS	PU11-HOURS PER WEEK MOM WORKS FOR PAY	3,980	98.59	0.00
MOMCAROT	PU32-PRIM ARRNG COVERS ALL WORK/SCH HRS	4,280	98.57	4.92
NCRACE1	EE21-CARE PRVDR SAME RACE/BACKGD-1	1,103	98.55	0.00
NCBELIE1	EE25-NONREL SIMILAR REARING BELIEFS-1	1,103	98.55	0.00
CPTEACH1	EG27-NUM OF TIMES TEACHER CHANGED-1	2,532	98.54	0.00
RELATN5	O/HH MEM - #5'S RELATION TO CHILD.....	203	98.52	100.00
PPLANG	EI5J-CAREGIVER SPEAKS CHILD NATIVE LANG	391	98.47	0.00
NCSTRM1	EE18-AGE NONREL CARE BEGAN/MONTHS-1	1,103	98.46	58.82
HDGOVT	PT8B-RECEIVES ST/LOCL/SOCL SERVICES	576	98.44	0.00
HGOVEVR	PW13-EVER RECD CHILD CARE BENEFITS	379	98.42	0.00
CPADLTS1	EG18-NUM OF ADULTS IN GROUP-1	2,532	98.38	0.00
MOMPUBL	PU14-MOM CHECKED PUBLIC EMPLOY AGENCY	370	98.38	0.00
MOMPRIV	PU14-MOM CHECKED PRIVATE EMPLOY AGENCY	370	98.38	0.00
MOMEMPL	PU14-MOM CHECKED W/EMPLOYER DIRECTLY	370	98.38	0.00
MOMREL	PU14-MOM CHECKED W/FRIENDS/RELATIVES.....	370	98.38	0.00
MOMANSAD	PU14-MOM PLACED/ANSWER ADS/SENT RESUME	370	98.38	0.00
MOMREAD	PU14-MOM READ WANT ADS	370	98.38	0.00
MOMOTHER	PU14-MOM DID SOMETHING ELSE TO FIND WORK	370	98.38	0.00
DADBIMOM	PV25-BIOLOGICAL MOM PROVIDES CARE	245	98.37	0.00
RCCANCE1	ED23-NUMBER OF DAYS REL CANCELS-1.....	1,518	98.35	0.00
RCSTRM1	ED19-AGE REL CARE BEGAN/MONTHS-1	1,518	98.35	44.00
MOMWLDSC	PU23-MOM WLD ATTEND SCHOOL IF CARE AVAIL	1,559	98.27	0.00
CPREL2	EG29A-REL HELPS PAY FOR PROGRAM-2	57	98.25	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPWELF2	EG29B-WELFARE HELPS PAY FOR PROGRAM-2	57	98.25	0.00
CPEMPL2	EG29C-EMPL HELPS PAY FOR PROGRAM-2	57	98.25	0.00
CPOTHER2	EG29D-OTHER HELPS PAYS FOR PROGRAM-2	57	98.25	0.00
RCDAYS2	ED11-# OF DAYS/WK RECEIVES REL CARE-2	225	98.22	0.00
MOMGRAD2	PU7-ACTUAL GRADE 9-11 MOM COMPLETED	562	98.22	100.00
NCSTRM2	EE18-AGE NONREL CARE BEGAN/MONTHS-2	56	98.21	0.00
NCSTRTY2	EE18-AGE NONREL CARE BEGAN/YEARS-2	56	98.21	0.00
DADDIPL	PV7-DAD HAS HS DIPLOMA OR GED	2,102	98.19	100.00
MOMBRELA	PU35-SECONDARY ARRNG RELATIVE TYPE	110	98.18	0.00
RCPLACE3	ED6-LOCATION OF RELATIVE CARE-3	54	98.15	0.00
HACONECT	EL8-PRTND READ SOUNDS LIKE CONNCTD STORY	4,151	98.05	0.00
DADHOURS	PV10-HOURS PER WEEK DAD WORKS FOR PAY	5,155	98.00	0.00
PCSTRTY1	EH10-YEAR PREVIOUS ARRANGEMENT BEGAN-1	197	97.97	0.00
MOMARELA	PU28-OTHER ARRNG RELATIVE TYPE	146	97.95	0.00
RCADLTS3	ED18-NUM OF ADULTS GIVING REL CARE-3	48	97.92	0.00
PPNEW	EI1H-CAREGIVER OPEN TO NEW INFORMATION	4,353	97.91	0.00
MOMCARE	PU26-PRIM ARRNG WHEN MOM AT WRK/SCH	4,280	97.90	14.44
PWRKHOME	PV27-PARENT WLD STOP/REDUCE WORK IF ABLE	6,187	97.83	0.00
PACHOOSE	EI3- WOULD CHOOSE NON-PARENTAL CARE	2,396	97.83	1.92
NCKIDS1	EE16-# OF CHILDRN CARED FOR BY NONREL-1	1,103	97.82	16.67
HAFDCCUR	PW11-FAMLY CURRENTLY RECVS WELFARE	864	97.80	0.00
DADGRADE	PV6-HIGHEST GRADE/YR SCH DAD COMPLETED	5,444	97.80	100.00
RCHRS2	ED12-# OF HRS/WK RECEIVES REL CARE-2	225	97.78	0.00
RCSTRTY2	ED19-AGE REL CARE BEGAN/YEARS-2	267	97.75	0.00
CPRACE1	EG21-CARE PROVIDER SAME RACE/BACKGD-1	2,532	97.75	0.00
CPRELGI	EG6-PROGRAM AFFL W/FAMILY'S RELIGION-1	1,983	97.73	0.00
CPWEEK2	EG9-PROGRAM REG SCHED ONCE/WEEK-2	88	97.73	0.00
MOMGRAD1	PU7-ACTUAL GRADE 0-8 MOM COMPLETED	303	97.69	100.00
RCDAYWK1	ED14-# OF DAYS/WK RECEIVES REL CARE-1	43	97.67	0.00
CPHOMM2	EG8-MINUTES FROM HOME TO PROGRAM-2	86	97.67	0.00
RCHRS1	ED12-# OF HRS/WK RECEIVES REL CARE-1	1,475	97.63	0.00
RCHRWK2	ED15-# OF HRS/WK RECEIVES REL CARE-2	42	97.62	0.00
CPSPEAK2	EG22-LANG PROVIDER SPEAKS MOST W/CHILD-2	82	97.56	0.00
CPPARWR2	EG25-VOLUNTEER CHILD'S PGM LST MNTH-2	82	97.56	0.00
CPTEACH2	EG27-NUM OF TIMES TEACHER CHANGED-2	82	97.56	0.00
CPFEE2	EG28-ANY FEE FOR PROGRAM-2	82	97.56	0.00
CPPARHR1	EG24-PGM ENCOURAGE PARENTS VOLUNTEER-1	2,532	97.55	0.00
PPDISCIP	EI1J-HANDLES DISCIPLINE/NOT HARSH	4,353	97.50	0.00
CMOVEAGE	PA5OV-AGE WHEN CHILD MOVED TO US	159	97.48	100.00
CPDAYS2	EG11-# OF DAYS/WK ATTENDS PROGRAM-2	79	97.47	0.00
CPHRS2	EG12-# OF HRS/WK ATTENDS PROGRAM-2	79	97.47	0.00
NCSICK1	EE26-NONREL RULES CARE WHEN CHLD SICK-1	1,103	97.46	0.00
MOMWLDWK	PU22-MOM WLD WORK IF CARE AVAILABLE	1,675	97.37	4.55
HGOVSINC	PW14-RECD CHILD CARE BENEFITS SINCE DATE	379	97.36	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCMONTH1	EE9-NONREL CARE REG SCHED ONCE/MONTH-1	37	97.30	0.00
HDAFFECT	PT10-DISABILITY AFFECTS ABILITY TO LEARN	406	97.29	0.00
MOMUSAGE	PU6OV-AGE WHEN MOM MOVED TO US.....	1,334	97.23	100.00
RCDAYS3	ED11-# OF DAYS/WK RECEIVES REL CARE-3	35	97.14	0.00
RCHRS3	ED12-# OF HRS/WK RECEIVES REL CARE-3	35	97.14	0.00
NCCANCE1	EE27-NUMBER OF DAYS NONREL CANCELS-1	1,103	97.01	3.03
MOMCARWH	PU33-SECONDARY ARRNG WHEN MOM AT WRK/SCH	963	96.99	6.90
CPDENTA1	EG26C-PGM PROVIDES DENTAL EXAMINATIONS-1	2,532	96.92	0.00
CPPHYSE1	EG26B-PGM PRVDS PHYSICAL EXAMINATIONS-1	2,532	96.48	0.00
CPSICK1	EG26E-PGM PROVIDES SICK CHILD CARE-1.....	2,532	96.41	0.00
CPKIDS1	EG17-# OF CHILDREN IN GROUP-1	2,532	96.41	1.10
CPFRIEN2	EG20-LEARN FROM FRIEND/NEIGHBOR-2	82	96.34	0.00
CPLEMP2	EG20-LEARNED FROM PLACE OF EMPLOYMENT-2	82	96.34	0.00
CPSCHOO2	EG20-LEARNED FROM PUB/PRIVATE SCHOOL-2.....	82	96.34	0.00
CPCHURC2	EG20-LEARNED FROM CHURCH/SYNAGOGUE-2.....	82	96.34	0.00
CPSOCWK2	EG20-LEARNED FROM SOCIAL WORKER-2.....	82	96.34	0.00
CPADS2	EG20-LEARNED FROM NEWSPAPER ADS-2.....	82	96.34	0.00
CPAGENC2	EG20-LEARNED FROM R & R AGENCY-2	82	96.34	0.00
CPCARE2	EG20-LEARNED FROM CHLD CARE AGNCY-2.....	82	96.34	0.00
CPKNEW2	EG20-ALREADY KNEW PROVIDER-2	82	96.34	0.00
CPCHILD2	EG20-PROVIDER CARED FOR OTHER CHILD-2.....	82	96.34	0.00
CPREFER2	EG20-LEARNED FROM REFERENCE MATERIALS-2.....	82	96.34	0.00
CPBULLE2	EG20-LEARNED FROM BULLETIN BRD/FLYER-2	82	96.34	0.00
CPINTER2	EG20-LEARNED FROM INTERNET-2.....	82	96.34	0.00
CPSOURC2	EG20-LEARNED FROM OTHER SOURCE-2	82	96.34	0.00
CPPARHR2	EG24-PGM ENCOURAGE PARENTS VOLUNTEER-2	82	96.34	0.00
CPPHYSE2	EG26B-PGM PRVDS PHYSICAL EXAMINATIONS-2	82	96.34	0.00
CPDENTA2	EG26C-PGM PROVIDES DENTAL EXAMINATIONS-2	82	96.34	0.00
CPDISAB2	EG26D-PGM PRVDS TEST FOR DEVT PROBLEM-2	82	96.34	0.00
CPSICK2	EG26E-PGM PROVIDES SICK CHILD CARE-2.....	82	96.34	0.00
RCTYPE3	ED5-RELATIVE WHO CARES FOR CHILD-3	54	96.30	0.00
RCAGE3	ED5OV-AGE OF RELATIVE CAREGIVER-3.....	54	96.30	0.00
CPRELG2	EG6-PROGRAM AFFL W/FAMILY'S RELIGION-2	52	96.15	0.00
AGE6	O/HH MEM - #6'S AGE	78	96.15	100.00
RCCOST2	ED26-AMT HH PAYS FOR REL CARE-2	25	96.00	0.00
RCUNIT2	ED26-UNIT OF TIME/REL CARE COST-2	25	96.00	0.00
PCENDYY1	EH10-YEAR PREVIOUS ARRANGEMENT ENDED-1	197	95.94	0.00
RCSTRTM2	ED19-AGE REL CARE BEGAN/MONTHS-2	267	95.88	27.27
RCCANCE3	ED23-NUMBER OF DAYS REL CANCELS-3.....	48	95.83	0.00
CPCOST1	EG30-AMOUNT HH PAYS FOR PROGRAM-1	2,012	95.68	0.00
CPUNIT1	EG30-UNIT OF TIME/PROGRAM COST-1.....	1,909	95.55	0.00
NCMONTH2	EE9-NONREL CARE REG SCHED ONCE/MONTH-2	22	95.45	0.00
PCSTRTM1	EH10-MONTH PREVIOUS ARRANGEMENT BEGAN-1	197	95.43	11.11
PCENDMM1	EH10-MONTH PREVIOUS ARRANGEMENT ENDED-1	197	95.43	22.22

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCHRWK1	ED15-# OF HRS/WK RECEIVES REL CARE-1	43	95.35	0.00
RCCSTHH2	ED27-AMOUNT FOR CHILD ONLY OR OTHERS-2.....	21	95.24	0.00
CPADLTS2	EG18-NUM OF ADULTS IN GROUP-2	82	95.12	0.00
CPRACE2	EG21-CARE PROVIDER SAME RACE/BACKGD-2	82	95.12	0.00
DADVOTEC	PV6OV-DAD HAS VOC/TECH DIPL	744	95.03	100.00
RCAGE1	ED5OV-AGE OF RELATIVE CAREGIVER-1	1,566	94.89	1.25
CPCSTHH2	EG31-AMOUNT FOR CHILD ONLY OR OTHERS-2.....	39	94.87	0.00
RCHOMM3	ED8-MINUTES TO GO TO RELATIVE'S HOME-3	38	94.74	0.00
CPCOST2	EG30-AMOUNT HH PAYS FOR PROGRAM-2	57	94.74	0.00
NCSICK2	EE26-NONREL RULES CARE WHEN CHLD SICK-2	56	94.64	0.00
NCCANCE2	EE27-NUMBER OF DAYS NONREL CANCELS-2	56	94.64	0.00
RCCSTHN1	ED27OV-# OF CHILDREN AMOUNT IS FOR-1	126	94.44	0.00
RCAGE2	ED5OV-AGE OF RELATIVE CAREGIVER-2.....	314	94.27	0.00
RCCSTHH1	ED27-AMOUNT FOR CHILD ONLY OR OTHERS-1	293	94.20	0.00
CPBELIE1	EG23-PROVIDER SIMILAR REARING BELIEF-1	2,532	94.15	0.00
CPUNIT2	EG30-UNIT OF TIME/PROGRAM COST-2.....	51	94.12	0.00
PCHDCOS2	EH5-REASON FOR HEAD START COST-2.....	17	94.12	100.00
DADWLDSC	PV22-DAD WLD ATTEND SCHOOL IF CARE AVAIL.....	117	94.02	0.00
CPBELIE2	EG23-PROVIDER SIMILAR REARING BELIEF-2.....	82	93.90	0.00
RCINHH3	ED7-REL CARE PROVIDER LIVES IN HH-3	16	93.75	0.00
RCCOST1	ED26-AMT HH PAYS FOR REL CARE-1	423	93.62	0.00
CPTEST1	EG26A-PGM PRVDS HEAR/SPEECH/VISN TEST-1	2,532	93.52	0.00
CPCSTHH1	EG31-AMOUNT FOR CHILD ONLY OR OTHERS-1	1,369	93.50	0.00
HINCMRNG	PW17- TOTAL HH INCOME BELOW/ABOVE \$25K.....	6,749	93.45	0.00
RCUNIT1	ED26-UNIT OF TIME/REL CARE COST-1	409	93.40	0.00
DADGRAD2	PV6-ACTUAL GRADE 9-11 DAD COMPLETED	452	93.36	100.00
MOMENHRS	PU17-HOURS MOM IN SCHOOL PER WEEK	783	92.98	7.27
RCDAYWK2	ED14-# OF DAYS/WK RECEIVES REL CARE-2	42	92.86	0.00
CPSTRM2	EG19-AGE CURRENT PRGM BEGAN/MONTHS-2	82	92.68	0.00
CPSTRTY2	EG19-AGE CURRENT PRGM BEGAN/YEARS-2	82	92.68	0.00
CPTEST2	EG26A-PGM PRVDS HEAR/SPEECH/VISN TEST-2	82	92.68	0.00
NCCOST1	EE30-AMT HH PAYS FOR NONREL CARE-1	993	92.65	0.00
FAMTCUSM	PU25-HH USED CHILD CARE TAX CREDIT 2000	3,163	92.63	0.00
CPDISAB1	EG26D-PGM PRVDS TEST FOR DEVT PROBLEM-1	2,532	92.61	0.00
HNIFSP	PT9-RECEIVES SERVICES THRU IFSP/IEP	429	92.54	0.00
DADWLDWK	PV21-DAD WLD WORK IF CARE AVAILABLE.....	134	92.54	20.00
NCUNIT1	EE30-UNIT OF TIME/NONREL CARE COST-1	973	92.50	0.00
HINCM50K	PW18-TOTAL HH INCOME BELOW/ABOVE \$50K.....	4,884	92.28	0.00
DADENHRS	PV16-HOURS DAD IN SCHOOL PER WEEK.....	474	92.19	5.41
FAMTCUSD	PV24-HH USED CHILD CARE TAX CREDIT 2000	2,715	92.15	0.00
NCHRWK1	EE14-# OF HRS/WK RECEIVES NONREL CARE-1	24	91.67	0.00
AGE7	O/HH MEM - #7'S AGE	36	91.67	100.00
DADUSAGE	PV5OV-AGE WHEN DAD MOVED TO US	1,129	91.32	100.00
MOMACCT	PU20-MOM'S EMPL HAS CARE ACCOUNT.....	3,980	90.98	0.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCCSTHN1	EE31OV-# OF CHILDREN AMOUNT IS FOR-1	221	90.95	0.00
PCSTRTM2	EH10-MONTH PREVIOUS ARRANGEMENT BEGAN-2	11	90.91	0.00
PCENDMM2	EH10-MONTH PREVIOUS ARRANGEMENT ENDED-2	11	90.91	0.00
PCREASN2	EH11-REASON PREVIOUS ARRANGEMENT ENDED-2	11	90.91	0.00
HSTOPYY	PW12-YEAR STOPPED RECEIVING WELFARE	379	90.77	0.00
MOMAHOUS	PU27-OTHER PARENT LIVES IN HH.....	798	90.60	57.33
DADGRAD1	PV6-ACTUAL GRADE 0-8 DAD COMPLETED	255	90.59	100.00
MOMAWEEK	PU29-ARRNG REG SCHED ONCE/WEEK	210	90.48	5.00
CPCSTHN1	EG31OV-# OF CHILDREN AMOUNT IS FOR-1	72	90.28	0.00
CPKIDS2	EG17-# OF CHILDREN IN GROUP-2	82	90.24	0.00
NCCSTHH2	EE31-AMOUNT FOR CHILD ONLY OR OTHERS-2	30	90.00	0.00
NCCSTHH1	EE31-AMOUNT FOR CHILD ONLY OR OTHERS-1	667	89.96	0.00
MOMACUSE	PU21-MOM USES EMPL CARE ACCOUNT	1,171	89.92	0.00
PPCHOIC	EI6-GOOD CHOICES OF DAYCARE WHERE LIVE	5,345	89.84	0.92
MOMADAYS	PU30-# DAYS EACH WK IN OTHER ARRNG	189	89.42	5.00
MOMBHOU5	PU34-SEC ARRNG PARENT LIVES IN HH.....	349	89.40	48.65
NCWKMO2	EE12-# OF WKS/MO RECEIVES NONREL CARE-2	9	88.89	0.00
NCDAYWK2	EE13-# DAYS/WK RECEIVES NONREL CARE-2	9	88.89	0.00
HINCOME	PW18-TOTAL HH INCOME RANGE	6,749	87.98	0.00
MOMBWEEK	PU36-SEC ARRNG REG SCHED ONCE/WEEK	141	87.94	0.00
MOMBDAYS	PU37-# DAYS EACH WK IN SEC ARRNG	105	87.62	0.00
NCCOST3	EE30-AMT HH PAYS FOR NONREL CARE-3	8	87.50	0.00
NCUNIT3	EE30-UNIT OF TIME/NONREL CARE COST-3	8	87.50	0.00
NCCSTHH3	EE31-AMOUNT FOR CHILD ONLY OR OTHERS-3	8	87.50	0.00
NCCOST2	EE30-AMT HH PAYS FOR NONREL CARE-2	39	87.18	0.00
NCUNIT2	EE30-UNIT OF TIME/NONREL CARE COST-2	39	87.18	0.00
PCHDCOS1	EH5-REASON FOR HEAD START COST-1.....	75	86.67	100.00
RCWKMO1	ED13-# OF WKS/MO RECEIVES REL CARE-1.....	43	86.05	0.00
CPDAYWK1	EG14-# OF DAYS/WK IN PROGRAM-1	7	85.71	0.00
CPHRWK1	EG15-# OF HRS/WEEK IN PROGRAM-1.....	7	85.71	0.00
MOMBHRS	PU38-# HRS EACH WEEK IN SEC ARRNG	105	84.76	0.00
MOMAHRS	PU31-# HRS EACH WK IN OTHER ARRNG	189	84.13	3.33
HSTOPMM	PW12-MONTH STOPPED RECEIVING WELFARE.....	379	83.91	0.00
DADACCT	PV19-DAD'S EMPL HAS CARE ACCOUNT	5,155	83.53	0.00
AGE9	O/HH MEM - #9'S AGE	6	83.33	100.00
DADACUSE	PV20-DAD USES EMPL CARE ACCOUNT	1,290	82.71	0.00
PCENDYY2	EH10-YEAR PREVIOUS ARRANGEMENT ENDED-2	11	81.82	0.00
RCWKMO2	ED13-# OF WKS/MO RECEIVES REL CARE-2.....	42	80.95	0.00
NCWKMO1	EE12-# OF WKS/MO RECEIVES NONREL CARE-1	24	79.17	0.00
NCDAYWK1	EE13-# DAYS/WK RECEIVES NONREL CARE-1	24	79.17	0.00
NCCSTHN2	EE31OV-# OF CHILDREN AMOUNT IS FOR-2.....	8	75.00	0.00
CPWKMO1	EG13-# OF WKS/MO IN PROGRAM-1.....	7	71.43	0.00
RCDAYS4	ED11-# OF DAYS/WK RECEIVES REL CARE-4	3	66.67	0.00
PCHDCOS3	EH5-REASON FOR HEAD START COST-3.....	3	66.67	100.00

See notes at end of table.

**Table 6-1. Item response rates for items on the public use data file: ECPP-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCAGEYR	EE3-AGE 1ST RECEIVED NONREL CARE/YRS.....	1,874	63.50	14.47
HINCMEXT	PW18OV-EXACT HH INC TO NEAREST \$1000.....	1,443	63.13	0.19
NCCSTHN3	EE31OV-# OF CHILDREN AMOUNT IS FOR-3.....	2	50.00	0.00
CPBELIE3	EG23-PROVIDER SIMILAR REARING BELIEF-3.....	2	50.00	0.00
CPDENTA3	EG26C-PGM PROVIDES DENTAL EXAMINATIONS-3.....	2	50.00	0.00

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), 2001.

Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RESPSEX	PARENT RESPONDENT'S SEX	9,583	100.00	0.00
SEX4	O/HH MEM - #4'S SEX	717	100.00	0.00
SEX6	O/HH MEM - #6'S SEX	120	100.00	0.00
RELATN6	O/HH MEM - #6'S RELATION TO CHILD.....	120	100.00	0.00
SEX7	O/HH MEM - #7'S SEX	47	100.00	0.00
RELATN7	O/HH MEM - #7'S RELATION TO CHILD.....	47	100.00	0.00
SEX8	O/HH MEM - #8'S SEX	26	100.00	0.00
RELATN8	O/HH MEM - #8'S RELATION TO CHILD.....	26	100.00	0.00
AGE9	O/HH MEM - #9'S AGE	13	100.00	0.00
SEX9	O/HH MEM - #9'S SEX	13	100.00	0.00
RELATN9	O/HH MEM - #9'S RELATION TO CHILD.....	13	100.00	0.00
AGE10	O/HH MEM - #10'S AGE	5	100.00	0.00
SEX10	O/HH MEM - #10'S SEX	5	100.00	0.00
RELATN10	O/HH MEM - #10'S RELATION TO CHILD.....	5	100.00	0.00
AGE11	O/HH MEM - #11'S AGE	1	100.00	0.00
SEX11	O/HH MEM - #11'S SEX	1	100.00	0.00
RELATN11	O/HH MEM - #11'S RELATION TO CHILD.....	1	100.00	0.00
ENROLL	PB1-CHILD ENROLLED/ATTENDING SCHOOL.....	9,583	100.00	0.00
GRADE	PB6-GRADE/YR CHILD IS ATTENDING.....	9,388	100.00	0.00
HSRELIGN	SC1-HOMESCHOOL/RELIGIOUS REASONS	195	100.00	0.00
HSBETTER	SC1-HOMESCHOOL/BETTER EDUCATION AT HOME.....	195	100.00	0.00
HSOBJECT	SC1-HOMESCH/OBJECT TO WHAT SCH TEACHES	195	100.00	0.00
HSENVIRN	SC1-HOMESCHOOL/POOR LEARN ENVIR AT SCH	195	100.00	0.00
HSCHALNG	SC1-HOMESCH/NO CHALLNG FOR CHLD AT SCH	195	100.00	0.00
HSPRIVAT	SC1-HOMESCH/CANT AFFORD PRIVATE SCH	195	100.00	0.00
HSDESIRE	SC1-HOMESCH/CLDNT GET INTO DESIRED SCH	195	100.00	0.00
HSILL	SC1-HOMESCHOOL/CHILD HAS TEMP ILLNESS.....	195	100.00	0.00
HSDISABL	SC1-HOMESCH/CHILD HAS SPEC NEED/DISABIL	195	100.00	0.00
HSCAREER	SC1-HOMESCHOOL/PARENT'S CAREER	195	100.00	0.00
HSAGE	SC1-HOMESCHOOL/CHILD NOT OLD ENOUGH.....	195	100.00	0.00
HSBEHAV	SC1-HOMESCH/STUDENT BEHAVIORAL PROBLEMS	195	100.00	0.00
HSCHAR	SC1-HOMESCH/TO DEVEL CHARACTER/MORALITY	195	100.00	0.00
HSSCPROB	SC1-HOMESCH/OTH PROB W/PUBL/PRIV SCHS.....	195	100.00	0.00
HSFAMLY	SC1-HOMESCH/FAMILY REASONS.....	195	100.00	0.00
HSTRAN	SC1-HOMESCH/TRANSPORT/DIST/CONVENIENCE.....	195	100.00	0.00
HSOTHER	SC1-HOMESCH/OTHER REASONS-SPECIFY.....	195	100.00	0.00
SSAME	SD12-CHILD1 GOES TO SAME SCH AS CHILD2.....	548	100.00	0.00
RCTYPE3	SF3-RELATIVE WHO CARES FOR CHILD-3	30	100.00	0.00
RCTYPE4	SF3-RELATIVE WHO CARES FOR CHILD-4	3	100.00	0.00
RCAGE4	SF3OV-AGE OF RELATIVE CAREGIVER-4.....	3	100.00	0.00
RCPLACE3	SF4-LOCATION OF RELATIVE CARE-3	30	100.00	0.00
RCPLACE4	SF4-LOCATION OF RELATIVE CARE-4	3	100.00	0.00
RCINHH3	SF5-REL CARE PROVIDER LIVES IN HH-3.....	9	100.00	0.00
RCINHH4	SF5-REL CARE PROVIDER LIVES IN HH-4.....	1	100.00	0.00
RCHOMM2	SF6-MINUTES TO GO TO RELATIVE'S HOME-2	184	100.00	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCHOMM4	SF6-MINUTES TO GO TO RELATIVE'S HOME-4	2	100.00	0.00
RCSCMM4	SF7-MIN TO GO FROM SCH TO REL'S HOME-4	2	100.00	0.00
RCBFAFT4	SF8-REL CARE BEFORE/AFTER SCHOOL-4	3	100.00	0.00
RCWEEK2	SF9-REL CARE REG SCHED ONCE/WEEK-2	295	100.00	0.00
RCWEEK4	SF9-REL CARE REG SCHED ONCE/WEEK-4	3	100.00	0.00
RCMONTH2	SF10-REL CARE REG SCHED ONCE/MONTH-2	98	100.00	0.00
RCMONTH3	SF10-REL CARE REG SCHED ONCE/MONTH-3	10	100.00	0.00
RCMONTH4	SF10-REL CARE REG SCHED ONCE/MONTH-4	2	100.00	0.00
RCDAYS4	SF11-# OF DAYS/WK RECEIVES REL CARE-4	1	100.00	0.00
RCHRSAF4	SF13-# OF HRS/WK REL CARE AFTER SCHOOL-4	1	100.00	0.00
RCAFT64	SF15-# OF HRS/WK REL CARE AFTER 6 PM-4	1	100.00	0.00
RCWKMO4	SF16-# OF WKS/MO RECEIVES REL CARE-4	1	100.00	0.00
RCDAYWK3	SF17-# OF DAYS/WK RECEIVES REL CARE-3	4	100.00	0.00
RCDAYWK4	SF17-# OF DAYS/WK RECEIVES REL CARE-4	1	100.00	0.00
RCHRWK1	SF18-# OF HRS/WK RECEIVES REL CARE-1	40	100.00	0.00
RCHRWK3	SF18-# OF HRS/WK RECEIVES REL CARE-3	4	100.00	0.00
RCHRWK4	SF18-# OF HRS/WK RECEIVES REL CARE-4	1	100.00	0.00
RCKIDS4	SF19-NUM OF CHILDREN CARED FOR BY REL-4	2	100.00	0.00
RCADLTS4	SF20-NUM OF ADULTS GIVING REL CARE-4	2	100.00	0.00
RCSPEAK2	SF21-LANGUAGE SPOKEN MOST BY REL-2	236	100.00	0.00
RCSPEAK4	SF21-LANGUAGE SPOKEN MOST BY REL-4	2	100.00	0.00
RCAEDUC3	SF22-HOMEWORK/SCH-RELATED/EDUCATIONAL-3	22	100.00	0.00
RCAEDUC4	SF22-HOMEWORK/SCH-RELATED/EDUCATIONAL-4	2	100.00	0.00
RCACOMP3	SF22-COMPUTERS-3	22	100.00	0.00
RCACOMP4	SF22-COMPUTERS-4	2	100.00	0.00
RCAREAD3	SF22-READING/WRITING-3	22	100.00	0.00
RCAREAD4	SF22-READING/WRITING-4	2	100.00	0.00
RCAART3	SF22-ARTS-3	22	100.00	0.00
RCAART4	SF22-ARTS-4	2	100.00	0.00
RCACHOR3	SF22-CHORES/WORK-3	22	100.00	0.00
RCACHOR4	SF22-CHORES/WORK-4	2	100.00	0.00
RCAOUTP3	SF22-OUTDOOR PLAY/ACTIVITIES/SPORTS-3	22	100.00	0.00
RCAOUTP4	SF22-OUTDOOR PLAY/ACTIVITIES/SPORTS-4	2	100.00	0.00
RCAINPL3	SF22-INDOOR PLAY-3	22	100.00	0.00
RCAINPL4	SF22-INDOOR PLAY-4	2	100.00	0.00
RCAPHON3	SF22-TELEPHONE-3	22	100.00	0.00
RCAPHON4	SF22-TELEPHONE-4	2	100.00	0.00
RCAEAT3	SF22-EATING/SNACKS-3	22	100.00	0.00
RCAEAT4	SF22-EATING/SNACKS-4	2	100.00	0.00
RCATV3	SF22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-3	22	100.00	0.00
RCATV4	SF22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-4	2	100.00	0.00
RCATALK3	SF22-TALKING TO PARENT/CARE PROVIDER-3	22	100.00	0.00
RCATALK4	SF22-TALKING TO PARENT/CARE PROVIDER-4	2	100.00	0.00
RCAFRIE3	SF22-TALKING WITH FRIENDS/SOCIALIZING-3	22	100.00	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCAFRIE4	SF22-TALKING WITH FRIENDS/SOCIALIZING-4	2	100.00	0.00
RCAOTHE3	SF22-OTHER-3	22	100.00	0.00
RCAOTHE4	SF22-OTHER-4	2	100.00	0.00
RCLIKE2	SF23-DOES CHILD LIKE ARRANGEMENT-2.....	236	100.00	0.00
RCLIKE4	SF23-DOES CHILD LIKE ARRANGEMENT-4.....	2	100.00	0.00
RCQUAL4	SF24A-QUALITY OF ACTIVITIES IN ARRNGMT-4	2	100.00	0.00
RCAFFOR4	SF24B-AFFORDABILITY OF ARRANGEMENT-4	2	100.00	0.00
RCRELIA4	SF24C-RELIABILITY OF ARRANGEMENT-4	2	100.00	0.00
RCTRANS4	SF24D-TRANSPORT TO/FROM ARRANGEMENT-4.....	1	100.00	0.00
RCSAFTY4	SF24E-CHILD'S SAFETY IN ARRANGEMENT-4	2	100.00	0.00
RCFEE4	SF25-ANY FEE FOR REL CARE-4	2	100.00	0.00
RCREL2	SF26A-REL HELPS PAY FOR REL CARE-2.....	32	100.00	0.00
RCREL3	SF26A-REL HELPS PAY FOR REL CARE-3.....	1	100.00	0.00
RCWELF2	SF26B-WELFARE HELPS PAY FOR REL CARE-2.....	32	100.00	0.00
RCWELF3	SF26B-WELFARE HELPS PAY FOR REL CARE-3.....	1	100.00	0.00
RCEMPL2	SF26C-EMPL HELPS PAY FOR REL CARE-2.....	32	100.00	0.00
RCEMPL3	SF26C-EMPL HELPS PAY FOR REL CARE-3.....	1	100.00	0.00
RCOTHER2	SF26D-OTHER HELPS PAY REL CARE-2.....	32	100.00	0.00
RCOTHER3	SF26D-OTHER HELPS PAY REL CARE-3.....	1	100.00	0.00
RCCSTHH3	SF28-AMOUNT FOR CHILD ONLY OR OTHERS-3.....	1	100.00	0.00
RCCSTHN2	SF28OV-# OF CHILDREN AMOUNT IS FOR-2	11	100.00	0.00
RCCSTHN3	SF28OV-# OF CHILDREN AMOUNT IS FOR-3	1	100.00	0.00
NCPLACE1	SG3-LOCATION OF NONRELATIVE CARE-1	624	100.00	0.00
NCPLACE2	SG3-LOCATION OF NONRELATIVE CARE-2	66	100.00	0.00
NCPLACE3	SG3-LOCATION OF NONRELATIVE CARE-3	6	100.00	0.00
NCPLACE4	SG3-LOCATION OF NONRELATIVE CARE-4	2	100.00	0.00
NCINHH3	SG4-NONREL CARE PROVIDER LIVES IN HH-3	1	100.00	0.00
NCHOMM2	SG5-MINUTES TO GO TO NONREL'S HOME-2.....	45	100.00	0.00
NCHOMM3	SG5-MINUTES TO GO TO NONREL'S HOME-3.....	5	100.00	0.00
NCHOMM4	SG5-MINUTES TO GO TO NONREL'S HOME-4.....	2	100.00	0.00
NCSCMM3	SG6-MIN FROM SCH TO NONREL'S HOME-3.....	5	100.00	0.00
NCSCMM4	SG6-MIN FROM SCH TO NONREL'S HOME-4.....	2	100.00	0.00
NCBFAFT3	SG7-NONREL CARE BEFORE/AFTER SCHOOL-3.....	6	100.00	0.00
NCBFAFT4	SG7-NONREL CARE BEFORE/AFTER SCHOOL-4.....	2	100.00	0.00
NCWEEK2	SG8-NONREL CARE REG SCHED ONCE/WEEK-2	66	100.00	0.00
NCWEEK3	SG8-NONREL CARE REG SCHED ONCE/WEEK-3	6	100.00	0.00
NCWEEK4	SG8-NONREL CARE REG SCHED ONCE/WEEK-4	2	100.00	0.00
NCMONTH1	SG9-NONREL CARE REG SCHED ONCE/MONTH-1	34	100.00	0.00
NCMONTH2	SG9-NONREL CARE REG SCHED ONCE/MONTH-2	25	100.00	0.00
NCMONTH3	SG9-NONREL CARE REG SCHED ONCE/MONTH-3	6	100.00	0.00
NCMONTH4	SG9-NONREL CARE REG SCHED ONCE/MONTH-4	1	100.00	0.00
NCDAYS4	SG10-# OF DAYS/WK RECEIVES NONREL CARE-4.....	1	100.00	0.00
NCHRSBF2	SG11-# OF HRS/WK NONREL CARE BEF SCH-2	12	100.00	0.00
NCHRSAF4	SG12-# OF HRS/WK NONREL CARE AFTER SCH-4.....	1	100.00	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCAFT62	SG14-# OF HRS NONREL CARE AFTER 6 PM-2	37	100.00	0.00
NCAFT64	SG14-# OF HRS NONREL CARE AFTER 6 PM-4	1	100.00	0.00
NCWKMO3	SG15-# OF WKS/MO RECEIVES NONREL CARE-3	1	100.00	0.00
NCDAYWK1	SG16-# OF DAYS/WK RECEIVES NONREL CARE-1	16	100.00	0.00
NCDAYWK3	SG16-# OF DAYS/WK RECEIVES NONREL CARE-3	1	100.00	0.00
NCHRWK3	SG17-# OF HRS/WK RECEIVES NONREL CARE-3	1	100.00	0.00
NCAGE2	SG18-CARE PROVIDER OVER 18 YRS OLD-2	55	100.00	0.00
NCAGE3	SG18-CARE PROVIDER OVER 18 YRS OLD-3	1	100.00	0.00
NCAGE4	SG18-CARE PROVIDER OVER 18 YRS OLD-4	1	100.00	0.00
NCAGEYY1	SG18OV-AGE OF CARE PROVIDER-1	15	100.00	0.00
NCAGEYY2	SG18OV-AGE OF CARE PROVIDER-2	4	100.00	0.00
NCKIDS2	SG19-# OF CHILDREN CARED FOR BY NONREL-2	55	100.00	0.00
NCKIDS3	SG19-# OF CHILDREN CARED FOR BY NONREL-3	1	100.00	0.00
NCKIDS4	SG19-# OF CHILDREN CARED FOR BY NONREL-4	1	100.00	0.00
NCADLTS2	SG20-# OF ADULTS GIVING NONREL CARE-2	55	100.00	0.00
NCADLTS3	SG20-# OF ADULTS GIVING NONREL CARE-3	1	100.00	0.00
NCADLTS4	SG20-# OF ADULTS GIVING NONREL CARE-4	1	100.00	0.00
NCSPEAK2	SG21-LANGUAGE SPOKEN MOST BY NONREL-2	55	100.00	0.00
NCSPEAK3	SG21-LANGUAGE SPOKEN MOST BY NONREL-3	1	100.00	0.00
NCSPEAK4	SG21-LANGUAGE SPOKEN MOST BY NONREL-4	1	100.00	0.00
NCAEDUC3	SG22-HOMEWORK/SCH-RELATED/EDUCATIONAL-3	1	100.00	0.00
NCAEDUC4	SG22-HOMEWORK/SCH-RELATED/EDUCATIONAL-4	1	100.00	0.00
NCACOMP3	SG22-COMPUTERS-3	1	100.00	0.00
NCACOMP4	SG22-COMPUTERS-4	1	100.00	0.00
NCAREAD3	SG22-READING/WRITING-3	1	100.00	0.00
NCAREAD4	SG22-READING/WRITING-4	1	100.00	0.00
NCAART3	SG22-ARTS-3	1	100.00	0.00
NCAART4	SG22-ARTS-4	1	100.00	0.00
NCACHOR3	SG22-CHORES/WORK-3	1	100.00	0.00
NCACHOR4	SG22-CHORES/WORK-4	1	100.00	0.00
NCAOUTP3	SG22-OUTDOOR PLAY/ACTIVITIES/SPORTS-3	1	100.00	0.00
NCAOUTP4	SG22-OUTDOOR PLAY/ACTIVITIES/SPORTS-4	1	100.00	0.00
NCAINPL3	SG22-INDOOR PLAY-3	1	100.00	0.00
NCAINPL4	SG22-INDOOR PLAY-4	1	100.00	0.00
NCAPHON3	SG22-TELEPHONE-3	1	100.00	0.00
NCAPHON4	SG22-TELEPHONE-4	1	100.00	0.00
NCAEAT3	SG22-EATING/SNACKS-3	1	100.00	0.00
NCAEAT4	SG22-EATING/SNACKS-4	1	100.00	0.00
NCATV3	SG22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-3	1	100.00	0.00
NCATV4	SG22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-4	1	100.00	0.00
NCATALK3	SG22-TALKING TO PARENT/CARE PROVIDER-3	1	100.00	0.00
NCATALK4	SG22-TALKING TO PARENT/CARE PROVIDER-4	1	100.00	0.00
NCAFRIE3	SG22-TALKING WITH FRIENDS/SOCIALIZING-3	1	100.00	0.00
NCAFRIE4	SG22-TALKING WITH FRIENDS/SOCIALIZING-4	1	100.00	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCAOTHE3	SG22-OTHER-3.....	1	100.00	0.00
NCAOTHE4	SG22-OTHER-4.....	1	100.00	0.00
NCLIKE3	SG23-DOES CHILD LIKE ARRANGEMENT-3	1	100.00	0.00
NCLIKE4	SG23-DOES CHILD LIKE ARRANGEMENT-4	1	100.00	0.00
NCQUAL3	SG24A-QUALITY OF ACTIVITIES IN ARRNGMT-3.....	1	100.00	0.00
NCQUAL4	SG24A-QUALITY OF ACTIVITIES IN ARRNGMT-4.....	1	100.00	0.00
NCAFFOR3	SG24B-AFFORABILITY OF ARRANGEMENT-3	1	100.00	0.00
NCAFFOR4	SG24B-AFFORABILITY OF ARRANGEMENT-4	1	100.00	0.00
NCRELIA3	SG24C-RELIABILITY OF ARRANGEMENT-3	1	100.00	0.00
NCRELIA4	SG24C-RELIABILITY OF ARRANGEMENT-4	1	100.00	0.00
NCTRANS3	SG24D-TRANSPORT TO/FROM ARRANGEMENT-3	1	100.00	0.00
NCTRANS4	SG24D-TRANSPORT TO/FROM ARRANGEMENT-4	1	100.00	0.00
NCSAFTY3	SG24E-CHILD'S SAFETY IN ARRANGEMENT-3	1	100.00	0.00
NCSAFTY4	SG24E-CHILD'S SAFETY IN ARRANGEMENT-4	1	100.00	0.00
NCFEE3	SG25-ANY FEE FOR NONRELATIVE CARE-3	1	100.00	0.00
NCFEE4	SG25-ANY FEE FOR NONRELATIVE CARE-4	1	100.00	0.00
NCREL2	SG26A-REL HELPS PAY FOR NONREL CARE-2	21	100.00	0.00
NCWELF2	SG26B-WELFARE HELP PAY FOR NONREL CARE-2.....	21	100.00	0.00
NCEMPL2	SG26C-EMPL HELPS PAY FOR NONREL CARE-2	21	100.00	0.00
NCOTHER2	SG26D-OTHER HELPS PAY NONREL CARE-2	21	100.00	0.00
CPHOMM3	SH6-MINUTES TO GO FROM HOME TO PROGRAM-3.....	26	100.00	0.00
CPHOMM4	SH6-MINUTES TO GO FROM HOME TO PROGRAM-4.....	6	100.00	0.00
CPSCMM4	SH7-MINUTES TO GO FROM SCH TO PROGRAM-4.....	6	100.00	0.00
CPMONTH3	SH10-PROGRAM REG SCHED ONCE/MONTH-3	5	100.00	0.00
CPMONTH4	SH10-PROGRAM REG SCHED ONCE/MONTH-4	1	100.00	0.00
CPHRBF3	SH12-# OF HRS/WK AT PROGRAM BEFORE SCH-3.....	2	100.00	0.00
CPWKMO3	SH16-# OF WKS/MO IN PROGRAM-3	4	100.00	0.00
CPWKMO4	SH16-# OF WKS/MO IN PROGRAM-4	1	100.00	0.00
CPDAYWK3	SH17-# OF DAYS/WK IN PROGRAM-3.....	4	100.00	0.00
CPDAYWK4	SH17-# OF DAYS/WK IN PROGRAM-4.....	1	100.00	0.00
CPHRWK3	SH18-# OF HRS/WK IN PROGRAM-3.....	4	100.00	0.00
CPHRWK4	SH18-# OF HRS/WK IN PROGRAM-4.....	1	100.00	0.00
CPBEDUC3	SH23-HOMEWORK/SCH-RELATED/EDUCATIONAL-3.....	2	100.00	0.00
CPBCOMP3	SH23-COMPUTERS-3	2	100.00	0.00
CPBREAD3	SH23-READING/WRITING-3	2	100.00	0.00
CPBART3	SH23-ARTS-3.....	2	100.00	0.00
CPBCHOR3	SH23-CHORES/WORK-3	2	100.00	0.00
CPBOUTP3	SH23-OUTDOOR PLAY/ACTIVITIES/SPORTS-3	2	100.00	0.00
CPBINPL3	SH23-INDOOR PLAY-3	2	100.00	0.00
CPBPON3	SH23-TELEPHONE-3	2	100.00	0.00
CPBEAT3	SH23-EATING/SNACKS-3	2	100.00	0.00
CPBTV3	SH23-TV/VIDEOS/VID GAMES/LIST TO MUSIC-3.....	2	100.00	0.00
CPBTALK3	SH23-TALKING TO PARENT/CARE PROVIDER-3	2	100.00	0.00
CPBFRIE3	SH23-TALKING TO FRIENDS/SOCIALIZING-3	2	100.00	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPBOTHE3	SH23-OTHER-3.....	2	100.00	0.00
CPSIB4	SH30-CHILD HAS A SIBLING AT PROGRAM-4.....	6	100.00	0.00
CPREL4	SH34A-REL HELPS PAY FOR PROGRAM-4	5	100.00	0.00
CPWELF4	SH34B-WELFARE HELPS PAY FOR PROGRAM-4	5	100.00	0.00
CPEMPL4	SH34C-EMPL HELPS PAY FOR PROGRAM-4	5	100.00	0.00
CPOTHER4	SH34D-OTHER HELPS PAY FOR PROGRAM-4.....	5	100.00	0.00
CPCSTHN3	SH36OV-# OF CHILDREN AMOUNT IS FOR-3.....	2	100.00	0.00
PCNUM	SK5-NUMBER OF ARRANGEMENTS SINCE SEPT	155	100.00	0.00
PCWHO1	SK6-WHO PROVIDED CARE OR PROGRAM-1	155	100.00	0.00
CSPEAK	PA6-LANG CHILD SPEAKS MOST AT HOME.....	9,583	99.99	100.00
RESRELN	PARENT R'S RELATIONSHIP TO CHILD	9,583	99.98	100.00
SEX2	O/HH MEM - #2'S SEX	4,363	99.98	100.00
CBORNUS	PA5-CHILD'S BIRTH COUNTRY	9,583	99.98	100.00
HOMESCHL	PB2-CHILD BEING SCHOOLED AT HOME	9,549	99.97	100.00
SEX	SEX	9,583	99.95	100.00
CPSNOW	SH1-CHILD ATTENDS CENTER-BASED PROGRAM	9,388	99.93	0.00
ASNOW	SI1-PARTICIPATING IN ANY ACTIVITIES	9,388	99.93	0.00
SEX1	O/HH MEM - #1'S SEX	8,244	99.93	100.00
MOMTYPE	SPECIFIC RELATIONSHIP OF MOTHER TO CHILD	8,966	99.92	100.00
ASSPORT	SI2B-SPORTS	4,682	99.91	0.00
ASOTHER	SI2I-ANY OTHER ACTIVITIES	4,682	99.91	0.00
HDRETARD	PT5B-CHILD HAS MENTAL RETARDATION	9,583	99.90	0.00
ASARTS	SI2A-ARTS.....	4,682	99.89	0.00
ASSCARTS	SI2A-ACTIVITIES PROVIDED BY SCHOOL.....	1,866	99.89	0.00
ASWEEK	SI3-ACTIVITIES REG SCHED ONCE/WEEK.....	4,682	99.89	0.00
AGE1	O/HH MEM - #1'S AGE	8,244	99.89	100.00
SEX3	O/HH MEM - #3'S SEX	1,847	99.89	100.00
SESUSEXP	SE5-CHILD EVER SUSPENDED/EXPELLED	9,398	99.88	0.00
NCNOW	SG1-RECEIVES CARE FROM A NONRELATIVE.....	9,388	99.88	0.00
PCOTHER	SK4-ANY OTHER ARRANGEMENTS SINCE SEPT	9,388	99.88	0.00
ASRELI	SI2F-RELIGIOUS ACTIVITIES	4,682	99.87	0.00
ASSCOUT	SI2G-SCOUTS.....	4,682	99.87	0.00
HDOTHER	PT5H_PT7E-HAS OTHR HLTH PROB 6 MOS/MORE	9,583	99.87	0.00
SESCHLWR	SE4-TCHRS CONTACT FAM RE SCH WORK PRBLMS	9,398	99.86	0.00
RCNOW	SF1-RECEIVES CARE FROM A RELATIVE	9,388	99.86	0.00
HDSPEECH	PT5C-CHILD HAS SPEECH IMPAIRMENT	9,583	99.86	0.00
HDDEAFIM	PT5E_PT7A-DEAFNESS/HEARING PROBLEM	9,583	99.86	0.00
RELATN2	O/HH MEM - #2'S RELATION TO CHILD.....	4,363	99.86	100.00
ASVOLUN	SI2E-VOLUNTEER WORK	4,682	99.85	0.00
HDORTHO	PT5G_PT7C-ORTHOPEDIC IMPAIRMENT	9,583	99.85	0.00
SPUBLIC	SD1-CHILD ATTNDNS PUBL/PRIV SCHOOL	9,398	99.84	0.00
SEBEHAVR	SE3-TCHRS CONTACT FAM RE BEH PRBLMS	9,398	99.83	0.00
ASSCCLUB	SI2C-ACTIVITIES PROVIDED BY SCHOOL	603	99.83	0.00
RCPLACE1	SF4-LOCATION OF RELATIVE CARE-1	1,708	99.82	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
ASBFAFT	SI5-ACTIVITIES BEF/AFTER SCHOOL	3,937	99.82	0.00
SSTRAMPM	SD9-TIME CHILD'S SCHOOL STARTS-AM/PM.....	9,398	99.81	0.00
ASACAD	SI2D-OTHER ACADEMIC ACTIVITIES.....	4,682	99.81	0.00
RELATN1	O/HH MEM - #1'S RELATION TO CHILD.....	8,244	99.81	100.00
HDBLNDIM	PT5F_PT7B-BLINDNESS/VISUAL PROBLEM.....	9,583	99.80	0.00
ASMONTH	SI4-ACTIVITIES REG SCHED ONCE/MONTH.....	964	99.79	0.00
DADTYPE	SPECIFIC RELATIONSHIP OF FATHER TO CHILD.....	7,113	99.79	100.00
HDDISTRB	PT5D-CHILD HAS EMOTIONAL DISTURBANCE.....	9,583	99.78	0.00
SCHOICE	SD2-SCHOOL ASSIGNED OR CHOSEN.....	8,265	99.76	0.00
ASCLUB	SI2C-CLUBS	4,682	99.74	0.00
SSTRTHR	SD9-TIME CHILD'S SCHOOL STARTS-HOURS.....	9,398	99.73	0.00
SENDAMPM	SD10-TIME CHILD'S SCHOOL ENDS-AM/PM	9,398	99.73	0.00
ASSCSPOR	SI2B-ACTIVITIES PROVIDED BY SCHOOL	3,310	99.73	0.00
RELATN3	O/HH MEM - #3'S RELATION TO CHILD.....	1,847	99.73	100.00
ASSCOTHR	SI2I-ACTIVITIES PROVIDED BY SCHOOL	353	99.72	0.00
CPPLACE2	SH4-LOCATION OF CENTER-BASED PROGRAM-2	343	99.71	0.00
SEREPEAT	SE6-CHILD HAS REPEATED A GRADE.....	9,398	99.70	0.00
SENDHR	SD10-TIME CHILD'S SCHOOL ENDS-HOURS	9,398	99.69	0.00
SSTRTMN	SD9-TIME CHILD'S SCHOOL STARTS-MINUTES.....	9,398	99.68	0.00
RCINHH1	SF5-REL CARE PROVIDER LIVES IN HH-1.....	931	99.68	33.33
AGE2	O/HH MEM - #2'S AGE	4,363	99.68	100.00
SENDMN	SD10-TIME CHILD'S SCHOOL ENDS-MINUTES.....	9,398	99.67	0.00
CPWEEK1	SH9-PROGRAM REG SCHED ONCE/WEEK-1	1,841	99.67	0.00
RCTYPE2	SF3-RELATIVE WHO CARES FOR CHILD-2	295	99.66	0.00
RCPLACE2	SF4-LOCATION OF RELATIVE CARE-2	295	99.66	0.00
DADAGE	FATHER'S AGE	7,113	99.66	100.00
SCATHLIC	SD5-CHILD ATTNDS CATHOLIC SCHOOL.....	862	99.65	0.00
ASSCRELI	SI2F-ACTIVITIES PROVIDED BY SCHOOL	281	99.64	0.00
SEX5	O/HH MEM - #5'S SEX	278	99.64	100.00
CMOVEAGE	PA5OV-AGE WHEN CHILD MOVED TO US.....	537	99.63	100.00
SCSELF	SJ1-CHILD RESPONSIBLE FOR SELF	9,388	99.62	0.00
AGE3	O/HH MEM - #3'S AGE	1,847	99.62	100.00
HDAUTISM	PT6A-CHILD HAS AUTISM.....	9,583	99.61	0.00
CHISPAN	PA4-CHILD IS OF HISPANIC ORIGIN	9,583	99.61	100.00
RCFEE2	SF25-ANY FEE FOR REL CARE-2	236	99.58	0.00
RELATN4	O/HH MEM - #4'S RELATION TO CHILD.....	717	99.58	100.00
GRADEEQ	PB7-GRADE EQUIV/HOMESCHOOL SP ED/UNGRD	222	99.55	100.00
HDLEARN	PT5A-CHLD HAS LEARNING DISABILITY.....	9,583	99.53	0.00
NCWEEK1	SG8-NONREL CARE REG SCHED ONCE/WEEK-1	624	99.52	0.00
NCAGE1	SG18-CARE PROVIDER OVER 18 YRS OLD-1	606	99.50	0.00
NCADLTS1	SG20-# OF ADULTS GIVING NONREL CARE-1.....	606	99.50	0.00
NCLIKE1	SG23-DOES CHILD LIKE ARRANGEMENT-1	606	99.50	0.00
NCRELIA1	SG24C-RELIABILITY OF ARRANGEMENT-1	606	99.50	0.00
NCSAFTY1	SG24E-CHILD'S SAFETY IN ARRANGEMENT-1	606	99.50	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
HOMEALL	PB4-FULL OR PARTIAL HOMESCHOOL.....	195	99.49	0.00
HSTECHR	SC4-CHILDS HM INSTR BY PUB SCH TCHR.....	195	99.49	0.00
SRELGN	SD4-CHILD ATTNDS CHURCH RELATED SCHOOL.....	1,133	99.47	0.00
RESPAGE	PARENT RESPONDENT'S AGE.....	9,583	99.46	100.00
ASSCVOLU	SI2E-ACTIVITIES PROVIDED BY SCHOOL.....	902	99.45	0.00
SEREPT8	SE7-CHILD REPEATED 8TH GRADE.....	180	99.44	0.00
PPSAFETY	SM1-CHILD'S SAFETY.....	3,046	99.44	0.00
PPWANT	SM1-PARENT WANTS TO BE WITH CHILD.....	3,046	99.44	0.00
AGE4	O/HH MEM - #4'S AGE.....	717	99.44	100.00
MOMSPEAK	PU5-LANGUAGE SPOKEN MOST AT HOME BY MOM.....	9,223	99.43	100.00
CPSIGNU2	SH3-SIGNED UP FOR PARTIC DAYS/TIMES-2.....	343	99.42	0.00
MOMDIPL	PU8-MOM HAS HS DIPLOMA OR GED.....	4,166	99.42	100.00
CPPLACE1	SH4-LOCATION OF CENTER-BASED PROGRAM-1.....	1,841	99.40	0.00
CPAFRIE1	SH24-TALKING TO FRIENDS/SOCIALIZING-1.....	1,666	99.40	0.00
MOMAGE	MOTHER'S AGE.....	8,966	99.39	100.00
HNUMUSE	PW4-# OF OTHER PHONE NUMBERS/HOME USE.....	2,273	99.38	0.00
MOMLANG	PU4-FIRST LANGUAGE SPOKEN BY MOM.....	9,223	99.38	100.00
MOMBORN	PU6-COUNTRY MOM WAS BORN IN.....	9,223	99.38	100.00
RCTYPE1	SF3-RELATIVE WHO CARES FOR CHILD-1.....	1,708	99.36	0.00
RCWEEK1	SF9-REL CARE REG SCHED ONCE/WEEK-1.....	1,708	99.36	0.00
CPMONTH1	SH10-PROGRAM REG SCHED ONCE/MONTH-1.....	155	99.35	0.00
ASSCACAD	SI2D-ACTIVITIES PROVIDED BY SCHOOL.....	765	99.35	0.00
MOMENROL	PU16-MOM ENROLLED IN SCHOOL.....	9,223	99.34	0.00
DADLEAVE	PV9-DAD ON LEAVE OR VACATION LAST WEEK.....	458	99.34	0.00
DADSPEAK	PV4-LANGUAGE SPOKEN MOST AT HOME BY DAD.....	7,151	99.33	100.00
MOMWORK	PU9-MOM WORKED FOR PAY LAST WEEK.....	9,223	99.31	0.00
DADBORN	PV5-COUNTRY DAD WAS BORN IN.....	7,151	99.31	100.00
RCBFAFT1	SF8-REL CARE BEFORE/AFTER SCHOOL-1.....	1,708	99.30	0.00
CRACE	PA3-CHILD'S RACE.....	9,583	99.30	100.00
DADLANG	PV3-FIRST LANGUAGE SPOKEN BY DAD.....	7,151	99.30	100.00
CPBFAFT1	SH8-PROGRAM BEF/AFTER SCHOOL-1.....	1,841	99.29	0.00
HDADD	PT6B-CHILD HAS ADD OR ADHD.....	9,583	99.29	0.00
RELATN5	O/HH MEM - #5'S RELATION TO CHILD.....	278	99.28	100.00
DADPUBL	PV13-DAD CHECKED PUBLIC EMPLOY AGENCY.....	137	99.27	0.00
DADPRIV	PV13-DAD CHECKED PRIVATE EMPLOY AGENCY.....	137	99.27	0.00
DADEMP	PV13-DAD CHECKED W/EMPLOYER DIRECTLY.....	137	99.27	0.00
DADREL	PV13-DAD CHECKED W/FRIENDS/RELATIVES.....	137	99.27	0.00
DADANSAD	PV13-DAD PLACE/ANSWERD ADS/SENT RESUME.....	137	99.27	0.00
DADREAD	PV13-DAD READ WANT ADS.....	137	99.27	0.00
DADOTHER	PV13-DAD DID SOMETHING ELSE TO FIND WORK.....	137	99.27	0.00
CPLIKE1	SH31-DOES CHILD LIKE PROGRAM-1.....	1,757	99.26	0.00
MOMSTAT	PU1-MOTHER'S MARITAL STATUS.....	9,223	99.25	100.00
CPSIGNU1	SH3-SIGNED UP FOR PARTIC DAYS/TIMES-1.....	1,841	99.24	0.00
HOTHNUM	PW2-OTHER PHONE NUMBERS/HOME USE.....	9,583	99.23	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
PCMOMHM	SK2-MOTHER STAYS HOME	5,228	99.22	0.00
PCDADHM	SK2-FATHER STAYS HOME.....	5,228	99.22	0.00
PCNONRS	SK2-NONRESIDENT PARENT	5,228	99.22	0.00
PCSIB	SK2-BROTHER OR SISTER	5,228	99.22	0.00
PCRELA	SK2-REL CARE (NOT BROTHER OR SISTER)	5,228	99.22	0.00
PCNREL	SK2-NONRELATIVE CARE	5,228	99.22	0.00
PCSELF	SK2-CHILD TAKES CARE OF SELF.....	5,228	99.22	0.00
PCCENT	SK2-CENTER-BASED PROGRAM	5,228	99.22	0.00
PCMOMWK	SK2-MOTHER TAKES CHILD TO WORK	5,228	99.22	0.00
PCDADWK	SK2-FATHER TAKES CHILD TO WORK.....	5,228	99.22	0.00
PCSSEXHM	SK2-SAME SEX PARENT STAYS HOME	5,228	99.22	0.00
PCAROTH	SK2-OTHER	5,228	99.22	0.00
HDDOCTOR	PT8C-RECEIVES SERVICES FROM DR/CLINIC	2,096	99.19	0.00
HDSOURCE	PT8D-RECEIVES OTHER SERVICES	2,096	99.19	0.00
MOMLEAVE	PU10-MOM ON LEAVE OR VACATION LAST WEEK	2,831	99.19	0.00
DADWORK	PV8-DAD WORKED FOR PAY LAST WEEK	7,151	99.19	0.00
DADSTAT	PV1-FATHER'S MARITAL STATUS	7,151	99.19	100.00
HGOVCUR	PW15-FAMLY CUR RECVS MONEY FOR CH CARE	9,228	99.18	0.00
HFOODST	PW16B-FAMILY RECD FOOD STMP PST 12 MONTH.....	9,583	99.18	0.00
NCSPEAK1	SG21-LANGUAGE SPOKEN MOST BY NONREL-1	606	99.17	0.00
NCQUAL1	SG24A-QUALITY OF ACTIVITIES IN ARRNGMT-1.....	606	99.17	0.00
SSCHOMM	SD11-AMT TIME FROM HOME TO SCHOOL-MIN.....	9,398	99.16	0.00
RCADLTS2	SF20-NUM OF ADULTS GIVING REL CARE-2.....	236	99.15	0.00
RCRELIA2	SF24C-RELIABILITY OF ARRANGEMENT-2.....	236	99.15	0.00
RCSAFTY2	SF24E-CHILD'S SAFETY IN ARRANGEMENT-2	236	99.15	0.00
CPSPEAK1	SH22-LANG PROVIDER SPEAKS MOST W/CHILD-1.....	1,757	99.15	0.00
CPSAFTY1	SH32E-CHILD'S SAFETY IN PROGRAM-1	1,757	99.15	0.00
PPHWHP	SM9A-TIME FOR HOMEWORK.....	6,366	99.15	0.00
DADLOOK	PV12-DAD LOOKING FOR WORK PAST 4 WEEKS.....	354	99.15	0.00
RCKIDS2	SF19-NUM OF CHILDREN CARED FOR BY REL-2	236	99.15	50.00
HWIC	PW16A-FAMILY RECD WIC PAST 12 MONTHS.....	9,583	99.13	0.00
PPENRCH	SM9B-ENRICHMENT EDUCATION	6,366	99.12	0.00
PPENGL	SM9I-PROVIDER WHO SPEAKS ENGLISH W CHILD.....	6,366	99.12	0.00
DADENROL	PV15-DAD ENROLLED IN SCHOOL.....	7,151	99.11	0.00
CPDAYS1	SH11-# OF DAYS/WK ATTENDS PROGRAM-1	1,686	99.11	13.33
PPSPORT	SM9C-TIME FOR SPORTS/PHYSICAL ACTIVITIES.....	6,366	99.10	0.00
RCINHH2	SF5-REL CARE PROVIDER LIVES IN HH-2.....	111	99.10	100.00
NCAFRIE1	SG22-TALKING WITH FRIENDS/SOCIALIZING-1	547	99.09	0.00
HDSCHL	PT8A-RECEIVES SERVICES FROM SCHL DIST	2,096	99.09	0.00
HOWNHOM	PW1-OWN HOME, RENT, OR OTHER ARRNGMNT.....	9,583	99.08	0.00
NCTRANS1	SG24D-TRANSPORT TO/FROM ARRANGEMENT-1	432	99.07	0.00
ASDAYS	SI10-# OF DAYS/WK IN ACTIVITIES	3,718	99.06	0.00
MOMLOOK	PU13-MOM LOOKING FOR WORK PAST 4 WEEKS	2,661	99.06	0.00
MOMACTY	PU15-MOM'S ACTIVITY MOST OF LAST WEEK.....	2,421	99.05	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
NCBFAFT1	SG7-NONREL CARE BEFORE/AFTER SCHOOL-1	624	99.04	0.00
PPTRANS	SM9H-TRANSPORTATION TO ARRANGEMENT	6,366	99.04	0.00
CPSIB1	SH30-CHILD HAS A SIBLING AT PROGRAM-1	821	99.03	0.00
CPRELIA1	SH32C-RELIABILITY OF PROGRAM-1	1,757	99.03	0.00
PPCONV	SM9E-A CONVENIENT LOCATION	6,366	99.01	0.00
PPCOST	SM9F-A REASONABLE COST	6,366	99.01	0.00
CPBFRIE1	SH23-TALKING TO FRIENDS/SOCIALIZING-1	296	98.99	0.00
RCSPEAK1	SF21-LANGUAGE SPOKEN MOST BY REL-1	1,666	98.98	0.00
PPKNBEF	SM9K-KNOW PROVIDER BEFORE MAKING ARRANG.....	6,366	98.98	0.00
MOMLVEAS	PU19-MOM'S EASE OF LEAVING WORK	6,484	98.98	0.00
DADPART	PV2-FATHER'S PARTNER LIKE PARENT TO CHLD	295	98.98	100.00
CPPLACK2	SH5-PROGRAM AT SCHOOL CHILD ATTENDS-2	195	98.97	0.00
PPRELIA	SM9D-A RELIABLE ARRANGEMENT	6,366	98.96	0.00
PPNOWORK	SM1-PARENT DOESN'T WORK/SCHEDULE	3,046	98.95	0.00
PPDAYCAR	SM1-PARENT IS HOME DAY CARE PROVIDER	3,046	98.95	0.00
PPWORKHO	SM1-PARENT WORKS/STUDIES AT HOME.....	3,046	98.95	0.00
PPSPECL	SM1-CHILD HAS SPECIAL NEEDS	3,046	98.95	0.00
PPDEPEND	SM1-PARENT CARES FOR OTHER DEPENDENTS	3,046	98.95	0.00
PPBARR	SM1-COST/AVAILABILTY/TRANSPORTATION	3,046	98.95	0.00
PPHMWRK	SM1-HELP W/CHILD'S EDUCATION/HOMEWORK	3,046	98.95	0.00
PPCAREER	SM1-PARENT VIEWS STAYING HOME AS CAREER	3,046	98.95	0.00
PPBEST	SM1-PARENT CARE BEST FOR CHILD	3,046	98.95	0.00
PPRESPON	SM1-PARENTS ARE RESPONSIBLE FOR CARE.....	3,046	98.95	0.00
PPOTHER	SM1-OTHER REASON PARENT CARES FOR CHILD.....	3,046	98.95	0.00
HMEDIC	PW16C-FAMILY RECD MEDICAID PAST 12 MONTH	9,583	98.94	0.00
MOMCAROT	PU32-PRIM ARRNG COVERS ALL WORK/SCH HRS	6,768	98.94	2.78
RCSAFTY1	SF24E-CHILD'S SAFETY IN ARRANGEMENT-1	1,666	98.92	0.00
PPRELIG	SM1-RELIGIOUS REASONS.....	3,046	98.92	0.00
DADBIDAD	PV26-BIOLOGICAL DAD PROVIDES CARE.....	3,319	98.92	0.00
MOMGRADE	PU7-HIGHEST GRADE/YR MOM COMPLETED	9,223	98.92	100.00
NCAEDUC1	SG22-HOMEWORK/SCH-RELATED/EDUCATIONAL-1.....	547	98.90	0.00
NCACOMP1	SG22-COMPUTERS-1	547	98.90	0.00
NCAREAD1	SG22-READING/WRITING-1	547	98.90	0.00
NCAART1	SG22-ARTS-1	547	98.90	0.00
NCACHOR1	SG22-CHORES/WORK-1	547	98.90	0.00
NCAOUTP1	SG22-OUTDOOR PLAY/ACTIVITIES/SPORTS-1	547	98.90	0.00
NCAINPL1	SG22-INDOOR PLAY-1	547	98.90	0.00
NCAPHON1	SG22-TELEPHONE-1	547	98.90	0.00
NCAEAT1	SG22-EATING/SNACKS-1	547	98.90	0.00
NCATV1	SG22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-1	547	98.90	0.00
NCATALK1	SG22-TALKING TO PARENT/CARE PROVIDER-1	547	98.90	0.00
NCAOTHE1	SG22-OTHER-1	547	98.90	0.00
MOMCHOIC	PU18-CHLD CARE AFFECTED MOM'S JOB CHOICE.....	6,484	98.90	0.00
COTHRACE	PA3OV-CHILD IS HISP/MIXED RACE.....	1,459	98.90	100.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CDOBMM	PA1-MONTH OF BIRTH.....	9,583	98.89	0.00
ASHRS	SI12-# OF HRS/WK IN ACTIVITIES AFT SCH	3,656	98.88	0.00
ASCOVER	SI9-ACTIVITIES FOR ADULT SUPERVISION	3,718	98.87	0.00
RCRELIA1	SF24C-RELIABILITY OF ARRANGEMENT-1	1,666	98.86	0.00
RCKIDS1	SF19-NUM OF CHILDREN CARED FOR BY REL-1	1,666	98.86	5.26
NCAFFOR1	SG24B-AFFORABILITY OF ARRANGEMENT-1	606	98.84	0.00
NCFEE1	SG25-ANY FEE FOR NONRELATIVE CARE-1	606	98.84	0.00
CPPLACK1	SH5-PROGRAM AT SCHOOL CHILD ATTENDS-1	1,288	98.84	0.00
DADCHOIC	PV17-CHLD CARE AFFECTED DAD'S JOB CHOICE	6,684	98.83	0.00
PPKIDS	SM9G-A SMALL NUMBER OF CHILDREN IN GROUP	6,366	98.82	2.67
SEGRADES	SE1-CHILD'S GRADES ACROSS ALL SUBJECTS	9,398	98.81	0.00
NCEMPL1	SG26C-EMPL HELPS PAY FOR NONREL CARE-1	421	98.81	0.00
RCMONTH1	SF10-REL CARE REG SCHED ONCE/MONTH-1	82	98.78	0.00
CPINFOR2	SH28-PROGRAM INFORMS ABOUT ACTIVITIES-2	328	98.78	0.00
CPLIKE2	SH31-DOES CHILD LIKE PROGRAM-2	328	98.78	0.00
CPRELIA2	SH32C-RELIABILITY OF PROGRAM-2	328	98.78	0.00
CPSAFTY2	SH32E-CHILD'S SAFETY IN PROGRAM-2	328	98.78	0.00
CPREL2	SH34A-REL HELPS PAY FOR PROGRAM-2	164	98.78	0.00
CPWELF2	SH34B-WELFARE HELPS PAY FOR PROGRAM-2	164	98.78	0.00
CPEMPL2	SH34C-EMPL HELPS PAY FOR PROGRAM-2	164	98.78	0.00
CPOTHER2	SH34D-OTHER HELPS PAY FOR PROGRAM-2.....	164	98.78	0.00
HAFDC3YR	PW10-FAMLY RECD WELFARE IN PAST 3 YRS	9,583	98.78	0.00
MOMHOURS	PU11-HOURS PER WEEK MOM WORKS FOR PAY	6,484	98.77	0.00
CPAFT61	SH15-# OF HRS IN PROGRAM AFTER 6 PM-1	1,596	98.75	0.00
RCFEE1	SF25-ANY FEE FOR REL CARE-1	1,666	98.74	0.00
ASAFT6	SI14-NUM OF HRS IN ACTIVITIES AFTER 6 PM.....	3,656	98.74	0.00
RCQUAL2	SF24A-QUALITY OF ACTIVITIES IN ARRNGMT-2	236	98.73	0.00
HAFDCCUR	PW11-FAMLY CURRENTLY RECVS WELFARE	944	98.73	0.00
RCDAYS1	SF11-# OF DAYS/WK RECEIVES REL CARE-1	1,626	98.71	0.00
HGOVSINC	PW14-RECD CHILD CARE BENEFITS SINCE DATE.....	386	98.70	0.00
MOMMTHS	PU12-MONTHS MOM WORKED IN PAST YEAR.....	9,223	98.70	2.50
MOMCARE	PU26-PRIM ARRNG WHEN MOM AT WRK/SCH.....	6,768	98.70	9.09
PCPLACE1	SK7-CARE TOOK PLACE IN OWN/OTHER HOME-1	76	98.68	0.00
RCAEDUC1	SF22-HOMEWORK/SCH-RELATED/EDUCATIONAL-1	1,569	98.66	0.00
RCACOMP1	SF22-COMPUTERS-1	1,569	98.66	0.00
RCAREAD1	SF22-READING/WRITING-1	1,569	98.66	0.00
RCAART1	SF22-ARTS-1	1,569	98.66	0.00
RCACHOR1	SF22-CHORES/WORK-1	1,569	98.66	0.00
RCAOUTP1	SF22-OUTDOOR PLAY/ACTIVITIES/SPORTS-1	1,569	98.66	0.00
RCAINPL1	SF22-INDOOR PLAY-1	1,569	98.66	0.00
RCAEAT1	SF22-EATING/SNACKS-1	1,569	98.66	0.00
RCATV1	SF22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-1.....	1,569	98.66	0.00
RCATALK1	SF22-TALKING TO PARENT/CARE PROVIDER-1	1,569	98.66	0.00
RCAOTHE1	SF22-OTHER-1	1,569	98.66	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
DADMTHS	PV11-MONTHS DAD WORKED IN PAST YEAR	7,151	98.66	0.00
NCHOMM1	SG5-MINUTES TO GO TO NONREL'S HOME-1	443	98.65	0.00
DADDIPL	PV7-DAD HAS HS DIPLOMA OR GED	2,739	98.65	100.00
HCHIP	PW16D-FAMILY RECD CHIP PAST 12 MONTHS	9,583	98.64	0.00
CPQUAL1	SH32A-QUALITY OF ACTIVITIES IN PROGRAM-1	1,757	98.63	0.00
SCREACH	SJ15-CHILD CAN REACH PARENT AT WORK	1,755	98.63	0.00
SLOW	SD6-LOWEST GRADE AT CHILD'S SCHOOL	9,398	98.63	3.88
MOMNEW	PU3-MOM'S AGE WHEN FIRST BECAME A MOTHER	9,223	98.63	4.76
RCQUAL1	SF24A-QUALITY OF ACTIVITIES IN ARRNGMT-1	1,666	98.62	0.00
SCWEEK	SJ3-SELF-CARE REG SCHED ONCE/WK	1,817	98.62	0.00
RCAPHON1	SF22-TELEPHONE-1	1,569	98.60	0.00
SCRESIB	SJ10V-CHILD RESPONSIBLE FOR SIBLING	855	98.60	0.00
PPAWARE	SM3-AWARE OF BEFORE/AFTER SCH PROGRAMS	4,525	98.59	3.13
CPFEE1	SH33-ANY FEE FOR PROGRAM-1	1,757	98.58	0.00
NCREL1	SG26A-REL HELPS PAY FOR NONREL CARE-1	421	98.57	0.00
NCOTHER1	SG26D-OTHER HELPS PAY NONREL CARE-1	421	98.57	0.00
HDSGOVT	PT8B-RECEIVES ST/LOCL/SOCL SERVICES	2,096	98.57	0.00
NCWELF1	SG26B-WELFARE HELP PAY FOR NONREL CARE-1	421	98.57	16.67
DADLVEAS	PV18-DAD'S EASE OF LEAVING WORK	6,684	98.56	0.00
CPWEEK2	SH9-PROGRAM REG SCHED ONCE/WEEK-2	343	98.54	0.00
RCAFRIE1	SF22-TALKING WITH FRIENDS/SOCIALIZING-1	1,569	98.53	0.00
RCTRANS2	SF24D-TRANSPORT TO/FROM ARRANGEMENT-2	135	98.52	0.00
CPINFOR1	SH28-PROGRAM INFORMS ABOUT ACTIVITIES-1	1,757	98.52	0.00
MOMVOTEC	PU7OV-MOM HAS VOC/TECH DIPL	1,627	98.52	100.00
RCLIKE1	SF23-DOES CHILD LIKE ARRANGEMENT-1	1,666	98.50	0.00
NCBFAFT2	SG7-NONREL CARE BEFORE/AFTER SCHOOL-2	66	98.48	0.00
CPSPEAK2	SH22-LANG PROVIDER SPEAKS MOST W/CHILD-2	328	98.48	0.00
CPFEE2	SH33-ANY FEE FOR PROGRAM-2	328	98.48	0.00
NCDAYS1	SG10-# OF DAYS/WK RECEIVES NONREL CARE-1	590	98.47	0.00
RCHOMM1	SF6-MINUTES TO GO TO RELATIVE'S HOME-1	777	98.46	0.00
FAMTCRED	PV23-R HEARD OF CHILD CARE TAX CREDIT	7,151	98.45	0.90
CPHRSAF1	SH13-# OF HRS/WK AT PROGRAM AFTER SCH-1	1,596	98.43	8.00
SEREPTK	SE7-CHILD REPEATED KINDERGARTEN	885	98.42	0.00
SEREPT1	SE7-CHILD REPEATED 1ST GRADE	885	98.42	0.00
FAMTCREM	PU24-R HEARD OF CHILD CARE TAX CREDIT	9,223	98.42	0.00
RCTRANS1	SF24D-TRANSPORT TO/FROM ARRANGEMENT-1	754	98.41	0.00
MOMLIVW	PU10V-MOM CURRENTLY LIVING WITH PARTNER	1,177	98.39	100.00
SDISRCT	SD3-SCHOOL IN ASSIGNED SCH DISTRICT	1,174	98.38	0.00
RCAFT62	SF15-# OF HRS/WK REL CARE AFTER 6 PM-2	182	98.35	0.00
SHIGH	SD7-HIGHEST GRADE AT CHILD'S SCHOOL	9,398	98.35	3.87
SEREPT2	SE7-CHILD REPEATED 2ND GRADE	842	98.34	0.00
MOMGRAD2	PU7-ACTUAL GRADE 9-11 MOM COMPLETED	724	98.34	100.00
RCAFFOR1	SF24B-AFFORDABILITY OF ARRANGEMENT-1	1,666	98.32	0.00
RCREL1	SF26A-REL HELPS PAY FOR REL CARE-1	296	98.31	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCEMPL1	SF26C-EMPL HELPS PAY FOR REL CARE-1.....	296	98.31	0.00
RCOTHER1	SF26D-OTHER HELPS PAY REL CARE-1.....	296	98.31	0.00
SEREPT3	SE7-CHILD REPEATED 3RD GRADE	766	98.30	0.00
SEREPT4	SE7-CHILD REPEATED 4TH GRADE	700	98.29	0.00
CPHOMWK1	SH26-PROG SET ASIDE TIME TO DO HMWORK-1.....	1,757	98.29	0.00
SCBFAFT	SJ2-SELF-CARE BEF/AFT SCH.....	1,817	98.29	0.00
DADACTY	PV14-DAD'S ACTIVITY MOST OF LAST WEEK	346	98.27	0.00
CPAEDUC1	SH24-HOMEWORK/SCH-RELATED/EDUCATIONAL-1.....	1,666	98.26	0.00
CPACOMP1	SH24-COMPUTERS-1	1,666	98.26	0.00
CPAREAD1	SH24-READING/WRITING-1	1,666	98.26	0.00
CPAART1	SH24-ARTS-1	1,666	98.26	0.00
CPACHOR1	SH24-CHORES/WORK-1	1,666	98.26	0.00
CPAOUTP1	SH24-OUTDOOR PLAY/ACTIVITIES/SPORTS-1	1,666	98.26	0.00
CPAINPL1	SH24-INDOOR PLAY-1	1,666	98.26	0.00
CPAPHON1	SH24-TELEPHONE-1	1,666	98.26	0.00
CPAEAT1	SH24-EATING/SNACKS-1	1,666	98.26	0.00
CPATV1	SH24-TV/VIDEOS/VID GAMES/LIST TO MUSIC-1	1,666	98.26	0.00
CPATALK1	SH24-TALKING TO PARENT/CARE PROVIDER-1	1,666	98.26	0.00
CPAOTHE1	SH24-OTHER-1.....	1,666	98.26	0.00
CPREL1	SH34A-REL HELPS PAY FOR PROGRAM-1	961	98.23	0.00
MOMPART	PU2-MOTHER'S PARTNER LIKE PARENT.....	389	98.20	100.00
HGOVEVR	PW13-EVER RECD CHILD CARE BENEFITS	386	98.19	0.00
NCLIKE2	SG23-DOES CHILD LIKE ARRANGEMENT-2	55	98.18	0.00
NCQUAL2	SG24A-QUALITY OF ACTIVITIES IN ARRNGMT-2.....	55	98.18	0.00
NCAFFOR2	SG24B-AFFORABILITY OF ARRANGEMENT-2	55	98.18	0.00
NCRELIA2	SG24C-RELIABILITY OF ARRANGEMENT-2	55	98.18	0.00
NCSAFTY2	SG24E-CHILD'S SAFETY IN ARRANGEMENT-2	55	98.18	0.00
NCFEE2	SG25-ANY FEE FOR NONRELATIVE CARE-2	55	98.18	0.00
NCKIDS1	SG19-# OF CHILDREN CARED FOR BY NONREL-1	606	98.18	27.27
CPHOMWK2	SH26-PROG SET ASIDE TIME TO DO HMWORK-2.....	328	98.17	0.00
CPQUAL2	SH32A-QUALITY OF ACTIVITIES IN PROGRAM-2.....	328	98.17	0.00
SCDAYS	SJ5-# OF DAYS/WK IN SELF-CARE.....	1,693	98.17	0.00
PCMOST	SK3-BACKUP ARRANGEMENT USED MOST.....	5,228	98.16	0.00
CPSIGNU3	SH3-SIGNED UP FOR PARTIC DAYS/TIMES-3.....	54	98.15	0.00
CPPLACE3	SH4-LOCATION OF CENTER-BASED PROGRAM-3	54	98.15	0.00
CPBFAFT3	SH8-PROGRAM BEF/AFTER SCHOOL-3.....	54	98.15	0.00
CPWEEK3	SH9-PROGRAM REG SCHED ONCE/WEEK-3	54	98.15	0.00
SCAFRIE	SJ13-TALKING TO FRIENDS/SOCIALIZING	1,612	98.14	0.00
CPWELF1	SH34B-WELFARE HELPS PAY FOR PROGRAM-1	961	98.13	0.00
SCLIKE	SJ16-DOES CHILD LIKE THE ARRANGEMENT	1,755	98.12	0.00
CPSPEAK3	SH22-LANG PROVIDER SPEAKS MOST W/CHILD-3.....	53	98.11	0.00
CPPHYS3	SH25-TIME FOR PHYSICAL ACTIVITIES-3	53	98.11	0.00
CPHOMWK3	SH26-PROG SET ASIDE TIME TO DO HMWORK-3.....	53	98.11	0.00
CPCMPOP3	SH27-OPPTY TO USE COMPUTER AT PROGRAM-3	53	98.11	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPINFOR3	SH28-PROGRAM INFORMS ABOUT ACTIVITIES-3	53	98.11	0.00
CPFRND3	SH29-CHLD HAS CLOSE FRIENDS AT PROGRAM-3	53	98.11	0.00
CPLIKE3	SH31-DOES CHILD LIKE PROGRAM-3	53	98.11	0.00
CPQUAL3	SH32A-QUALITY OF ACTIVITIES IN PROGRAM-3	53	98.11	0.00
CPAFFOR3	SH32B-AFFORDABILITY OF PROGRAM-3	53	98.11	0.00
CPRELIA3	SH32C-RELIABILITY OF PROGRAM-3	53	98.11	0.00
CPTRANS3	SH32D-TRANSPORTATION TO/FROM PROGRAM-3.....	53	98.11	0.00
CPSAFTY3	SH32E-CHILD'S SAFETY IN PROGRAM-3	53	98.11	0.00
CPFEE3	SH33-ANY FEE FOR PROGRAM-3	53	98.11	0.00
CPAEDUC3	SH24-HOMEWORK/SCH-RELATED/EDUCATIONAL-3.....	52	98.08	0.00
CPACOMP3	SH24-COMPUTERS-3	52	98.08	0.00
CPAREAD3	SH24-READING/WRITING-3	52	98.08	0.00
CPAART3	SH24-ARTS-3	52	98.08	0.00
CPACHOR3	SH24-CHORES/WORK-3	52	98.08	0.00
CPAOUTP3	SH24-OUTDOOR PLAY/ACTIVITIES/SPORTS-3	52	98.08	0.00
CPAINPL3	SH24-INDOOR PLAY-3	52	98.08	0.00
CPAPHON3	SH24-TELEPHONE-3	52	98.08	0.00
CPAEAT3	SH24-EATING/SNACKS-3	52	98.08	0.00
CPATV3	SH24-TV/VIDEOS/VID GAMES/LIST TO MUSIC-3.....	52	98.08	0.00
CPATALK3	SH24-TALKING TO PARENT/CARE PROVIDER-3	52	98.08	0.00
CPAFRIE3	SH24-TALKING TO FRIENDS/SOCIALIZING-3	52	98.08	0.00
CPAOTHE3	SH24-OTHER-3.....	52	98.08	0.00
RCSCMM1	SF7-MIN TO GO FROM SCH TO REL'S HOME-1	777	98.07	0.00
CPCHAGE1	SH21-AGE OF THE CHILDREN IN PROGRAM-1	1,757	98.06	0.00
DADGRADE	PV6-HIGHEST GRADE/YR SCH DAD COMPLETED	7,151	98.06	100.00
SEREPT6	SE7-CHILD REPEATED 6TH GRADE	513	98.05	0.00
SEREPT7	SE7-CHILD REPEATED 7TH GRADE	359	98.05	0.00
PACHOOSE	SL5-WOULD CHOOSE NON-PARENTAL CARE	4,160	98.05	0.00
SEREPT5	SE7-CHILD REPEATED 5TH GRADE	604	98.01	0.00
NCAFRIE2	SG22-TALKING WITH FRIENDS/SOCIALIZING-2	50	98.00	0.00
MOMCARWH	PU33-SECONDARY ARRNG WHEN MOM AT WRK/SCH	2,953	98.00	6.78
MOMPUBL	PU14-MOM CHECKED PUBLIC EMPLOY AGENCY	399	97.99	0.00
MOMPRIV	PU14-MOM CHECKED PRIVATE EMPLOY AGENCY	399	97.99	0.00
MOMEMPL	PU14-MOM CHECKED W/EMPLOYER DIRECTLY	399	97.99	0.00
MOMREL	PU14-MOM CHECKED W/FRIENDS/RELATIVES.....	399	97.99	0.00
MOMANSAD	PU14-MOM PLACED/ANSWERD ADS/SENT RESUME	399	97.99	0.00
MOMREAD	PU14-MOM READ WANT ADS.....	399	97.99	0.00
MOMOTHER	PU14-MOM DID SOMETHING ELSE TO FIND WORK	399	97.99	0.00
RCDAYS2	SF11-# OF DAYS/WK RECEIVES REL CARE-2	197	97.97	0.00
CPDAYS3	SH11-# OF DAYS/WK ATTENDS PROGRAM-3	49	97.96	0.00
SCAHOMI	SJ12-LOCATION/OWN HOME INSIDE	1,612	97.95	0.00
SCAHOMO	SJ12-LOCATION/OWN HOME OUTSIDE	1,612	97.95	0.00
SCARELA	SJ12-LOCATION/A RELATIVE'S HOME.....	1,612	97.95	0.00
SCAFRND	SJ12-LOCATION/A FRIEND'S HOME.....	1,612	97.95	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
SCANEIG	SJ12-LOCATION/A NEIGHBOR'S HOME.....	1,612	97.95	0.00
SCAPUBL	SJ12-LOCATION/A PUBLIC PLACE.....	1,612	97.95	0.00
SCACENT	SJ12-LOCATION/A COMMUNITY CENTER.....	1,612	97.95	0.00
SCAOUT	SJ12-LOCATION/OUTDOORS.....	1,612	97.95	0.00
SCASCHL	SJ12-LOCATION/A SCHOOL.....	1,612	97.95	0.00
SCAPLOTH	SJ12-LOCATION/OTHER.....	1,612	97.95	0.00
CPAFT63	SH15-# OF HRS IN PROGRAM AFTER 6 PM-3.....	48	97.92	0.00
RCADLTS1	SF20-NUM OF ADULTS GIVING REL CARE-1.....	1,666	97.90	2.86
SEGRADEQ	SE2-RATING OF CHILD'S SCHOOL WORK.....	2,169	97.88	0.00
RCAFFOR2	SF24B-AFFORDABILITY OF ARRANGEMENT-2.....	236	97.88	0.00
CPPHYS2	SH25-TIME FOR PHYSICAL ACTIVITIES-2.....	328	97.87	0.00
CPAFFOR2	SH32B-AFFORDABILITY OF PROGRAM-2.....	328	97.87	0.00
AGE7	O/HH MEM - #7'S AGE.....	47	97.87	100.00
CPAFFOR1	SH32B-AFFORDABILITY OF PROGRAM-1.....	1,757	97.84	0.00
RCSCMM2	SF7-MIN TO GO FROM SCH TO REL'S HOME-2.....	184	97.83	0.00
SCAEDUC	SJ13-HOMEWORK/SCH-RELATED/EDUCATIONAL.....	1,612	97.83	0.00
SCACOMP	SJ13-COMPUTERS.....	1,612	97.83	0.00
SCAREAD	SJ13-READING/WRITING.....	1,612	97.83	0.00
SCAART	SJ13-ARTS.....	1,612	97.83	0.00
SCACHOR	SJ13-CHORES/WORK.....	1,612	97.83	0.00
SCAOUTPL	SJ13-OUTDOOR PLAY/ACTIVITIES/SPORTS.....	1,612	97.83	0.00
SCAINPLA	SJ13-INDOOR PLAY.....	1,612	97.83	0.00
SCAPHON	SJ13-TELEPHONE.....	1,612	97.83	0.00
SCAEAT	SJ13-EATING/SNACKS.....	1,612	97.83	0.00
SCATV	SJ13-TV/VIDEOS/VID GAMES/LISTEN TO MUSIC.....	1,612	97.83	0.00
SCATALK	SJ13-TALKING TO PARENT/CARE PROVIDER.....	1,612	97.83	0.00
SCAOTHER	SJ13-OTHER.....	1,612	97.83	0.00
CPEMPL1	SH34C-EMPL HELPS PAY FOR PROGRAM-1.....	961	97.81	0.00
CPOTHER1	SH34D-OTHER HELPS PAY FOR PROGRAM-1.....	961	97.81	0.00
DADHOURS	PV10-HOURS PER WEEK DAD WORKS FOR PAY.....	6,684	97.80	0.00
NCSCMM2	SG6-MIN FROM SCH TO NONREL'S HOME-2.....	45	97.78	0.00
DADBIMOM	PV25-BIOLOGICAL MOM PROVIDES CARE.....	854	97.78	0.00
CPAFRIE2	SH24-TALKING TO FRIENDS/SOCIALIZING-2.....	310	97.74	0.00
PPOPTION	SM6-MORE THAN ONE OPTION.....	5,228	97.74	0.00
RCAEDUC2	SF22-HOMEWORK/SCH-RELATED/EDUCATIONAL-2.....	220	97.73	0.00
RCACOMP2	SF22-COMPUTERS-2.....	220	97.73	0.00
RCAREAD2	SF22-READING/WRITING-2.....	220	97.73	0.00
RCAART2	SF22-ARTS-2.....	220	97.73	0.00
RCACHOR2	SF22-CHORES/WORK-2.....	220	97.73	0.00
RCAOUTP2	SF22-OUTDOOR PLAY/ACTIVITIES/SPORTS-2.....	220	97.73	0.00
RCAINPL2	SF22-INDOOR PLAY-2.....	220	97.73	0.00
RCAPHON2	SF22-TELEPHONE-2.....	220	97.73	0.00
RCAEAT2	SF22-EATING/SNACKS-2.....	220	97.73	0.00
RCATV2	SF22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-2.....	220	97.73	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCATALK2	SF22-TALKING TO PARENT/CARE PROVIDER-2.....	220	97.73	0.00
RCAFRIE2	SF22-TALKING WITH FRIENDS/SOCIALIZING-2.....	220	97.73	0.00
RCAOTHE2	SF22-OTHER-2.....	220	97.73	0.00
CPHOMM2	SH6-MINUTES TO GO FROM HOME TO PROGRAM-2.....	176	97.73	0.00
CPDAYS2	SH11-# OF DAYS/WK ATTENDS PROGRAM-2.....	304	97.70	0.00
RCWELF1	SF26B-WELFARE HELPS PAY FOR REL CARE-1.....	296	97.64	0.00
DADLIVW	PV10V-DAD CURRENTLY LIVING WITH PARTNER.....	423	97.64	100.00
CPSIB2	SH30-CHILD HAS A SIBLING AT PROGRAM-2.....	168	97.62	0.00
CPHOMM1	SH6-MINUTES TO GO FROM HOME TO PROGRAM-1.....	624	97.60	0.00
HDAFFECT	PT10-DISABILITY AFFECTS ABILITY TO LEARN.....	2,096	97.57	0.00
NCDAYS2	SG10-# OF DAYS/WK RECEIVES NONREL CARE-2.....	41	97.56	0.00
NCAFT61	SG14-# OF HRS NONREL CARE AFTER 6 PM-1.....	531	97.55	0.00
CPAFT62	SH15-# OF HRS IN PROGRAM AFTER 6 PM-2.....	286	97.55	0.00
NCSCMM1	SG6-MIN FROM SCH TO NONREL'S HOME-1.....	443	97.52	0.00
AGE5	O/HH MEM - #5'S AGE.....	278	97.48	100.00
CPMONTH2	SH10-PROGRAM REG SCHED ONCE/MONTH-2.....	39	97.44	0.00
CPAEDUC2	SH24-HOMEWORK/SCH-RELATED/EDUCATIONAL-2.....	310	97.42	0.00
CPACOMP2	SH24-COMPUTERS-2.....	310	97.42	0.00
CPAREAD2	SH24-READING/WRITING-2.....	310	97.42	0.00
CPAART2	SH24-ARTS-2.....	310	97.42	0.00
CPACHOR2	SH24-CHORES/WORK-2.....	310	97.42	0.00
CPAOUTP2	SH24-OUTDOOR PLAY/ACTIVITIES/SPORTS-2.....	310	97.42	0.00
CPAINPL2	SH24-INDOOR PLAY-2.....	310	97.42	0.00
CPAPHON2	SH24-TELEPHONE-2.....	310	97.42	0.00
CPAEAT2	SH24-EATING/SNACKS-2.....	310	97.42	0.00
CPATV2	SH24-TV/VIDEOS/VID GAMES/LIST TO MUSIC-2.....	310	97.42	0.00
CPATALK2	SH24-TALKING TO PARENT/CARE PROVIDER-2.....	310	97.42	0.00
CPAOTHE2	SH24-OTHER-2.....	310	97.42	0.00
CPBFAFT2	SH8-PROGRAM BEF/AFTER SCHOOL-2.....	343	97.38	0.00
PWRKHOME	PV27-PARENT WLD STOP/REDUCE WORK IF ABLE.....	8,751	97.33	0.00
RCBFAFT2	SF8-REL CARE BEFORE/AFTER SCHOOL-2.....	295	97.29	0.00
NCTRANS2	SG24D-TRANSPORT TO/FROM ARRANGEMENT-2.....	36	97.22	0.00
CPHRWK1	SH18-# OF HRS/WK IN PROGRAM-1.....	71	97.18	0.00
PPLANG	SM9J-PROVIDER WHO SPEAKS CHLD'S LANGUAGE.....	426	97.18	50.00
DADGRAD2	PV6-ACTUAL GRADE 9-11 DAD COMPLETED.....	480	97.08	100.00
RCAGE2	SF30V-AGE OF RELATIVE CAREGIVER-2.....	295	96.95	0.00
CPFRND2	SH29-CHLD HAS CLOSE FRIENDS AT PROGRAM-2.....	328	96.95	0.00
RCAGE1	SF30V-AGE OF RELATIVE CAREGIVER-1.....	1,708	96.90	0.00
CPPLACK3	SH5-PROGRAM AT SCHOOL CHILD ATTENDS-3.....	32	96.88	0.00
SCAFT6	SJ8-# OF HRS IN SELF-CARE AFTER 6 PM.....	1,550	96.84	0.00
SCMONTH	SJ4-SELF-CARE REG SCHED ONCE/MONTH.....	124	96.77	0.00
MOMGRAD1	PU7-ACTUAL GRADE 0-8 MOM COMPLETED.....	517	96.71	100.00
RCWEEK3	SF9-REL CARE REG SCHED ONCE/WEEK-3.....	30	96.67	0.00
PPACHOIC	SM8-GOOD CHOICES FOR AFTER SCH CARE.....	6,366	96.67	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPCMPOP2	SH27-OPPTY TO USE COMPUTER AT PROGRAM-2	328	96.65	0.00
CPPHYS1	SH25-TIME FOR PHYSICAL ACTIVITIES-1	1,757	96.53	0.00
NCHRSBF1	SG11-# OF HRS/WK NONREL CARE BEF SCH-1	230	96.52	0.00
PPDIFCLT	SM5-DIFFICULTY FINDING CARE.....	5,228	96.52	0.00
CPFRND1	SH29-CHLD HAS CLOSE FRIENDS AT PROGRAM-1	1,757	96.47	0.00
CPREL3	SH34A-REL HELPS PAY FOR PROGRAM-3	28	96.43	0.00
CPWELF3	SH34B-WELFARE HELPS PAY FOR PROGRAM-3	28	96.43	0.00
CPEMPL3	SH34C-EMPL HELPS PAY FOR PROGRAM-3	28	96.43	0.00
CPOTHER3	SH34D-OTHER HELPS PAY FOR PROGRAM-3.....	28	96.43	0.00
MOMUSAGE	PU6OV-AGE WHEN MOM MOVED TO US.....	1,729	96.41	100.00
MOMARELA	PU28-OTHER ARRNG RELATIVE TYPE.....	191	96.34	0.00
SCOVRLP	SJ14-SELF-CARE OVERLAPS W/ACTIVITIES	267	96.25	0.00
NCHRSAF1	SG12-# OF HRS/WK NONREL CARE AFTER SCH-1.....	531	96.23	0.00
CPADLTS3	SH20-# OF ADULTS IN GROUP AT PROGRAM-3.....	53	96.23	0.00
RCHRSAF2	SF13-# OF HRS/WK REL CARE AFTER SCHOOL-2.....	182	96.15	0.00
CPSCMM3	SH7-MINUTES TO GO FROM SCH TO PROGRAM-3.....	26	96.15	0.00
CPHRSAF2	SH13-# OF HRS/WK AT PROGRAM AFTER SCH-2	286	96.15	0.00
MOMWLDSC	PU23-MOM WLD ATTEND SCHOOL IF CARE AVAIL	1,921	96.15	0.00
AGE8	O/HH MEM - #8'S AGE	26	96.15	100.00
MOMWLDWK	PU22-MOM WLD WORK IF CARE AVAILABLE.....	2,088	96.12	2.47
NCAEDUC2	SG22-HOMEWORK/SCH-RELATED/EDUCATIONAL-2.....	50	96.00	0.00
NCACOMP2	SG22-COMPUTERS-2	50	96.00	0.00
NCAREAD2	SG22-READING/WRITING-2.....	50	96.00	0.00
NCAART2	SG22-ARTS-2.....	50	96.00	0.00
NCACHOR2	SG22-CHORES/WORK-2	50	96.00	0.00
NCAOUTP2	SG22-OUTDOOR PLAY/ACTIVITIES/SPORTS-2.....	50	96.00	0.00
NCAINPL2	SG22-INDOOR PLAY-2	50	96.00	0.00
NCAPHON2	SG22-TELEPHONE-2.....	50	96.00	0.00
NCAEAT2	SG22-EATING/SNACKS-2	50	96.00	0.00
NCATV2	SG22-TV/VIDEOS/VID GAMES/LIST TO MUSIC-2.....	50	96.00	0.00
NCATALK2	SG22-TALKING TO PARENT/CARE PROVIDER-2	50	96.00	0.00
NCAOTHE2	SG22-OTHER-2.....	50	96.00	0.00
PCWHO2	SK6-WHO PROVIDED CARE OR PROGRAM-2.....	25	96.00	0.00
CPBEDUC1	SH23-HOMEWORK/SCH-RELATED/EDUCATIONAL-1.....	296	95.95	0.00
CPBCOMP1	SH23-COMPUTERS-1	296	95.95	0.00
CPBREAD1	SH23-READING/WRITING-1	296	95.95	0.00
CPBART1	SH23-ARTS-1.....	296	95.95	0.00
CPBCHOR1	SH23-CHORES/WORK-1	296	95.95	0.00
CPBOUTP1	SH23-OUTDOOR PLAY/ACTIVITIES/SPORTS-1	296	95.95	0.00
CPBINPL1	SH23-INDOOR PLAY-1	296	95.95	0.00
CPBPON1	SH23-TELEPHONE-1	296	95.95	0.00
CPBEAT1	SH23-EATING/SNACKS-1	296	95.95	0.00
CPBTV1	SH23-TV/VIDEOS/VID GAMES/LIST TO MUSIC-1.....	296	95.95	0.00
CPBTALK1	SH23-TALKING TO PARENT/CARE PROVIDER-1	296	95.95	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPBOTHE1	SH23-OTHER-1.....	296	95.95	0.00
CPCMPOP1	SH27-OPPTY TO USE COMPUTER AT PROGRAM-1	1,757	95.90	0.00
RCKIDS3	SF19-NUM OF CHILDREN CARED FOR BY REL-3	24	95.83	0.00
RCADLTS3	SF20-NUM OF ADULTS GIVING REL CARE-3.....	24	95.83	0.00
RCSPEAK3	SF21-LANGUAGE SPOKEN MOST BY REL-3	24	95.83	0.00
RCLIKE3	SF23-DOES CHILD LIKE ARRANGEMENT-3.....	24	95.83	0.00
RCQUAL3	SF24A-QUALITY OF ACTIVITIES IN ARRNGMT-3	24	95.83	0.00
RCRELIA3	SF24C-RELIABILITY OF ARRANGEMENT-3	24	95.83	0.00
RCSAFTY3	SF24E-CHILD'S SAFETY IN ARRANGEMENT-3	24	95.83	0.00
RCFEE3	SF25-ANY FEE FOR REL CARE-3	24	95.83	0.00
CPWKMO2	SH16-# OF WKS/MO IN PROGRAM-2.....	24	95.83	0.00
CPDAYWK2	SH17-# OF DAYS/WK IN PROGRAM-2.....	24	95.83	0.00
CPHRWK2	SH18-# OF HRS/WK IN PROGRAM-2.....	24	95.83	0.00
AGE6	O/HH MEM - #6'S AGE	120	95.83	100.00
RCAFT61	SF15-# OF HRS/WK REL CARE AFTER 6 PM-1	1,533	95.76	0.00
CPCHAGE2	SH21-AGE OF THE CHILDREN IN PROGRAM-2	328	95.73	0.00
CPTRANS2	SH32D-TRANSPORTATION TO/FROM PROGRAM-2.....	327	95.72	0.00
SCHRSAF	SJ7-# OF HRS/WK IN SELF-CARE AFT SCH.....	1,550	95.55	0.00
PPREFER	SM2-MOST PREFERRED ARRANGEMENT	6,366	95.54	0.00
CPHRSBF1	SH12-# OF HRS/WK AT PROGRAM BEFORE SCH-1	291	95.53	7.69
RCHRSAF1	SF13-# OF HRS/WK REL CARE AFTER SCHOOL-1	1,533	95.37	0.00
PPCHOIC	SM7-GOOD CHOICES FOR BEFORE SCH CARE	6,366	95.33	0.00
RCHOMM3	SF6-MINUTES TO GO TO RELATIVE'S HOME-3	21	95.24	0.00
RCSCMM3	SF7-MIN TO GO FROM SCH TO REL'S HOME-3	21	95.24	0.00
RCCSTHH2	SF28-AMOUNT FOR CHILD ONLY OR OTHERS-2.....	21	95.24	0.00
NCINHH1	SG4-NONREL CARE PROVIDER LIVES IN HH-1	181	95.03	88.89
RCDAYWK1	SF17-# OF DAYS/WK RECEIVES REL CARE-1	40	95.00	0.00
MOMENHRS	PU17-HOURS MOM IN SCHOOL PER WEEK	975	94.97	2.04
CPTRANS1	SH32D-TRANSPORTATION TO/FROM PROGRAM-1.....	1,751	94.92	0.00
DADWLDWK	PV21-DAD WLD WORK IF CARE AVAILABLE.....	314	94.90	0.00
RCHRWK2	SF18-# OF HRS/WK RECEIVES REL CARE-2	39	94.87	0.00
HNIFSP	PT9-RECEIVES SERVICES THRU IFSP/IEP	1,634	94.80	0.00
FAMTCUSM	PU25-HH USED CHLD CARE TAX CREDIT 2000.....	5,046	94.75	0.00
CPSCMM1	SH7-MINUTES TO GO FROM SCH TO PROGRAM-1.....	624	94.71	0.00
NCHRSAF2	SG12-# OF HRS/WK NONREL CARE AFTER SCH-2.....	37	94.59	0.00
FAMTCUSD	PV24-HH USED CHILD CARE TAX CREDIT 2000	4,089	94.55	0.00
DADVOTEC	PV6OV-DAD HAS VOC/TECH DIPL	954	94.45	100.00
RCHRSAF3	SF13-# OF HRS/WK REL CARE AFTER SCHOOL-3.....	18	94.44	0.00
RCAFT63	SF15-# OF HRS/WK REL CARE AFTER 6 PM-3.....	18	94.44	0.00
CPKIDS3	SH19-# OF CHILDREN IN GROUP AT PROGRAM-3.....	53	94.34	33.33
MOMBRELA	PU35-SECONDARY ARRNG RELATIVE TYPE.....	210	94.29	0.00
PCSTRTY1	SK8-YEAR PREVIOUS ARRANGEMENT BEGAN-1	155	94.19	0.00
MOMAHOUS	PU27-OTHER PARENT LIVES IN HH.....	582	94.16	79.41
PAAFRIE	SL4-TALKING TO FRIENDS/SOCIALIZING	4,635	94.07	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPADLTS1	SH20-# OF ADULTS IN GROUP AT PROGRAM-1	1,757	93.91	8.41
HINCMRNG	PW17- TOTAL HH INCOME BELOW/ABOVE \$25K.....	9,583	93.77	0.00
NCWKMO1	SG15-# OF WKS/MO RECEIVES NONREL CARE-1	16	93.75	0.00
NCHRWK1	SG17-# OF HRS/WK RECEIVES NONREL CARE-1	16	93.75	0.00
CPHRSAF3	SH13-# OF HRS/WK AT PROGRAM AFTER SCH-3	48	93.75	0.00
PCPLACE2	SK7-CARE TOOK PLACE IN OWN/OTHER HOME-2	16	93.75	0.00
PAAHOME	SL2-PARENT AT HOME AFTER SCHOOL	4,635	93.70	0.00
PAAHMIN	SL3-LOCATION/OWN HOME INSIDE	4,635	93.59	0.00
PAAHMOUT	SL3-LOCATION/OWN HOME OUTSIDE	4,635	93.59	0.00
PAAEDUC	SL4-HOMEWORK/SCH-RELATED/EDUCATIONAL	4,635	93.59	0.00
PAACOMP	SL4-COMPUTERS.....	4,635	93.59	0.00
PAAREAD	SL4-READING/WRITING.....	4,635	93.59	0.00
PAAART	SL4-ARTS	4,635	93.59	0.00
PAACHOR	SL4-CHORES/WORK.....	4,635	93.59	0.00
PAAOUTPL	SL4-OUTDOOR PLAY/ACTIVITIES/SPORTS.....	4,635	93.59	0.00
PAAINPLA	SL4-INDOOR PLAY	4,635	93.59	0.00
PAAPHON	SL4-TELEPHONE.....	4,635	93.59	0.00
PAAEAT	SL4-EATING/SNACKS	4,635	93.59	0.00
PAATV	SL4-TV/VIDEOS/VID GAMES/LISTEN TO MUSIC	4,635	93.59	0.00
PAATALK	SL4-TALKING TO PARENT/CARE PROVIDER	4,635	93.59	0.00
PAAACTIV	SL4-BEFORE OR AFTER SCH ACTIVITIES	4,635	93.59	0.00
PAAOTHER	SL4-OTHER	4,635	93.59	0.00
PAARELA	SL3-LOCATION/A RELATIVE'S HOME.....	4,635	93.57	0.00
PAAFRND	SL3-LOCATION/A FRIEND'S HOME.....	4,635	93.57	0.00
PAANEIG	SL3-LOCATION/A NEIGHBOR'S HOME.....	4,635	93.57	0.00
PAAPUBL	SL3-LOCATION/A PUBLIC PLACE.....	4,635	93.57	0.00
PAACENT	SL3-LOCATION/A COMMUNITY CENTER	4,635	93.57	0.00
PAAOUT	SL3-LOCATION/OUTDOORS.....	4,635	93.57	0.00
PAASCHL	SL3-LOCATION/A SCHOOL.....	4,635	93.57	0.00
PAAPLOTH	SL3-LOCATION/OTHER	4,635	93.57	0.00
CPBFRIE2	SH23-TALKING TO FRIENDS/SOCIALIZING-2	31	93.55	0.00
RCAGE3	SF30V-AGE OF RELATIVE CAREGIVER-3.....	30	93.33	0.00
RCBFAFT3	SF8-REL CARE BEFORE/AFTER SCHOOL-3.....	30	93.33	0.00
RCTRANS3	SF24D-TRANSPORT TO/FROM ARRANGEMENT-3.....	15	93.33	0.00
CPDAYWK1	SH17-# OF DAYS/WK IN PROGRAM-1	71	92.96	0.00
PCSTRTM1	SK8-MONTH PREVIOUS ARRANGEMENT BEGAN-1	155	92.90	0.00
NCDAYWK2	SG16-# OF DAYS/WK RECEIVES NONREL CARE-2	14	92.86	0.00
CPSIB3	SH30-CHILD HAS A SIBLING AT PROGRAM-3.....	28	92.86	0.00
CPSCMM2	SH7-MINUTES TO GO FROM SCH TO PROGRAM-2.....	176	92.61	0.00
CPCHAGE3	SH21-AGE OF THE CHILDREN IN PROGRAM-3	53	92.45	0.00
HINCM50K	PW18-TOTAL HH INCOME BELOW/ABOVE \$50K.....	7,237	92.41	0.00
DADWLDSC	PV22-DAD WLD ATTEND SCHOOL IF CARE AVAIL.....	288	92.36	4.55
RCDAYWK2	SF17-# OF DAYS/WK RECEIVES REL CARE-2	39	92.31	0.00
PCREASN1	SK9-REASON PREVIOUS ARRANGEMENT ENDED-1	155	92.26	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCHRSBF1	SF12-# OF HRS/WK REL CARE BEF SCHOOL-1	610	92.13	0.00
PABHOME	SL1-PARENT AT HOME BEFORE SCHOOL	7,488	92.12	0.00
DADUSAGE	PV5OV-AGE WHEN DAD MOVED TO US	1,430	92.10	100.00
DADENHRS	PV16-HOURS DAD IN SCHOOL PER WEEK.....	440	92.05	2.86
PCSTRTY2	SK8-YEAR PREVIOUS ARRANGEMENT BEGAN-2	25	92.00	0.00
PCSTRTM2	SK8-MONTH PREVIOUS ARRANGEMENT BEGAN-2	25	92.00	0.00
PCREASN2	SK9-REASON PREVIOUS ARRANGEMENT ENDED-2	25	92.00	0.00
CPADLTS2	SH20-# OF ADULTS IN GROUP AT PROGRAM-2	328	91.77	11.11
RCAFFOR3	SF24B-AFFORDABILITY OF ARRANGEMENT-3	24	91.67	0.00
CPSIGNU4	SH3-SIGNED UP FOR PARTIC DAYS/TIMES-4	12	91.67	0.00
CPPLACE4	SH4-LOCATION OF CENTER-BASED PROGRAM-4	12	91.67	0.00
CPBFAFT4	SH8-PROGRAM BEF/AFTER SCHOOL-4.....	12	91.67	0.00
CPWEEK4	SH9-PROGRAM REG SCHED ONCE/WEEK-4	12	91.67	0.00
CPKIDS4	SH19-# OF CHILDREN IN GROUP AT PROGRAM-4.....	12	91.67	0.00
CPADLTS4	SH20-# OF ADULTS IN GROUP AT PROGRAM-4	12	91.67	0.00
CPCHAGE4	SH21-AGE OF THE CHILDREN IN PROGRAM-4	12	91.67	0.00
CPSPEAK4	SH22-LANG PROVIDER SPEAKS MOST W/CHILD-4.....	12	91.67	0.00
CPPHYS4	SH25-TIME FOR PHYSICAL ACTIVITIES-4	12	91.67	0.00
CPHOMWK4	SH26-PROG SET ASIDE TIME TO DO HMWORK-4.....	12	91.67	0.00
CPCMPOP4	SH27-OPPTY TO USE COMPUTER AT PROGRAM-4	12	91.67	0.00
CPINFOR4	SH28-PROGRAM INFORMS ABOUT ACTIVITIES-4	12	91.67	0.00
CPFRND4	SH29-CHLD HAS CLOSE FRIENDS AT PROGRAM-4	12	91.67	0.00
CPLIKE4	SH31-DOES CHILD LIKE PROGRAM-4	12	91.67	0.00
CPQUAL4	SH32A-QUALITY OF ACTIVITIES IN PROGRAM-4	12	91.67	0.00
CPAFFOR4	SH32B-AFFORDABILITY OF PROGRAM-4	12	91.67	0.00
CPRELIA4	SH32C-RELIABILITY OF PROGRAM-4	12	91.67	0.00
CPTRANS4	SH32D-TRANSPORTATION TO/FROM PROGRAM-4.....	12	91.67	0.00
CPSAFTY4	SH32E-CHILD'S SAFETY IN PROGRAM-4	12	91.67	0.00
CPFEE4	SH33-ANY FEE FOR PROGRAM-4	12	91.67	0.00
SCHRSBF	SJ6-# OF HRS/WK IN SELF-CARE BEF SCH.....	709	91.54	0.00
DADGRAD1	PV6-ACTUAL GRADE 0-8 DAD COMPLETED	413	91.53	100.00
SNUMSTUD	SD8-NUMBER OF STDTS AT CHILD'S SCHOOL	9,398	91.47	0.00
ABSHRS	SI11-# OF HRS/WK IN ACTIVITIES BEF SCH.....	316	91.46	0.00
NCCOST1	SG27-AMT HH PAYS FOR NONREL CARE-1	421	91.21	0.00
HSTOPYY	PW12-YEAR STOPPED RECEIVING WELFARE	386	91.19	0.00
CPDAYS4	SH11-# OF DAYS/WK ATTENDS PROGRAM-4	11	90.91	0.00
CPHRSAF4	SH13-# OF HRS/WK AT PROGRAM AFTER SCH-4	11	90.91	0.00
CPAFT64	SH15-# OF HRS IN PROGRAM AFTER 6 PM-4	11	90.91	0.00
CPAEDUC4	SH24-HOMEWORK/SCH-RELATED/EDUCATIONAL-4.....	11	90.91	0.00
CPACOMP4	SH24-COMPUTERS-4	11	90.91	0.00
CPAREAD4	SH24-READING/WRITING-4.....	11	90.91	0.00
CPAART4	SH24-ARTS-4.....	11	90.91	0.00
CPACHOR4	SH24-CHORES/WORK-4	11	90.91	0.00
CPAOUTP4	SH24-OUTDOOR PLAY/ACTIVITIES/SPORTS-4.....	11	90.91	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CPAINPL4	SH24-INDOOR PLAY-4	11	90.91	0.00
CPAPHON4	SH24-TELEPHONE-4	11	90.91	0.00
CPAEAT4	SH24-EATING/SNACKS-4	11	90.91	0.00
CPATV4	SH24-TV/VIDEOS/VID GAMES/LIST TO MUSIC-4	11	90.91	0.00
CPATALK4	SH24-TALKING TO PARENT/CARE PROVIDER-4	11	90.91	0.00
CPAFRIE4	SH24-TALKING TO FRIENDS/SOCIALIZING-4	11	90.91	0.00
CPAOTHE4	SH24-OTHER-4.....	11	90.91	0.00
NCUNIT1	SG27-UNIT OF TIME/NONREL CARE COST-1	404	90.84	0.00
MOMBHOUS	PU34-SEC ARR PARENT LIVES IN HH	505	90.69	48.94
RCCOST2	SF27-AMT HH PAYS FOR REL CARE-2	32	90.63	66.67
NCCOST2	SG27-AMT HH PAYS FOR NONREL CARE-2	21	90.48	0.00
NCUNIT2	SG27-UNIT OF TIME/NONREL CARE COST-2	21	90.48	0.00
NCINHH2	SG4-NONREL CARE PROVIDER LIVES IN HH-2	21	90.48	50.00
CPBEDUC2	SH23-HOMEWORK/SCH-RELATED/EDUCATIONAL-2.....	31	90.32	0.00
CPBCOMP2	SH23-COMPUTERS-2	31	90.32	0.00
CPBREAD2	SH23-READING/WRITING-2	31	90.32	0.00
CPBART2	SH23-ARTS-2.....	31	90.32	0.00
CPBCHOR2	SH23-CHORES/WORK-2	31	90.32	0.00
CPBOUTP2	SH23-OUTDOOR PLAY/ACTIVITIES/SPORTS-2.....	31	90.32	0.00
CPBINPL2	SH23-INDOOR PLAY-2	31	90.32	0.00
CPBPON2	SH23-TELEPHONE-2.....	31	90.32	0.00
CPBEAT2	SH23-EATING/SNACKS-2	31	90.32	0.00
CPBTV2	SH23-TV/VIDEOS/VID GAMES/LIST TO MUSIC-2.....	31	90.32	0.00
CPBTALK2	SH23-TALKING TO PARENT/CARE PROVIDER-2	31	90.32	0.00
CPBOTHE2	SH23-OTHER-2.....	31	90.32	0.00
HOMSCHR	PB5-HRS/WK HOMESCHOOLED CHILD IN SCHOOL	31	90.32	33.33
CPCOST1	SH35-AMOUNT HH PAYS FOR PROGRAM-1.....	961	90.22	0.00
NCCSTHH1	SG28-AMOUNT FOR CHILD ONLY OR OTHERS-1	293	90.10	0.00
RCDAYS3	SF11-# OF DAYS/WK RECEIVES REL CARE-3	20	90.00	0.00
RCUNIT2	SF27-UNIT OF TIME/REL CARE COST-2	30	90.00	66.67
CPUNIT1	SH35-UNIT OF TIME/PROGRAM COST-1	915	89.84	0.00
SCOVRRH	SJ14OV-HRS SELF-CARE OVERLAPS ACTIV.....	78	89.74	25.00
MOMACUSE	PU21-MOM USES EMPL CARE ACCOUNT	1,860	89.52	0.00
HINCOME	PW18-TOTAL HH INCOME RANGE	9,583	89.29	0.00
MOMACCT	PU20-MOM'S EMPL HAS CARE ACCOUNT.....	6,484	89.02	0.00
CPKIDS2	SH19-# OF CHILDREN IN GROUP AT PROGRAM-2.....	328	89.02	8.33
RCHRSBF2	SF12-# OF HRS/WK REL CARE BEF SCHOOL-2	63	88.89	0.00
NCCSTHN1	SG28OV-# OF CHILDREN AMOUNT IS FOR-1.....	160	88.13	0.00
SNUMGRAD	SD80V-NUMBER OF STDTS IN CHILD'S GRADE.....	200	88.00	8.33
RCCOST1	SF27-AMT HH PAYS FOR REL CARE-1	296	87.84	13.89
RCCSTHH1	SF28-AMOUNT FOR CHILD ONLY OR OTHERS-1.....	221	87.78	11.11
ASWKMO	SF6-# OF WKS/MO IN ACTIVITIES	219	87.67	0.00
RCWKMO1	SF16-# OF WKS/MO RECEIVES REL CARE-1	40	87.50	0.00
RCUNIT1	SF27-UNIT OF TIME/REL CARE COST-1	288	87.50	13.89

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCCSTHN1	SF28OV-# OF CHILDREN AMOUNT IS FOR-1	120	87.50	20.00
ASDAYWK	SI7-# OF DAYS/WK IN ACTIVITIES	219	86.76	0.00
CPHRSBF2	SH12-# OF HRS/WK AT PROGRAM BEFORE SCH-2.....	30	86.67	0.00
ASHRWK	SI8-# OF HRS/WK IN ACTIVITIES	219	85.84	0.00
HSPAPLCU	SC2OVC-USED PUB SCH SPRT-PLCE FOR PRNTS.....	42	85.71	0.00
NCCSTHH2	SG28-AMOUNT FOR CHILD ONLY OR OTHERS-2.....	14	85.71	0.00
CPPLACK4	SH5-PROGRAM AT SCHOOL CHILD ATTENDS-4	7	85.71	0.00
HSACTVSU	SC2OVG-USED PUB SCH SPRT-PARTIC IN SPRT.....	82	85.37	0.00
PCENDYY1	SK8-YEAR PREVIOUS ARRANGEMENT ENDED-1	155	84.52	4.17
CPKIDS1	SH19-# OF CHILDREN IN GROUP AT PROGRAM-1.....	1,757	84.35	8.73
CPCOST2	SH35-AMOUNT HH PAYS FOR PROGRAM-2.....	164	84.15	0.00
PCENDYY2	SK8-YEAR PREVIOUS ARRANGEMENT ENDED-2	25	84.00	0.00
PPOBSTCL	SM4-OBSTACLE TO BEF/AFT SCH PROGRAM.....	2,706	83.78	0.00
CPUNIT2	SH35-UNIT OF TIME/PROGRAM COST-2.....	153	83.66	0.00
HSTOPMM	PW12-MONTH STOPPED RECEIVING WELFARE.....	386	83.42	0.00
PCENDMM1	SK8-MONTH PREVIOUS ARRANGEMENT ENDED-1	155	83.23	3.85
CPWKMO1	SH16-# OF WKS/MO IN PROGRAM-1	71	83.10	0.00
DADACCT	PV19-DAD'S EMPL HAS CARE ACCOUNT	6,684	82.85	0.00
DADACUSE	PV20-DAD USES EMPL CARE ACCOUNT.....	1,511	82.06	0.00
HSACTVS	SC2G-PUB SCH SPRT-CHLD CAN PARTIC SPRTS	195	82.05	0.00
SCDAYWK	SJ10-# OF DAYS/WK IN SELF-CARE.....	62	80.65	0.00
SCHRWK	SJ11-# OF HRS/WK IN SELF-CARE.....	62	80.65	0.00
CPCSTHN1	SH36OV-# OF CHILDREN AMOUNT IS FOR-1.....	51	80.39	0.00
HSSTPLC	SC2E-PUB SCH SPRT-PLCE HM SCH STDT MEET	195	80.00	0.00
PCENDMM2	SK8-MONTH PREVIOUS ARRANGEMENT ENDED-2	25	80.00	0.00
HSPAPLC	SC2C-PUB SCH SPRT OFFR PRNT PLCE W/INFO	195	79.49	0.00
CPCSTHH1	SH36-AMOUNT FOR CHILD ONLY OR OTHERS-1	568	79.05	0.00
HSSTPLCU	SC2OVE-USED PUB SCH SPRT-PLACE FOR STDT.....	38	78.95	0.00
MOMAWEEK	PU29-ARRNG REG SCHED ONCE/WEEK	253	78.66	0.00
NCHRWK2	SG17-# OF HRS/WK RECEIVES NONREL CARE-2.....	14	78.57	0.00
CPCOST3	SH35-AMOUNT HH PAYS FOR PROGRAM-3.....	28	78.57	0.00
CPUNIT3	SH35-UNIT OF TIME/PROGRAM COST-3.....	27	77.78	0.00
MOMADAYS	PU30-# DAYS EACH WK IN OTHER ARRNG	206	77.18	0.00
RCWKMO2	SF16-# OF WKS/MO RECEIVES REL CARE-2	39	76.92	0.00
HSSTWEBU	SC2OVF-USED PUB SCH SPRT-WEB SITE STDT.....	24	75.00	0.00
RCWKMO3	SF16-# OF WKS/MO RECEIVES REL CARE-3	4	75.00	0.00
NCCSTHN2	SG28OV-# OF CHILDREN AMOUNT IS FOR-2.....	8	75.00	0.00
HSMATLS	SC2B-PUB SCH SPRT-OFFER BOOK/MATLS	195	74.36	0.00
MOMAHRS	PU31-# HRS EACH WK IN OTHER ARRNG	206	74.27	0.00
MOMBWEEK	PU36-SEC ARRNG REG SCHED ONCE/WEEK	331	73.72	0.00
SCWKMO	SJ9-# OF WKS/MO IN SELF-CARE.....	62	72.58	5.88
HSSTWEB	SC2F-PUB SCH SPRT-WEB SITE HM SCH STDTS.....	195	72.31	0.00
HSMATLSU	SC2OV-USED PUB SCH SPRT-BOOKS/MATLS	61	72.13	0.00
HSCURRU	SC2OVA-USED PUB SCH SPRT-CURRICULA	56	71.43	0.00

See note at end of table.

**Table 6-2. Item response rates for items on the public use data file: ASPA-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
RCHRSBF3	SF12-# OF HRS/WK REL CARE BEF SCHOOL-3	7	71.43	0.00
NCWKMO2	SG15-# OF WKS/MO RECEIVES NONREL CARE-2	14	71.43	0.00
MOMBDAYS	PU37-# DAYS EACH WK IN SEC ARRNG	272	71.32	0.00
HSPAWEB	SC2D-PUB SCH SPRT-WEB SITE HM SCH PRNTS	195	70.26	0.00
HSATTND	SC3-PUB SCH OFFER CHILD CHNC ATTND CLASS	164	69.51	0.00
MOMBHRS	PU38-# HRS EACH WEEK IN SEC ARRNG	272	69.49	0.00
HSCURR	SC2A-PUB SCH SPRT-DETAILED CURRICULUM	195	69.23	0.00
HINCMEXT	PW18OV-EXACT HH INC TO NEAREST \$1000	1,827	67.76	0.34
CPCSTHH2	SH36-AMOUNT FOR CHILD ONLY OR OTHERS-2	96	67.71	0.00
HSPAWEBU	SC2OVD-USED PUB SCH SPRT-WEB SITE PRNTS	40	67.50	0.00
CPCOST4	SH35-AMOUNT HH PAYS FOR PROGRAM-4	5	60.00	0.00
CPCSTHH3	SH36-AMOUNT FOR CHILD ONLY OR OTHERS-3	17	58.82	0.00
CPBEDUC4	SH23-HOMEWORK/SCH-RELATED/EDUCATIONAL-4	2	50.00	0.00
CPBCOMP4	SH23-COMPUTERS-4	2	50.00	0.00
CPBREAD4	SH23-READING/WRITING-4	2	50.00	0.00
CPBART4	SH23-ARTS-4	2	50.00	0.00
CPBCHOR4	SH23-CHORES/WORK-4	2	50.00	0.00
CPBOUTP4	SH23-OUTDOOR PLAY/ACTIVITIES/SPORTS-4	2	50.00	0.00
CPBINPL4	SH23-INDOOR PLAY-4	2	50.00	0.00
CPBPON4	SH23-TELEPHONE-4	2	50.00	0.00
CPBEAT4	SH23-EATING/SNACKS-4	2	50.00	0.00
CPBTV4	SH23-TV/VIDEOS/VID GAMES/LIST TO MUSIC-4	2	50.00	0.00
CPBTALK4	SH23-TALKING TO PARENT/CARE PROVIDER-4	2	50.00	0.00
CPBFRIE4	SH23-TALKING TO FRIENDS/SOCIALIZING-4	2	50.00	0.00
CPBOTHE4	SH23-OTHER-4	2	50.00	0.00
CPUNIT4	SH35-UNIT OF TIME/PROGRAM COST-4	4	50.00	0.00
CPCSTHN2	SH36OV-# OF CHILDREN AMOUNT IS FOR-2	4	50.00	0.00
CPCSTHH4	SH36-AMOUNT FOR CHILD ONLY OR OTHERS-4	3	33.33	0.00
CPHRSBF4	SH12-# OF HRS/WK AT PROGRAM BEFORE SCH-4	1	0.00	0.00
RCCOST3	SF27-AMT HH PAYS FOR REL CARE-3	1	0.00	100.00
RCUNIT3	SF27-UNIT OF TIME/REL CARE COST-3	1	0.00	100.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001.

Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
SEX4	O/HH MEM - #4'S GENDER AT SCREENER	914	100.00	0.00
SEX5	O/HH MEM - #5'S GENDER AT SCREENER	317	100.00	0.00
SEX6	O/HH MEM - #6'S GENDER AT SCREENER	116	100.00	0.00
SEX7	O/HH MEM - #7'S GENDER AT SCREENER	34	100.00	0.00
SEX8	O/HH MEM - #8'S GENDER AT SCREENER	16	100.00	0.00
AGE9	O/HH MEM - #9'S AGE AT SCREENER	7	100.00	0.00
SEX9	O/HH MEM - #9'S GENDER AT SCREENER	7	100.00	0.00
AGE10	O/HH MEM - #10'S AGE AT SCREENER	2	100.00	0.00
SEX10	O/HH MEM - #10'S GENDER AT SCREENER	2	100.00	0.00
ESINCBK	AB14-TUITON & FEES INCLUDE BOOKS/MTLS	12	100.00	0.00
BSCHIL	AC5A-HELP CHILDREN WITH SCHOOL WORK	197	100.00	0.00
BSPUBAST	AC5E-MEET REQ MNT FOR PUBLIC ASSISTANCE	197	100.00	0.00
BSPROVEM	AC7-INSTRUCTION PROVIDER WAS EMPLOYER	140	100.00	0.00
CRTYASC	AD2-TYPE OF PRGM-ASSOCIATE'S DEGREE	1,140	100.00	0.00
CRTYBCH	AD2-TYPE OF PRGM-BACHELOR'S DEGREE	1,140	100.00	0.00
CRTYMAS	AD2-TYPE OF PRGM-MASTER'S DEGREE	1,140	100.00	0.00
CRTYDOC	AD2-TYPE OF PRGM-DOCTORATE	1,140	100.00	0.00
CRTYPRF	AD2-TYPE OF PRGM-PROFESSIONAL DEGREE	1,140	100.00	0.00
CRTYOTH	AD2-TYPE OF PRGM-ANOTHER DEGREE	1,140	100.00	0.00
CRPOSBAC	AD4-POST-BACCALAUREATE CERTIFICATE	122	100.00	0.00
CRPOSMAS	AD4-POST-MASTER'S CERTIFICATE	122	100.00	0.00
CRPOSDOC	AD4-POST-DOCTORAL CERTIFICATE	122	100.00	0.00
CRCIPF1	MAJOR FIELD OF STUDY-1	1,188	100.00	0.00
CRCIPF2	MAJOR FIELD OF STUDY-2	120	100.00	0.00
CRCIPF3	MAJOR FIELD OF STUDY-3	8	100.00	0.00
CREXAM3	AD8-TOOK EXAM TO GET CERT/LICENSE-3	5	100.00	0.00
CRCERMO3	AD10-RECEIVED CERT BEFORE LAST YEAR-3	5	100.00	0.00
CRFACUL2	AD15-MEMBER OF FACULTY-2	21	100.00	0.00
CRFACUL3	AD15-MEMBER OF FACULTY-3	1	100.00	0.00
CRASSIS1	AD16-ASSTSHIP/FLWSHIP/WORK STUDY-1	87	100.00	0.00
CRASSIS2	AD16-ASSTSHIP/FLWSHIP/WORK STUDY-2	10	100.00	0.00
CRCLSHR2	AD21-TOTAL CLASSROOM HRS-2	6	100.00	0.00
CRINOTH1	AD22E-INSTR BY OTHER TECHNOLOGY-1	1,166	100.00	0.00
CRINOTH2	AD22E-INSTR BY OTHER TECHNOLOGY-2	116	100.00	0.00
CRINOTH3	AD22E-INSTR BY OTHER TECHNOLOGY-3	8	100.00	0.00
VOVOC	AE2-TYPE OF PRGM-VOCATIONAL DIPLOMA	249	100.00	0.00
VOTECH	AE2-TYPE OF PRGM-TECHNICAL DIPLOMA	249	100.00	0.00
VOASSOC	AE2-TYPE OF PRGM-ASSOCIATE'S DEGREE	249	100.00	0.00
VOOTHDIP	AE2-TYPE OF PRGM-ANOTHER DIPLOMA	249	100.00	0.00
VOCIPF1	MAJOR FIELD OF STUDY-1	249	100.00	0.00
VOCIPF2	MAJOR FIELD OF STUDY-2	11	100.00	0.00
VOREAS2	AE4-PRGM FOR WORK OR PERSONAL REASONS-2	11	100.00	0.00
VOCERT1	AE5-GET/KEEP CERTIFICATE/LICENSE-1	249	100.00	0.00
VOCERT2	AE5-GET/KEEP CERTIFICATE/LICENSE-2	11	100.00	0.00
VOEXAM1	AE6-TOOK EXAM TO GET CERT/LICENSE-1	118	100.00	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
VOEXAM2	AE6-TOOK EXAM TO GET CERT/LICENSE-2.....	6	100.00	0.00
VOCERMO1	AE8-RECEIVED CERT BEFORE LAST YEAR-1	118	100.00	0.00
VOCERMO2	AE8-RECEIVED CERT BEFORE LAST YEAR-2	6	100.00	0.00
VOSTRTM2	AE9-VOCA START MONTH-2	11	100.00	0.00
VOPROVE1	AE12-INSTRUCTION PROVIDER WAS EMPLOYER-1	205	100.00	0.00
VOPROVE2	AE12-INSTRUCTION PROVIDER WAS EMPLOYER-2	9	100.00	0.00
VOFACUL1	AE13-MEMBER OF FACULTY-1	28	100.00	0.00
VOFACUL2	AE13-MEMBER OF FACULTY-2	1	100.00	0.00
VOASSIS1	AE14-ASSTSHIP/FLWSHIP/WORK STUDY-1	18	100.00	0.00
VOPTFT2	AE15-ENROLLED PART-TIME/FULL-TIME/BOTH-2.....	11	100.00	0.00
VOCRSNU2	AE17-NUMBER OF COURSES TOOK IN PRGM-2.....	11	100.00	0.00
VOCLSHR1	AE19-TOTAL CLASSROOM HRS-1	1	100.00	0.00
VOINTV1	AE20A-INSTR BY TV/VIDEO/RADIO-1.....	244	100.00	0.00
VOINTV2	AE20A-INSTR BY TV/VIDEO/RADIO-2.....	11	100.00	0.00
VOINCOM2	AE20B-INSTR BY COMPUTER-2.....	11	100.00	0.00
VOINCON2	AE20C-INSTR BY COMPUTER CONFERENCING-2.....	11	100.00	0.00
VOINOTH1	AE20E-INSTR BY OTHER TECHNOLOGY-1	244	100.00	0.00
VOINOTH2	AE20E-INSTR BY OTHER TECHNOLOGY-2	11	100.00	0.00
VOTECHN2	AE21-NUMBER COURSES USED TECHNOLOGY-2.....	9	100.00	0.00
VOTECHP2	AE22-PERCENT INSTR TECHNOLGY USE-2.....	9	100.00	0.00
VOTUITO2	AE23A-PERSONAL EXPENSE FOR TUITION/FEE-2	11	100.00	0.00
VOMATLS2	AE23B-PERSONAL EXPENSE FOR BKS/MTLS-2	11	100.00	0.00
VOINCBK1	AE24-TUITION/FEE INCLUDE BOOKS/MTLS-1	61	100.00	0.00
VOINCBK2	AE24-TUITION/FEE INCLUDE BOOKS/MTLS-2.....	1	100.00	0.00
VOWORK2	AE25-WORK WHILE TAKING PRGM-2	9	100.00	0.00
VOEMPRE2	AE26-EMPLOYER REQUIRED TO TAKE PRGM-2	7	100.00	0.00
VOEMPSU2	AE27-EMPLOYER SUGGESTED TO TAKE PRGM-2	4	100.00	0.00
VOWRKPL2	AE28-TOOK PRGM AT WORKPLACE-2.....	7	100.00	0.00
VOWRKHR2	AE29-TOOK PRGM DURING WORK HRS-2	7	100.00	0.00
VOEMPAI2	AE30-BEING PAID WHILE TAKING PRGM-2	7	100.00	0.00
VOEMPTU2	AE31A-EMPLOYER PAID TUITION/FEE-2	7	100.00	0.00
VOEMPMA2	AE31B-EMPLOYER PAID BOOKS/MTLS-2	7	100.00	0.00
APEMPLOY	AF3A-EMPLOYER PROVIDED	135	100.00	0.00
APINCBK	AF9-TUITION/FEE INCLUDE BOOKS/MTRLS.....	26	100.00	0.00
WRCRS3	COURSE CODE-3.....	1,125	100.00	0.00
WRCRS4	COURSE CODE-4.....	625	100.00	0.00
WRINOTH3	AH8E-INSTR BY OTHER TECHNOLOGY-3.....	1,125	100.00	0.00
WRINOTH4	AH8E-INSTR BY OTHER TECHNOLOGY-4.....	625	100.00	0.00
WRINCBK3	AH12-TUITION/FEE INCLUDE BOOKS/MTLS-3.....	139	100.00	0.00
WRINCBK4	AH12-TUITION/FEE INCLUDE BOOKS/MTLS-4.....	68	100.00	0.00
WREMPSU4	AH15-EMPLOYER SUGGESTED TO TAKE COURSE-4.....	296	100.00	0.00
WROTIME	AH20D-EMPLOYER GAVE TIME OFF WITH PAY	315	100.00	0.00
SACRS2	PERSONAL INTEREST COURSE CODE-2.....	870	100.00	0.00
SAREAS1	REASON TAKING PERSONAL INTEREST COURSE-1.....	2,679	100.00	0.00
SAREAS2	REASON TAKING PERSONAL INTEREST COURSE-2.....	870	100.00	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
SAPROVE2	AI3-INSTRUCTION PROVIDER WAS EMPLOYER-2.....	584	100.00	0.00
SAINOTH2	AI7E-INSTR BY OTHER TECHNOLOGY-2	870	100.00	0.00
SAWORK2	AI11-WORK WHILE TAKING COURSE-2	584	100.00	0.00
SAWRKPL2	AI12-TOOK COURSE AT WORKPLACE-2	504	100.00	0.00
SAOTECH	AI16E-TAUGHT BY USING TECHNOLOGY	307	100.00	0.00
HGOVSINC	AL14-RECD CHILD CARE BENEFITS SINCE DTE	136	100.00	0.00
CRDEGREE	AD1-COL OR UNIV DEGREE PROGRAM	10,873	99.99	0.00
SEX	GENDER AT SCREENER.....	10,873	99.99	100.00
SEX1	O/HH MEM - #1'S GENDER AT SCREENER	8,076	99.99	100.00
IBWORK12	AA6-WORK AT JOB IN PAST 12 MONTHS.....	10,873	99.97	0.00
CRVOC DIP	AE1-VOCATIONAL OR TECHNICAL DIPLOMA PRGM	10,873	99.96	0.00
SEX3	O/HH MEM - #3'S GENDER AT SCREENER	2,351	99.96	100.00
WRCRS1	COURSE CODE-1.....	3,764	99.95	0.00
WRCRS2	COURSE CODE-2.....	2,010	99.95	0.00
WRRSSKI2	AH2A-MAINTAIN OR IMPROVE SKILLS/KNOWDG-2.....	2,010	99.95	0.00
WRINTV2	AH8A-INSTR BY TV, VIDEO, OR RADIO-2	2,010	99.95	0.00
WRINCOM2	AH8B-INSTR BY COMPUTER-2	2,010	99.95	0.00
WRINOTH1	AH8E-INSTR BY OTHER TECHNOLOGY-1	3,764	99.95	0.00
WRINOTH2	AH8E-INSTR BY OTHER TECHNOLOGY-2.....	2,010	99.95	0.00
IBSPEAK	AA11-LANGUAGE SPOKEN MOST AT HOME NOW	10,873	99.95	100.00
ESLANG	AB1-TOOK ESL CLASSES	1,636	99.94	0.00
FCACTY	AG1-TOOK ANY COURSES	10,873	99.94	0.00
SEX2	O/HH MEM - #2'S GENDER AT SCREENER	4,129	99.93	100.00
IBSELFEM	AA7-SELF-EMPLOYED IN THE PAST 12 MONTHS	7,879	99.92	0.00
IBLANG	AA10-FIRST LANGUAGE LEARNED TO SPEAK.....	10,873	99.91	100.00
IBUSDIPL	AA2OV-RECEIVED HS DIPLOMA/GED IN U.S.	6,000	99.90	0.00
IBDIPLYR	AA3-HS DIPLOMA/GED IN LAST 12 MONTHS.....	6,000	99.90	0.00
BSHSEQUV	AC1C-OTHER HS EQUIVALENCY PROGRAM.....	2,058	99.90	0.00
WRREAS2	REASON FOR TAKING WORK-RELATED COURSE-2.....	2,009	99.90	0.00
WRNWSKI2	AH2B-LEARN NEW SKILLS OR METHODS-2	2,010	99.90	0.00
WRRSRAI2	AH2C-GET A RAISE OR PROMOTION-2.....	2,010	99.90	0.00
WRRSOTH2	AH2G-SOME OTHER REASON-2	2,010	99.90	0.00
WRINWWW2	AH8D-INSTR BY INTERNET/WWW-2.....	2,010	99.90	0.00
APPRENTI	AF1-APPRENTICESHIP PROGRAM	10,873	99.89	0.00
SACRS1	PERSONAL INTEREST COURSE CODE-1	2,682	99.89	0.00
SAINOTH1	AI7E-INSTR BY OTHER TECHNOLOGY-1	2,682	99.89	0.00
WRPROVE2	AH4-INSTRUCTION PROVIDER WAS EMPLOYER-2	1,799	99.89	50.00
FCACTOTH	AG2-TOOK ANY OTHER COURSES	6,926	99.88	25.00
ESEVER	AB22-EVER TAKEN ESL CLASSES	1,484	99.87	0.00
IBDIPL	AA2-HAS HS DIPLOMA/GED	4,709	99.87	100.00
BSIMPROV	AC1A-BASIC SKILLS CLASSES	2,058	99.85	0.00
WRCURR2	AH1-CURRENTLY TAKING COURSE-2.....	2,010	99.85	0.00
WRRSNEW2	AH2D-GET A NEW JOB-2.....	2,010	99.85	0.00
WRRSREQ2	AH2F-BECAUSE IT WAS REQUIRED-2	2,010	99.85	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
WRINCON2	AH8C-INSTR BY COMPUTER CONFERENCING-2.....	2,010	99.85	0.00
WRREAS1	REASON FOR TAKING WORK-RELATED COURSE-1.....	3,762	99.84	0.00
WRREAS4	REASON FOR TAKING WORK-RELATED COURSE-4.....	625	99.84	0.00
WRINCOM1	AH8B-INSTR BY COMPUTER-1	3,764	99.84	0.00
WRJOBSK4	AH10-HOW USEFUL SKILLS IN JOB-4	609	99.84	0.00
CRINTV1	AD22A-INSTR BY TV/VIDEO/RADIO-1	1,166	99.83	0.00
SAWORK1	AI11-WORK WHILE TAKING COURSE-1	1,798	99.83	0.00
WRWORK2	AH13-WORK WHILE TAKING COURSE-2.....	1,799	99.83	33.33
WRWRKPL2	AH16-TOOK COURSE AT WORKPLACE-2.....	1,758	99.83	33.33
SAPROVE1	AI3-INSTRUCTION PROVIDER WAS EMPLOYER-1.....	1,798	99.83	66.67
WRITENGL	AB24-HOW WELL WRITES ENGLISH.....	1,636	99.82	0.00
BSEVER	AC22-EVER TAKEN ABE/GED CLASSES	1,712	99.82	0.00
WRREAS3	REASON FOR TAKING WORK-RELATED COURSE-3.....	1,125	99.82	0.00
WRCURR3	AH1-CURRENTLY TAKING COURSE-3.....	1,125	99.82	0.00
WRWORK4	AH13-WORK WHILE TAKING COURSE-4.....	565	99.82	0.00
WREMPRE4	AH14-EMPLOYER REQUIRED TO TAKE COURSE-4.....	556	99.82	0.00
WRWRKPL4	AH16-TOOK COURSE AT WORKPLACE-4.....	556	99.82	0.00
WRWRKHR4	AH17-TOOK COURSE DURING WORK HRS-4.....	556	99.82	0.00
WREMPA14	AH18-BEING PAID WHILE TAKING COURSE-4	556	99.82	0.00
ILCOMP	AJ1C-SELF-PACED STUDY-COMP SOFTWARE.....	10,873	99.82	0.00
ILOMAG	AJ1F-READ PROFESSIONAL PUBLICATIONS	10,873	99.82	0.00
IBEMPNUM	AA9-NUMBER EMPLOYERS IN PAST 12 MONTHS.....	7,879	99.81	0.00
CRPROVE1	AD14-INSTRUCTION PROVIDER WAS EMPLOYER-1	1,034	99.81	0.00
WRINTV1	AH8A-INSTR BY TV, VIDEO, OR RADIO-1	3,764	99.81	0.00
WRINWWW1	AH8D-INSTR BY INTERNET/WWW-1	3,764	99.81	0.00
SAWRKPL1	AI12-TOOK COURSE AT WORKPLACE-1	1,619	99.81	0.00
SAWRKHR1	AI13-TOOK COURSE DURING WORK HRS-1	1,619	99.81	0.00
SAWRKHR2	AI13-TOOK COURSE DURING WORK HRS-2	504	99.80	0.00
SAEMPMA2	AI15B-EMPLOYER PAID BOOKS/MTLS-2.....	504	99.80	0.00
IBOTHEMP	AA8-WORKED FOR ANOTHER EMPLOYER ALSO	1,453	99.79	0.00
CRWORK1	AD27-WORK WHILE TAKING PRGM-1	974	99.79	0.00
WRRSOTH1	AH2G-SOME OTHER REASON-1	3,764	99.79	0.00
ILCONF	AJ1E-CONFERENCES OR CONVENTIONS.....	10,873	99.79	0.00
WRWORK1	AH13-WORK WHILE TAKING COURSE-1.....	3,312	99.79	14.29
CREMPRE1	AD28-EMPLOYER REQUIRED TO TAKE PRGM-1	874	99.77	0.00
CRWRKPL1	AD30-TOOK PRGM AT WORKPLACE-1	874	99.77	0.00
WREMPSU1	AH15-EMPLOYER SUGGESTED TO TAKE COURSE-1.....	1,736	99.77	0.00
SAINTV2	AI7A-INSTR BY TV/VIDEO/RADIO-2.....	870	99.77	0.00
ILMENTOR	AJ1A-RECEIVED SUPERVISED TRAINING	7,879	99.77	0.00
ILSELF	AJ1B-SELF-PACED STUDY-BOOKS/MANUALS	10,873	99.77	0.00
READENGL	AB23-HOW WELL READS ENGLISH	1,636	99.76	0.00
BSGED	AC1B-GED PREPARATION CLASSES.....	2,058	99.76	0.00
WRRSREQ1	AH2F-BECAUSE IT WAS REQUIRED-1	3,764	99.76	0.00
WRPROVE1	AH4-INSTRUCTION PROVIDER WAS EMPLOYER-1	3,312	99.76	12.50

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
WRRSCER2	AH2E-GET/KEEP CERTIFICATE/LICENSE-2	2,010	99.75	0.00
SAEMPAI1	AI14-BEING PAID WHILE TAKING COURSE-1	1,619	99.75	0.00
CRINCOM1	AD22B-INSTR BY COMPUTER-1	1,166	99.74	0.00
CRINCON1	AD22C-INSTR BY COMPUTER CONFERENCING-1.....	1,166	99.74	0.00
CRINWWW1	AD22D-INSTR BY INTERNET/WWW-1	1,166	99.74	0.00
WRRSRAI1	AH2C-GET A RAISE OR PROMOTION-1.....	3,764	99.73	0.00
WRRSNEW1	AH2D-GET A NEW JOB-1	3,764	99.73	0.00
WRRSNEW3	AH2D-GET A NEW JOB-3.....	1,125	99.73	0.00
WRRSCER3	AH2E-GET/KEEP CERTIFICATE/LICENSE-3	1,125	99.73	0.00
WRRSOTH3	AH2G-SOME OTHER REASON-3	1,125	99.73	0.00
WRINCON1	AH8C-INSTR BY COMPUTER CONFERENCING-1.....	3,764	99.73	0.00
WRJOBK3	AH10-HOW USEFUL SKILLS IN JOB-3	1,092	99.73	0.00
WROCERT	AH20E-TO GET/KEEP CERTIFICATE/LICENSE.....	353	99.72	0.00
WROTECH	AH20F-TAUGHT BY USING TECHNOLOGY.....	353	99.72	0.00
WREMPRE2	AH14-EMPLOYER REQUIRED TO TAKE COURSE-2.....	1,758	99.72	20.00
WREMPAI2	AH18-BEING PAID WHILE TAKING COURSE-2	1,758	99.72	20.00
ILBBAG	AJ1D-BROWN-BAG OR INFORMAL PRESENT	10,873	99.71	0.00
WRWRKPL1	AH16-TOOK COURSE AT WORKPLACE-1	3,201	99.69	10.00
WRJOBK2	AH10-HOW USEFUL SKILLS IN JOB-2	1,938	99.69	16.67
WRCURR4	AH1-CURRENTLY TAKING COURSE-4.....	625	99.68	0.00
WRRSSKI1	AH2A-MAINTAIN OR IMPROVE SKILLS/KNOWDG-1.....	3,764	99.68	0.00
WRRSSKI4	AH2A-MAINTAIN OR IMPROVE SKILLS/KNOWDG-4.....	625	99.68	0.00
WRNWSKI4	AH2B-LEARN NEW SKILLS OR METHODS-4	625	99.68	0.00
WRRSRAI4	AH2C-GET A RAISE OR PROMOTION-4.....	625	99.68	0.00
WRRSNEW4	AH2D-GET A NEW JOB-4.....	625	99.68	0.00
WRRSCER4	AH2E-GET/KEEP CERTIFICATE/LICENSE-4	625	99.68	0.00
WRRSOTH4	AH2G-SOME OTHER REASON-4	625	99.68	0.00
WROREQ	AH20A-REQUIRED BY EMPLOYER.....	315	99.68	0.00
WROPAY	AH20C-EMPLOYER PAID ALL/PART OF COST	315	99.68	0.00
SAOCOLL	AI16B-TAUGHT BY COLLEGE/UNIVERSITY.....	307	99.67	0.00
AGE4	O/HH MEM - #4'S AGE AT SCREENER	914	99.67	100.00
CRREAS1	AD6-PRGM FOR WORK OR PERSONAL REASONS-1	1,188	99.66	0.00
CRWRKHR1	AD31-TOOK PRGM DURING WORK HRS-1	874	99.66	0.00
SAPRTYP2	AI2-TYPE OF INSTRUCTION PROVIDER-2.....	870	99.66	0.00
SAINTV1	AI7A-INSTR BY TV/VIDEO/RADIO-1.....	2,682	99.66	0.00
SAINCOM2	AI7B-INSTR BY COMPUTER-2.....	870	99.66	0.00
SAINWWW1	AI7D-INSTR BY INTERNET/WWW-1	2,682	99.66	0.00
WRNWSKI1	AH2B-LEARN NEW SKILLS OR METHODS-1	3,764	99.65	0.00
CRPOSTDG	AD3-ENROLLED IN POST-DEGREE PROGRAM	3,377	99.64	0.00
WRRSSKI3	AH2A-MAINTAIN OR IMPROVE SKILLS/KNOWDG-3.....	1,125	99.64	0.00
WRNWSKI3	AH2B-LEARN NEW SKILLS OR METHODS-3	1,125	99.64	0.00
WRRSRAI3	AH2C-GET A RAISE OR PROMOTION-3.....	1,125	99.64	0.00
WRINCOM3	AH8B-INSTR BY COMPUTER-3	1,125	99.64	0.00
WRINCON3	AH8C-INSTR BY COMPUTER CONFERENCING-3.....	1,125	99.64	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
ILCERT	AJ2-GET/KEEP CERTIFICATE/LICENSE.....	7,179	99.64	0.00
WRJOBSK1	AH10-HOW USEFUL SKILLS IN JOB-1	3,591	99.64	7.69
CREMPSU1	AD29-EMPLOYER SUGGESTED TO TAKE PRGM-1	805	99.63	0.00
WRCURR1	AH1-CURRENTLY TAKING COURSE-1	3,764	99.63	0.00
WREMPSU3	AH15-EMPLOYER SUGGESTED TO TAKE COURSE-3.....	534	99.63	0.00
SAINCOM1	AI7B-INSTR BY COMPUTER-1.....	2,682	99.63	0.00
WRPROVE3	AH4-INSTRUCTION PROVIDER WAS EMPLOYER-3	1,018	99.61	0.00
WRWORK3	AH13-WORK WHILE TAKING COURSE-3.....	1,018	99.61	0.00
VOREAS1	AE4-PRGM FOR WORK OR PERSONAL REASONS-1	249	99.60	0.00
WRRSCER1	AH2E-GET/KEEP CERTIFICATE/LICENSE-1	3,764	99.60	0.00
SAEMPAI2	AI14-BEING PAID WHILE TAKING COURSE-2	504	99.60	0.00
SAEMPTU2	AI15A-EMPLOYER PAID TUITON/FEES-2	504	99.60	0.00
VOINCOM1	AE20B-INSTR BY COMPUTER-1.....	244	99.59	0.00
VOINWWW1	AE20D-INSTR BY INTERNET/WWW-1	244	99.59	0.00
WRINCBK2	AH12-TUITION/FEES INCLUDE BOOKS/MTLS-2.....	246	99.59	0.00
WREMPSU2	AH15-EMPLOYER SUGGESTED TO TAKE COURSE-2.....	950	99.58	0.00
ILOTH	AJ1G-OTHER LESS FORMAL LEARNING.....	10,873	99.57	0.00
WRRSREQ3	AH2F-BECAUSE IT WAS REQUIRED-3	1,125	99.56	0.00
WRINWWW3	AH8D-INSTR BY INTERNET/WWW-3.....	1,125	99.56	0.00
CREMPAI1	AD32-BEING PAID WHILE TAKING PRGM-1	874	99.54	0.00
CREMPTU1	AD33A-EMPLOYER PAID TUITION/FEE-1	874	99.54	0.00
CREMPMA1	AD33B-EMPLOYER PAID BOOKS/MTLS-1	874	99.54	0.00
SACRED2	AI4-EARNED COLLEGE CREDIT-2	870	99.54	0.00
SAINCON2	AI7C-INSTR BY COMPUTER CONFERENCING-2	870	99.54	0.00
WRWRKHR2	AH17-TOOK COURSE DURING WORK HRS-2.....	1,758	99.54	12.50
ABORNUS	AK8-COUNTRY OF ORIGIN	10,873	99.54	100.00
WREMPRE1	AH14-EMPLOYER REQUIRED TO TAKE COURSE-1.....	3,201	99.53	6.67
WRWRKHR1	AH17-TOOK COURSE DURING WORK HRS-1.....	3,201	99.53	6.67
IBGRADE	AA1-HIGHEST GRADE/YEAR SCHOOL COMPLETED.....	10,873	99.53	100.00
WRRSREQ4	AH2F-BECAUSE IT WAS REQUIRED-4	625	99.52	0.00
WRINCON4	AH8C-INSTR BY COMPUTER CONFERENCING-4.....	625	99.52	0.00
WRINWWW4	AH8D-INSTR BY INTERNET/WWW-4.....	625	99.52	0.00
SAEMPTU1	AI15A-EMPLOYER PAID TUITON/FEES-1	1,619	99.51	0.00
SAEMPMA1	AI15B-EMPLOYER PAID BOOKS/MTLS-1.....	1,619	99.51	0.00
WREMPRE3	AH14-EMPLOYER REQUIRED TO TAKE COURSE-3.....	996	99.50	0.00
WREMPAI1	AH18-BEING PAID WHILE TAKING COURSE-1	3,201	99.50	6.25
BSFEEL	AC5F-IMPROVE THE WAY YOU FEEL ABOUT SELF.....	197	99.49	0.00
VOWORK1	AE25-WORK WHILE TAKING PRGM-1	196	99.49	0.00
AGE3	O/HH MEM - #3'S AGE AT SCREENER	2,351	99.49	100.00
SAOREQ	AI16A-REQUIRED BY EMPLOYER	191	99.48	0.00
SAOPAY	AI16C-EMPLOYER PAID ALL/PART OF COST.....	191	99.48	0.00
SAOTIME	AI16D-EMPLOYER GAVE TIME OFF WITH PAY.....	191	99.48	0.00
WRINTV3	AH8A-INSTR BY TV, VIDEO, OR RADIO-3	1,125	99.47	0.00
IBHSREQ	AA4-COMPLETED HS REQUIREMENTS	9,377	99.45	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
SAPRTYP1	AI2-TYPE OF INSTRUCTION PROVIDER-1	2,682	99.44	0.00
AGE1	O/HH MEM - #1'S AGE AT SCREENER	8,076	99.44	100.00
SACURR2	AI1-CURRENTLY TAKING COURSE-2	870	99.43	0.00
SAINWWW2	AI7D-INSTR BY INTERNET/WWW-2	870	99.43	0.00
VOEMPRE1	AE26-EMPLOYER REQUIRED TO TAKE PRGM-1	173	99.42	0.00
VOEMPA11	AE30-BEING PAID WHILE TAKING PRGM-1	173	99.42	0.00
VOEMPTU1	AE31A-EMPLOYER PAID TUITION/FEE-1	173	99.42	0.00
VOEMPMA1	AE31B-EMPLOYER PAID BOOKS/MTLS-1	173	99.42	0.00
FCOTH	AG6-COURSES FOR WORK OR PERSONAL REASONS	3,474	99.42	5.00
WRWRKHR3	AH17-TOOK COURSE DURING WORK HRS-3.....	996	99.40	0.00
SAINCON1	AI7C-INSTR BY COMPUTER CONFERENCING-1	2,682	99.40	0.00
APUNION	AF3B-LABOR UNION PROVIDED	163	99.39	0.00
AGE2	O/HH MEM - #2'S AGE AT SCREENER	4,129	99.37	100.00
AGE5	O/HH MEM - #5'S AGE AT SCREENER	317	99.37	100.00
WREXAM3	AH2OV1-TOOK EXAM TO GET CERT/LICENSE-3.....	312	99.36	0.00
WRCERMO3	AH2OV3-RECEIVE CERT BEFORE LAST YEAR-3	312	99.36	0.00
WRINTV4	AH8A-INSTR BY TV, VIDEO, OR RADIO-4	625	99.36	0.00
WRINCOM4	AH8B-INSTR BY COMPUTER-4	625	99.36	0.00
ILEXAM	AJ2OV1-TOOK EXAM TO GET CERT/LICENSE	932	99.36	0.00
ESNOW	AB2-CURRENTLY TAKING ESL CLASSES	152	99.34	0.00
ESREAS	AB4-ESL FOR WORK OR PERSONAL REASONS	152	99.34	0.00
ESCHIL	AB5A-HELP CHILDREN WITH SCHOOL WORK.....	152	99.34	0.00
ESUSCIT	AB5B-GET U.S. CITIZENSHIP	152	99.34	0.00
ESRAISE	AB5D-GET RAISE OR PROMOTION.....	152	99.34	0.00
ESCOLVOC	AB5E-ATTEND COLLEGE OR VOCATIONAL SCHOOL	152	99.34	0.00
ESRSOTH	AB5I-SOME OTHER REASON	152	99.34	0.00
CRPTFT1	AD17-ENROLLED PART-TIME/FULL-TIME/BOTH-1	1,188	99.33	0.00
IBVOCDIP	AA1OV-RECEIVED VOC/TECH DIPLOMA	1,915	99.32	100.00
APCOLCR	AF7-EARNED COLLEGE CREDIT	143	99.30	0.00
WRWRKPL3	AH16-TOOK COURSE AT WORKPLACE-3.....	996	99.30	0.00
WREMPA13	AH18-BEING PAID WHILE TAKING COURSE-3	996	99.30	0.00
BSWORK	AC15-WORK WHILE TAKING ABE/GED.....	140	99.29	0.00
WRCLSHR3	WORK-REL CRSE TOTAL HRS/YEAR-3	1,125	99.29	0.00
WRPROVE4	AH4-INSTRUCTION PROVIDER WAS EMPLOYER-4	565	99.29	0.00
VOEMPSU1	AE27-EMPLOYER SUGGESTED TO TAKE PRGM-1	136	99.26	0.00
ADISABL	AK7-LONG TERM PROBLEMS THAT LIMITED YOU	10,873	99.26	0.00
HGOVEVR	AL13-EVER RECD CHILD CARE BENEFITS	136	99.26	0.00
CRCERT1	AD7-GET/KEEP CERTIFICATE/LICENSE-1	1,188	99.24	0.00
WRPRTP4	AH3-TYPE OF INSTRUCTION PROVIDER-4	625	99.20	0.00
VOINCON1	AE20C-INSTR BY COMPUTER CONFERENCING-1	244	99.18	0.00
SACURR1	AI1-CURRENTLY TAKING COURSE-1	2,682	99.18	0.00
WRPRTP2	AH3-TYPE OF INSTRUCTION PROVIDER-2	2,010	99.15	0.00
WROCOLL	AH20B-TAUGHT BY COLLEGE/UNIVERSITY	353	99.15	0.00
AGE6	O/HH MEM - #6'S AGE AT SCREENER	116	99.14	100.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
WRTUITO3	AH11A-PERSONAL EXPENSES FOR COURSES-3	1,125	99.11	0.00
AMARSTAT	AK6-CURRENT MARITAL STATUS	10,873	99.09	100.00
BSEMPREQ	AC16-EMPLOYER REQUIRED TO TAKE ABE/GED.....	106	99.06	0.00
BSWRKPL	AC18-TOOK ABE/GED AT WORKPLACE.....	106	99.06	0.00
BSEMPAID	AC20-PAID WHILE TAKING ABE/GED.....	106	99.06	0.00
BSEMPUI	AC21A-EMPLOYER PAID TUITION/FEE	106	99.06	0.00
BSEMPMAT	AC21B-EMPLOYER PAID BOOKS/MTLS.....	106	99.06	0.00
WRTUITO2	AH11A-PERSONAL EXPENSES FOR COURSES-2.....	2,010	99.05	0.00
WRMATLS2	AH11B-PERSONAL EXPENSES FOR BOOKS/MTLS-2.....	2,010	99.05	0.00
WRCLSHR4	WORK-REL CRSE TOTAL HRS/YEAR-4	625	99.04	0.00
WRMATLS3	AH11B-PERSONAL EXPENSES FOR BOOKS/MTLS-3.....	1,125	99.02	0.00
WRCLSHR2	WORK-REL CRSE TOTAL HRS/YEAR-2.....	2,010	99.00	0.00
WREXAM1	AH20V1-TOOK EXAM TO GET CERT/LICENSE-1.....	1,201	99.00	0.00
BSJOB	AC5B-GET A NEW JOB	197	98.98	0.00
BSRAISE	AC5C-GET RAISE OR PROMOTION	197	98.98	0.00
BSCOLVOC	AC5D-ATTEND COLLEGE OR VOCATIONAL SCHOOL.....	197	98.98	0.00
BSRSOTH	AC5H-SOME OTHER REASON	197	98.98	0.00
BSEMPUG	AC17-EMPLOYER SUGGESTED TO TAKE ABE/GED	98	98.98	0.00
ASTUENG	AK10-STUDY ENGLISH BEFORE CAME TO US.....	1,173	98.98	0.00
SACRED1	AI4-EARNED COLLEGE CREDIT-1	2,682	98.96	0.00
ESPROVEM	AB7-INSTRUCTION PROVIDER WAS EMPLOYER.....	95	98.95	0.00
ESWORK	AB15-WORK WHILE TAKING ESL CLASSES.....	95	98.95	0.00
WRCRED2	AH5-EARNED COLLEGE CREDIT-2.....	2,010	98.91	0.00
IBWORKMO	AK12-MONTHS WORKED FOR PAY IN PAST YEAR	10,873	98.90	0.00
WRTUITO4	AH11A-PERSONAL EXPENSES FOR COURSES-4.....	625	98.88	0.00
COMPHOME	AK28-HAVE HOME COMPUTER/LAPTOP	10,873	98.87	0.00
COMPWORK	AK29-HAVE ACCESS TO COMPUTER AT WORK.....	7,879	98.86	0.00
WREMPU2	AH19A-EMPLOYER PAID TUITION/FEE-2.....	1,758	98.86	5.00
CUREMP	AK19-CURRENTLY EMPLOYED	7,879	98.85	2.20
VOWRKHR1	AE29-TOOK PRGM DURING WORK HRS-1	173	98.84	0.00
WRPRTP3	AH3-TYPE OF INSTRUCTION PROVIDER-3	1,125	98.84	0.00
CERTPROF	AK24-HAVE OTHER CERT/LICENSURE	10,873	98.84	0.00
WREXAM2	AH20V1-TOOK EXAM TO GET CERT/LICENSE-2.....	600	98.83	0.00
WRTUITO1	AH11A-PERSONAL EXPENSES FOR COURSES-1	3,764	98.83	0.00
IBGRAD2	AA1-ACTUAL GRADE 9-11 COMPLETED.....	942	98.83	100.00
ESAGAIN	AB3-WOULD YOU TAKE ESL AGAIN	84	98.81	0.00
WREMPMA2	AH19B-EMPLOYER PAID BOOKS/MTLS-2	1,758	98.81	4.76
AHISPANI	AK5-HISPANIC ORIGIN	10,873	98.81	100.00
WRPRTP1	AH3-TYPE OF INSTRUCTION PROVIDER-1	3,764	98.80	0.00
WEBHOME	AK30-HAVE ACCESS TO INTERNET AT HOME	10,873	98.79	0.00
APOTHER	AF3E-SOMEONE ELSE PROVIDED	163	98.77	0.00
APTUITON	AF8A-PERSONAL EXPENSE FOR TUITION/FEES	163	98.77	0.00
JOBEVER	AK11-EVER WORKED AT A JOB FOR PAY	2,994	98.76	0.00
SUPERV	AK22-HAVE ANY SUPERVISORY ROLE AT WORK	7,879	98.76	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
WRINCBK1	AH12-TUITION/FEE INCLUDE BOOKS/MTLS-1.....	558	98.75	0.00
AUNEMP	AK13-PAST 12 MONTH UNEMP AND LOOKING	4,489	98.75	0.00
CRCRSNU1	AD19-NUMBER OF COURSES TOOK IN PRGM-1	1,188	98.74	0.00
CERTJOB	AK23-HAVE CERT/LICENSURE FOR JOB	7,879	98.74	0.00
CRFACUL1	AD15-MEMBER OF FACULTY-1	158	98.73	0.00
HOTHNUM	AL2-OTHR PHONE NMBRS/HOME USE.....	10,873	98.73	0.00
WRCRED4	AH5-EARNED COLLEGE CREDIT-4.....	625	98.72	0.00
WRMATLS4	AH11B-PERSONAL EXPENSES FOR BOOKS/MTLS-4	625	98.72	0.00
HGOVCUR	AL15-FAMLY CUR RECVS MONEY FOR CH CARE	2,478	98.71	0.00
ESJOB	AB5C-GET A NEW JOB	152	98.68	0.00
ESLIFE	AB5H-IMPROVE DAILY TASK	152	98.68	0.00
ESPRYP	AB6-TYPE OF INSTRUCTION PROVIDER.....	152	98.68	0.00
ESEMPREQ	AB16-EMPLOYER REQUIRED TO TAKE ESL.....	76	98.68	0.00
ESWRKPL	AB18-TOOK ESL CLASSES AT WORKPLACE.....	76	98.68	0.00
ESWRKHR	AB19-TOOK ESL CLASSES DURING WORK HRS.....	76	98.68	0.00
ESEMPAID	AB20-BEING PAID WHILE TAKING ESL CLASSES.....	76	98.68	0.00
WRCERMO2	AH2OV3-RECEIVE CERT BEFORE LAST YEAR-2	600	98.67	0.00
WRMATLS1	AH11B-PERSONAL EXPENSES FOR BOOKS/MTLS-1	3,764	98.65	0.00
CRCERMO1	AD10-RECEIVED CERT BEFORE LAST YEAR-1	219	98.63	0.00
WRTECHP2	AH9-PERCENT INSTR USED TECHNOLOGY-2	1,456	98.63	0.00
ALIVWITH	AK6OV-LIVING WITH PARTNER.....	2,186	98.63	100.00
WRTECHP4	AH9-PERCENT INSTR USED TECHNOLOGY-4	433	98.61	0.00
GIHOPE	AK32B-HEARD OF HOPE SCHOLARSHIP TAX CRED	10,873	98.57	0.00
WREMPMA4	AH19B-EMPLOYER PAID BOOKS/MTLS-4	556	98.56	0.00
LABUNION	AK26-MEM OF LABOR UNION OR ORGANIZATI.....	10,099	98.56	0.00
WRCLSHR1	WORK-REL CRSE TOTAL HRS/YEAR-1	3,764	98.54	0.00
ESEMPUG	AB17-EMPLOYER SUGGESTED TO TAKE ESL.....	68	98.53	0.00
BSNOW	AC2-CURRENTLY TAKING ABE/GED CLASSES	197	98.48	0.00
BSLIFE	AC5G-IMPROVE DAILY TASK	197	98.48	0.00
HNUMUSE	AL4-# OF OTHR PHONE NMBRS/HOME USE.....	1,939	98.45	0.00
HAFDC3YR	AL10-FAMLY RECD WELFARE IN PAST 3 YRS	2,599	98.42	0.00
WRCRED3	AH5-EARNED COLLEGE CREDIT-3	1,125	98.40	0.00
WRCEU4	AH6-EARNED CEU-4	625	98.40	0.00
GILIFE	AK32A-HEARD LIFETIME LEARNING TAX CRED	10,873	98.39	0.00
WREMPU4	AH19A-EMPLOYER PAID TUITION/FEE-4.....	556	98.38	0.00
HAFDCCUR	AL11-FAMLY CURRENTLY RECVS WELFARE	304	98.36	0.00
WRCRED1	AH5-EARNED COLLEGE CREDIT-1	3,764	98.35	0.00
HWIC	AL16A-FAMLY RECD WIC PAST 12 MO	3,069	98.31	0.00
HFOODST	AL16B-FAMLY RECD FOOD STMPST 12 MO.....	3,069	98.31	0.00
ARACE	AK3-RACE.....	10,873	98.31	100.00
FSOC	OCCUPATION CODE (SOC).....	7,879	98.30	0.75
WREMPU3	AH19A-EMPLOYER PAID TUITION/FEE-3.....	996	98.29	0.00
WREMPMA3	AH19B-EMPLOYER PAID BOOKS/MTLS-3	996	98.29	0.00
SACEU2	AI5-EARNED CEUS-2.....	870	98.28	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
WREMP TU1	AH19A-EMPLOYER PAID TUITION/FEE-1.....	3,201	98.25	1.79
WRCEU2	AH6-EARNED CEU-2	2,010	98.21	0.00
WRTECHP3	AH9-PERCENT INSTR USED TECHNOLOGY-3	783	98.21	0.00
PAYHRS	AK15-HRS PER WEEK WORKED FOR PAY	7,879	98.20	0.00
ILCERMO	AJ2OV3-RECEIVED CERT BEFORE LAST YEAR.....	932	98.18	0.00
CREXAM1	AD8-TOOK EXAM TO GET CERT/LICENSE-1	219	98.17	0.00
JOBACTY	AK14-MAIN ACT DONE MOST OF LAST WEEK.....	4,489	98.17	0.00
APSTAGOV	AF3C-LOCAL OR STATE GOVERNMENT PROVIDED	163	98.16	0.00
APSTRTMM	AF4-APPR PRGM START MONTH.....	163	98.16	0.00
WEBWORK	AK31-HAVE ACCESS TO INTERNET AT WORK.....	7,879	98.16	0.00
APSTRYY	AF4-APPR PRGM START YEAR.....	163	98.16	33.33
BSWRKHR	AC19-TOOK ABE/GED DURING REGULAR WORK HR	106	98.11	0.00
HOWNHOME	AL1-OWN, RENT HOME/OTHR ARRANGMNT	10,873	98.11	0.00
FSIC	INDUSTRY CODE (SIC).....	7,879	98.11	0.67
WREXAM4	AH2OV1-TOOK EXAM TO GET CERT/LICENSE-4.....	157	98.09	0.00
SAMATLS1	AI9B-PERSONAL EXPENSES FOR BOOKS/MTLS-1	2,682	98.06	0.00
WREMPMA1	AH19B-EMPLOYER PAID BOOKS/MTLS-1	3,201	98.06	1.61
CRINCBK1	AD26-TUITION/FEE INCLUDE BOOKS/MTLS-1.....	101	98.02	0.00
WRCERMO1	AH2OV3-RECEIVE CERT BEFORE LAST YEAR-1	1,201	98.00	0.00
CRSTRTY1	AD11-CRED START YEAR-1	1,188	97.98	41.67
BSREAS	AC4-ABE/GED FOR WORK OR PERSONAL REASONS	197	97.97	0.00
IBGEDCLS	AA5-TOOK COURSE/TUTOR TO PREPARE FOR GED	672	97.92	0.00
SACEU1	AI5-EARNED CEUS-1.....	2,682	97.91	0.00
HCHIP	AL16D-FAMLY RECD CHIP PAST 12 MO.....	3,069	97.85	0.00
WRCEU3	AH6-EARNED CEU-3	1,125	97.78	0.00
HMEDIC	AL16C-FAMLY RECD MEDICAID PAST 12 MO	3,069	97.78	0.00
VOWRKPL1	AE28-TOOK PRGM AT WORKPLACE-1.....	173	97.69	0.00
WRTECHP1	AH9-PERCENT INSTR USED TECHNOLOGY-1	2,756	97.68	0.00
SAINCBK2	AI10-TUITION/FEE INCLUDE BOOKS/MTLS-2	300	97.67	0.00
AOTHRACE	AK4-OTHER RACE.....	1,013	97.63	100.00
SAMATLS2	AI9B-PERSONAL EXPENSES FOR BOOKS/MTLS-2	870	97.59	0.00
UNIONCON	AK27-COVERED BY UNION CONTRACT	1,190	97.56	0.00
ADOBMM	AK1-MONTH OF BIRTH.....	10,873	97.53	0.00
ADOBY	AK1-YEAR OF BIRTH.....	10,873	97.48	100.00
SATUITO2	AI9A-PERSONAL EXPENSES FOR TUITION/FEE-2.....	870	97.47	0.00
SATUITO1	AI9A-PERSONAL EXPENSES FOR TUITION/FEE-1	2,682	97.46	0.00
ES PUBAST	AB5F-MEET REQ MNT FOR PUBLIC ASSISTANCE	152	97.37	0.00
ESFEEL	AB5G-IMPROVE THE WAY YOU FEEL ABOUT SELF	152	97.37	0.00
ESEMP TU1	AB21A-EMPLOYER PAID TUITION/FEE	76	97.37	0.00
ESEMP MAT	AB21B-EMPLOYER PAID BOOKS/MTLS.....	76	97.37	0.00
CONTREQ	AK25-REQUIRED CONTINUING EDUCATION.....	10,873	97.29	0.00
IBGRAD1	AA1-ACTUAL GRADE 0-8 COMPLETED.....	608	97.20	100.00
CRSTRM1	AD11-CRED START MONTH-1.....	1,188	97.14	0.00
SACLSHR2	PERSONAL INTEREST COURSE TOTAL HRS-2.....	870	97.13	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
AGE7	O/HH MEM - #7'S AGE AT SCREENER	34	97.06	100.00
BSTUITON	AC13A-PERSONAL EXPENSES FOR TUITION/FEES	197	96.95	0.00
VOTECHP1	AE22-PERCENT INSTR TECHNOLOGY USE-1	191	96.86	0.00
WRCEU1	AH6-EARNED CEU-1	3,764	96.84	0.00
WRCERMO4	AH20V3-RECEIVE CERT BEFORE LAST YEAR-4	157	96.82	0.00
VOCRSNU1	AE17-NUMBER OF COURSES TOOK IN PRGM-1	249	96.79	0.00
AMOVEAGE	AK8OV-AGE WHEN MOVED TO U.S.	1,430	96.78	100.00
CRCERMO2	AD10-RECEIVED CERT BEFORE LAST YEAR-2	31	96.77	0.00
CRCERT2	AD7-GET/KEEP CERTIFICATE/LICENSE-2	120	96.67	0.00
CRMATLS1	AD25B-PERSONAL EXPENSE FOR BOOKS/MTLS-1	1,188	96.63	0.00
CRTECHP1	AD24-PERCENT INSTR USED TECHNOLOGY-1	856	96.61	0.00
BSPRTYP	AC6-TYPE OF INSTRUCTION PROVIDER.....	197	96.45	0.00
CRPROVE2	AD14-INSTRUCTION PROVIDER WAS EMPLOYER-2	112	96.43	0.00
VOPTFT1	AE15-ENROLLED PART-TIME/FULL-TIME/BOTH-1	249	96.39	0.00
SATECHP1	AI8-PERCENT INSTR USED TECHNOLOGY-1	1,189	96.22	0.00
SAINCBK1	AI10-TUITION/FEES INCLUDE BOOKS/MTLS-1	854	96.14	0.00
SACLSHR1	PERSONAL INTEREST COURSE TOTAL HRS-1	2,682	96.09	0.00
BSMATLS	AC13B-PERSONAL EXPENSES FOR BOOKS/MTLS	197	95.94	0.00
BSINCBK	AC14-TUITION/FEES INCLUDE BOOKS/MTLS	24	95.83	0.00
APMATLS	AF8B-PERSONAL EXPENSE FOR BOOKS/MTLS	163	95.71	0.00
VOTUITO1	AE23A-PERSONAL EXPENSE FOR TUITION/FEE-1	249	95.58	0.00
ESCOLL	AB8-EARNED COLLEGE CREDIT	152	95.39	0.00
ESMATLS	AB13B-PERSONAL EXPENSES FOR BOOKS/MTLS	152	95.39	0.00
SATECHP2	AI8-PERCENT INSTR USED TECHNOLOGY-2	368	95.38	0.00
NUMPEEP	AK20-EMPLOYER SIZE.....	7,879	95.38	0.00
VOTECHN1	AE21-NUMBER COURSES USED TECHNOLOGY-1	191	95.29	0.00
APFEDGOV	AF3D-FED GOVERNMENT PROVIDED	163	95.09	0.00
CRREAS2	AD6-PRGM FOR WORK OR PERSONAL REASONS-2	120	95.00	0.00
BSAGAIN	AC3-WOULD YOU TAKE ABE/GED AGAIN	117	94.87	0.00
VOMATLS1	AE23B-PERSONAL EXPENSE FOR BKS/MTLS-1	249	94.78	0.00
CRENRNU1	AD18-HOW LONG ENROLLED IN PGRM-1	1,188	94.70	0.00
CRENRUN1	AD18-UNIT ENROLLED IN PGRM-1	1,188	94.70	0.00
VOSTRTM1	AE9-VOCA START MONTH-1	249	94.38	0.00
VOCOMPY1	AE10-VOCA COMPLETION YEAR-1	249	94.38	7.14
CRTUITO1	AD25A-PERSONAL EXPENSE FOR TUITION/FEE-1	1,188	94.11	0.00
ESHRYR	AB10-TOTAL HRS ATTEND ESL CLASSES	152	94.08	0.00
ESTUITON	AB13A-PERSONAL EXPENSES FOR TUITION/FEES	152	94.08	0.00
GIHOPUS	AK34-USE HOPE SCHOLARSHIP TAX CREDIT	943	93.85	0.00
AGE8	O/HH MEM - #8'S AGE AT SCREENER	16	93.75	100.00
CRCOMPY1	AD12-CRED COMPLETION YEAR-1	1,188	93.69	4.00
CRTECHN1	AD23-NUM OF COURSES USED TECHNOLOGY-1	856	93.34	12.28
VOCOMPM1	AE10-VOCA COMPLETION MONTH-1	249	93.17	0.00
USGRADE	AK9-HIGHEST GRADE BEFORE MOVING TO US	1,258	93.16	100.00
CRWORK2	AD27-WORK WHILE TAKING PRGM-2	102	93.14	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CRCRDHR1	AD20-TOTAL CREDIT HRS ENROLLED-1	1,188	93.10	0.00
VOENRNU1	AE16-HOW LONG ENROLLED IN PGRM-1	249	92.77	0.00
VOENRUN1	AE16-UNIT ENROLLED IN PRGM-1	249	92.77	0.00
VOSTRTY1	AE9-VOCA START YEAR-1	249	92.77	66.67
CREMPRE2	AD28-EMPLOYER REQUIRED TO TAKE PRGM-2	81	92.59	0.00
CRWRKPL2	AD30-TOOK PRGM AT WORKPLACE-2	81	92.59	0.00
CRWRKHR2	AD31-TOOK PRGM DURING WORK HRS-2	81	92.59	0.00
CREMPAI2	AD32-BEING PAID WHILE TAKING PRGM-2	81	92.59	0.00
CREMPTU2	AD33A-EMPLOYER PAID TUITION/FEE-2	81	92.59	0.00
CREMPMA2	AD33B-EMPLOYER PAID BOOKS/MTLS-2	81	92.59	0.00
CRSTRM2	AD11-CRED START MONTH-2	120	92.50	0.00
CREMPSU2	AD29-EMPLOYER SUGGESTED TO TAKE PRGM-2	76	92.11	0.00
GILIFUS	AK33-USE LIFETIME LEARNING TAX CREDIT	1,210	91.90	0.00
BSFMLIT	AC9-ABE/GED WAS PART OF FAM LITERACY	197	91.88	0.00
HSTOPYY	AL12-YEAR STOPPED RECV WELFARE	136	91.18	0.00
VOCOMPY2	AE10-VOCA COMPLETION YEAR-2	11	90.91	0.00
VOENRNU2	AE16-HOW LONG ENROLLED IN PGRM-2	11	90.91	0.00
VOENRUN2	AE16-UNIT ENROLLED IN PRGM-2	11	90.91	0.00
VOINWWW2	AE20D-INSTR BY INTERNET/WWW-2	11	90.91	0.00
CRSTRTY2	AD11-CRED START YEAR-2	120	90.83	18.18
CRINTV2	AD22A-INSTR BY TV/VIDEO/RADIO-2	116	90.52	0.00
CRINCOM2	AD22B-INSTR BY COMPUTER-2	116	90.52	0.00
CRINCON2	AD22C-INSTR BY COMPUTER CONFERENCING-2	116	90.52	0.00
CRINWWW2	AD22D-INSTR BY INTERNET/WWW-2	116	90.52	0.00
CREXAM2	AD8-TOOK EXAM TO GET CERT/LICENSE-2	31	90.32	0.00
CRCOMPM1	AD12-CRED COMPLETION MONTH-1	1,188	90.24	0.00
CRCRSNU2	AD19-NUMBER OF COURSES TOOK IN PRGM-2	120	90.00	0.00
APCOMPMM	AF5-APPR PRGM COMPLETION MONTH	163	89.57	0.00
CRCOMPM2	AD12-CRED COMPLETION MONTH-2	120	89.17	0.00
BSHRYR	AC10-TOTAL HRS ATTENDED ABE/GED	197	88.83	9.09
CRPTFT2	AD17-ENROLLED PART-TIME/FULL-TIME/BOTH-2	120	88.33	0.00
CRMATLS2	AD25B-PERSONAL EXPENSE FOR BOOKS/MTLS-2	120	88.33	0.00
CRREAS3	AD6-PRGM FOR WORK OR PERSONAL REASONS-3	8	87.50	0.00
CRCERT3	AD7-GET/KEEP CERTIFICATE/LICENSE-3	8	87.50	0.00
CRSTRM3	AD11-CRED START MONTH-3	8	87.50	0.00
CRCOMPY2	AD12-CRED COMPLETION YEAR-2	120	87.50	0.00
CRTUITO2	AD25A-PERSONAL EXPENSE FOR TUITION/FEE-2	120	87.50	0.00
CRTECHP2	AD24-PERCENT INSTR USED TECHNOLOGY-2	78	87.18	0.00
APCOMPYY	AF5-APPR PRGM COMPLETION YEAR	146	86.99	36.84
HINCMRNG	AL17-TOTAL HH INCOME RANGE	10,873	85.55	0.00
APCLSHR	AF6-TOTAL CLASSROOM INST HRS	163	84.05	0.00
CRTECHN2	AD23-NUM OF COURSES USED TECHNOLOGY-2	78	83.33	7.69
HINCM50K	AL17OV-HH INCOME BELOW/ABOVE \$50K	7,801	82.55	0.00
CRENRNU2	AD18-HOW LONG ENROLLED IN PGRM-2	120	82.50	0.00

See notes at end of table.

**Table 6-3. Item response rates for items on the public use data file: AELL-NHES:2001—
Continued**

Variable name	Description	Number eligible	Item response rate (percent)	Percent manually imputed
CRENRUN2	AD18-UNIT ENROLLED IN PGRM-2.....	120	82.50	0.00
CRCRDHR2	AD20-TOTAL CREDIT HRS ENROLLED-2	120	82.50	0.00
VOCOMPM2	AE10-VOCA COMPLETION MONTH-2	11	81.82	0.00
VOSTRTY2	AE9-VOCA START YEAR-2	11	81.82	100.00
EARNAMT	AK21-AMOUNT OF EARNINGS	7,879	81.67	0.00
HSTOPMM	AL12-MONTH STOPPED REC V WELFARE	136	81.62	0.00
EARNUNT	AK21-UNIT OF EARNINGS	7,879	81.57	0.55
HINCOME	AL17OV-TOTAL HH INCOME RANGE 2	10,873	78.26	0.00
CRCLSHR1	AD21-TOTAL CLASSROOM HRS-1	26	76.92	0.00
VOCRDHR1	AE18-TOTAL CREDIT HRS ENROLLED-1	249	75.10	0.00
CRCOMP3	AD12-CRED COMPLETION MONTH-3	8	75.00	0.00
CRCOMPY3	AD12-CRED COMPLETION YEAR-3	8	75.00	0.00
CRPTFT3	AD17-ENROLLED PART-TIME/FULL-TIME/BOTH-3	8	75.00	0.00
CRCRSNU3	AD19-NUMBER OF COURSES TOOK IN PRGM-3	8	75.00	0.00
CRINTV3	AD22A-INSTR BY TV/VIDEO/RADIO-3	8	75.00	0.00
CRINCOM3	AD22B-INSTR BY COMPUTER-3	8	75.00	0.00
CRINCON3	AD22C-INSTR BY COMPUTER CONFERENCING-3.....	8	75.00	0.00
CRINWWW3	AD22D-INSTR BY INTERNET/WWW-3.....	8	75.00	0.00
CRTUITO3	AD25A-PERSONAL EXPENSE FOR TUITION/FEE-3.....	8	75.00	0.00
CRMATLS3	AD25B-PERSONAL EXPENSE FOR BOOKS/MTLS-3	8	75.00	0.00
CRINCBK2	AD26-TUITION/FEE INCLUDE BOOKS/MTLS-2.....	11	72.73	0.00
VOCRDHR2	AE18-TOTAL CREDIT HRS ENROLLED-2.....	11	72.73	0.00
CRPROVE3	AD14-INSTRUCTION PROVIDER WAS EMPLOYER-3	7	71.43	0.00
CRWORK3	AD27-WORK WHILE TAKING PRGM-3	7	71.43	0.00
CREMPRE3	AD28-EMPLOYER REQUIRED TO TAKE PRGM-3	7	71.43	0.00
CREMP3	AD29-EMPLOYER SUGGESTED TO TAKE PRGM-3	7	71.43	0.00
CRWRKPL3	AD30-TOOK PRGM AT WORKPLACE-3	7	71.43	0.00
CRWRKHR3	AD31-TOOK PRGM DURING WORK HRS-3	7	71.43	0.00
CREMPAI3	AD32-BEING PAID WHILE TAKING PRGM-3.....	7	71.43	0.00
CREMPTU3	AD33A-EMPLOYER PAID TUITION/FEE-3.....	7	71.43	0.00
CREMPMA3	AD33B-EMPLOYER PAID BOOKS/MTLS-3	7	71.43	0.00
CRENRNU3	AD18-HOW LONG ENROLLED IN PGRM-3.....	8	62.50	0.00
CRENRUN3	AD18-UNIT ENROLLED IN PGRM-3.....	8	62.50	0.00
CRCRDHR3	AD20-TOTAL CREDIT HRS ENROLLED-3	8	62.50	0.00
CRSTRTY3	AD11-CRED START YEAR-3	8	62.50	33.33
CRTECHN3	AD23-NUM OF COURSES USED TECHNOLOGY-3	5	60.00	0.00
CRTECHP3	AD24-PERCENT INSTR USED TECHNOLOGY-3	5	60.00	0.00
HINCMEXT	AL17OV2-EXCT HH INC NRST \$1000	1,082	56.75	0.21
CRINCBK3	AD26-TUITION/FEE INCLUDE BOOKS/MTLS-3.....	2	50.00	0.00

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001.

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7. WEIGHTING AND VARIANCE ESTIMATION

Weighting Methodology

The objective of the NHES:2001 is to make inferences about the entire civilian, noninstitutionalized population for the domains of interest. Weighting is necessary to account for differential probabilities of selection and to reduce potential bias due to nonresponse and differential coverage of subpopulations. Although weighting adjustments are aimed at reducing bias, these adjustments typically introduce variation in the weights, which increases the variances of survey estimates. Care was taken in the development and implementation of the weighting methodology to balance the bias reductions against the potential increases in variance.

The target populations for the NHES:2001 surveys are the U.S. civilian, noninstitutional population age 6 or younger and not yet enrolled in kindergarten (ECPN-NHES:2001), age 15 or younger enrolled in kindergarten through 8th grade (ASPA-NHES:2001), and age 16 or older and not enrolled in 12th grade or below (AELL-NHES:2001). Although only telephone households were sampled, the estimates were adjusted to totals of persons living in both telephone and nontelephone households derived from the Current Population Survey (CPS) to achieve this goal. Totals of the number of persons adjusted to account for undercoverage are available from the 1990 decennial census. Beginning in 1994, the CPS weights were adjusted to these totals. Any additional undercoverage in the census of special subpopulations, such as the homeless, remains in the totals obtained from the CPS.

The full sample weight to be used for analysis of the ECPN file is FEWT. For the ASPA file, the full sample weight is FSWT. For the AELL file, the full sample weight is FAWT. The weighting procedures are described briefly below.

Household-Level Weights

The primary purpose of the Screener in the NHES:2001 was to provide information required to assess the eligibility of household members for an extended interview. Household-level information that is of analytic interest was also collected during the extended interview. Since no data intended for analyses were collected at the household level only, household-level weights were calculated solely for use as a basis for computing person-level weights for the analysis of the extended interview data.

The household-level weight was the product of five factors:

- (1) the weight associated with the differential sampling of telephone numbers based on the minority stratum of the exchange and the listed status of the telephone number (A_j);
- (2) an adjustment to account for the subsampling of no answer cases (B_j);
- (3) an adjustment for Screener nonresponse (C_j);
- (4) an adjustment for the number of telephone numbers in a household (D_j); and
- (5) a poststratification adjustment to compensate for the fact that only telephone households were eligible for the NHES:2001 surveys (E_j).

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

1. The RDD sampling method used for the NHES:2001 is a list-assisted method described by Brick et al. (1995). This basic method was also used in the NHES:1995, the NHES:1996, and the NHES:1999. For NHES:2001, a two-phase approach was used. In the first phase, a single-stage sample of telephone numbers was sampled from strata defined by minority status of the exchange. Telephone numbers in high-minority exchanges were sampled at a rate almost twice that of those in low-minority exchanges. In particular, in the high-minority stratum, 101,170 telephone numbers were selected from the 818,262 eligible 100-banks; in the low-minority stratum, 105,012 telephone numbers were selected from the 1,640,319 eligible 100-banks. In the second phase, telephone numbers selected in the first phase were matched against White and yellow pages directory listings and subsampled differentially within each minority stratum based on listed status (i.e., whether the number is listed in the White Pages). Table 7-1 gives the numbers of telephone numbers selected at each phase of selection and the weighting factors associated with the sampling at each phase. The telephone number level base weight, A_j , is the product of the two weighting factors given in table 7-1.

Table 7-1. Weighting factors for the sampling of telephone numbers: NHES:2001

Minority stratum	Phase 1 sample			Phase 2 sample			
	Number of telephone numbers in frame	Number of telephone numbers sampled	Weighting factor	Listed status	Number of telephone numbers in Phase 1 sample	Number of telephone numbers sampled	Weighting factor
High minority	81,826,200	101,170	808.80	Listed	31,747	22,681	1.40
				Not listed	69,423	65,942	1.05
Low minority	164,031,900	105,012	1,562.03	Listed	38,880	28,271	1.38
				Not listed	66,132	62,317	1.06

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

2. During data collection, no answer cases (those at which neither a person nor a machine had been reached) were subsampled for refielding; only a one-third subsample of such cases was refielded. (See chapter 5 for further details on refielding.) The second weighting factor adjusts for the subsampling of no answer cases. No answer cases that were selected to be refielded were given a weighting factor $B_j = 3$. The no answer cases that were subsampled out were given a weighting factor $B_j = 0$. For each sampled telephone number j , the unadjusted weight, UHW_j , can be written as $UHW_j = A_j \cdot B_j$.

3. The third weighting factor adjusts for households that did not respond to the NHES:2001 Screener. Each sampled telephone number was classified as either a respondent (R), a nonrespondent (NR),⁴⁰ or an ineligible case (I). The base weights of the nonrespondent cases were distributed to the base weights of the respondent cases within a nonresponse adjustment cell. A CHAID analysis (described in chapter 5) was used to identify characteristics most associated with Screener nonresponse. The characteristics considered included all the characteristics used for Screener nonresponse adjustment for the NHES:1995 and the NHES:1999. (The household weights were not adjusted for Screener nonresponse in the NHES:1996.) These characteristics, which were primarily geographic characteristics, were used to form the cells for nonresponse adjustment of the household weights.⁴¹ Table 7-2 contains the cells used for Screener nonresponse adjustment in the NHES:2001, along with the estimated Screener unit response rate for each cell. The nonresponse adjustment factor, $C_{j(c)}$, applied to each respondent j in adjustment cell c is

$$C_{j(c)} = \frac{\sum_{h \in R_c \cup NR_c} UHW_h}{\sum_{h \in R_c} UHW_h}.$$

4. A weighting factor of unity was assigned to households reporting one telephone number in the household. An adjustment factor of 1/2 was assigned to households with more than one residential telephone number.⁴² Technically, if the other telephone number(s) of households with multiple residential telephone numbers is in the zero-listed stratum, the household should get a weight adjustment of 1. However, looking up the other numbers to determine their listed status is impractical, and the percent of such numbers in the zero-listed stratum is small. Let

$$D_j = \frac{1}{2} \quad \text{if household } j \text{ has more than one telephone number, and}$$

$$D_j = 1 \quad \text{if household } j \text{ has one telephone number.}$$

⁴⁰The residency status of telephone numbers that finalized with Screener dispositions of no answer or no answer-answering machine was unresolved. Based on the survival method of response rate estimation (described in chapter 6), 27.9 percent of these cases were assumed to be residential; thus, for these cases, 27.9 percent of the weight was retained and these cases were treated as nonrespondents.

⁴¹As noted in the discussion in chapter 5, little information is available about nonresponding units in an RDD survey. Measures are selected from among the limited items that are available for both respondents and nonrespondents.

⁴²The weight could be modified by a factor equal to the reciprocal of the number of residential telephone numbers in the household, but the adjustment by a factor of one-half is thought to be somewhat better. Massey and Botman (1988) comment on this adjustment.

If a household was sampled twice through two different telephone numbers, only one of the telephone numbers was kept in the sample.⁴³ The telephone number that was not kept was assigned a Screener result code indicating that it is a duplicate. The interview that was kept has D_j set equal to unity, to reflect that it was sampled twice.

Thus, the nonresponse adjusted household weight, adjusted for multiple residential telephone numbers in the household, is

$$UHW'_j = A_j \cdot B_j \cdot C_{j(c)} \cdot D_j$$

5. The final step in computing the household weight was to adjust UHW'_j to known national control totals in order to account for household-level undercoverage due to sampling only telephone households. Poststratification was used to accomplish this task. Poststratification ensures that survey weights sum to known population totals. The characteristics used in poststratification were Census region and presence of children under 18 years of age. Table 7-3 presents the control totals used for poststratifying the household-level weights. The variables used in poststratification were chosen to address differences in coverage rates with respect to region in which the household is located and presence of children in the household. The control totals for poststratification were obtained from the March 2000 Current Population Survey (CPS).

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

$$HHW_j = UHW'_j \cdot E_{j(d)},$$

where $E_{j(d)}$ is the poststratification adjustment factor described above for adjustment cell d , where household j has the attributes corresponding to poststratification cell d .

Person-Level Weights for the ECPP, ASPA, and AELL Interviews

As described in chapter 3, a sampling algorithm was used to limit the number of persons sampled in each household while maintaining the sampling rates required to attain the target sample sizes. The sampling was based on information collected in the Screener interview from the adult household member who responded to the Screener. For the ECPP and ASPA interviews, the eligibility of the sampled child was later verified or updated when the parent/guardian most knowledgeable about the child responded to the ECPP or ASPA interview. For the AELL interview, an eligible adult was defined to be a person 16 years of age or older who was not enrolled in 12th grade or below and not on active duty in the U.S. Armed Forces. Because sampling eligibility was defined in terms of the data collected in the Screener, the weighting procedures were developed with possible misclassification taken into account so that the estimates would not incur bias due to misclassification.

⁴³There was one such household identified in the NHES:2001 sample.

Table 7-2. Screener nonresponse adjustment cells: NHES:2001

Cell	Mailable status	Answering machine message indicator	Percent White	Median home value	Listed status	Percent renters	Percent owners	Census region	Estimated unit response rate (percent) ¹
1.....	1	1	0,1	†	†	†	†	†	57
2.....	1	1	2,3,4	†	†	†	†	†	63
3.....	1	1	5,6,7	0,1,2	†	†	†	†	71
4.....	1	1	5,6,7	3,4	†	†	†	†	67
5.....	1	1	5,6,7	5	†	†	†	†	72
6.....	1	1	5,6,7	6,7,8,9	†	†	†	†	64
7.....	1	1	8	0,1,2,3,4	†	†	†	†	73
8.....	1	1	8	5,6,7,8	†	†	†	†	68
9.....	1	1	8	9	†	†	†	†	62
10.....	1	1	9	0,1	†	†	†	†	77
11.....	1	1	9	2,3,4,5,6	†	†	†	†	72
12.....	1	1	9	7,8,9	†	†	†	†	65
13.....	1	2	†	†	1	0,1,2,3,4	†	†	81
14.....	1	2	†	†	1	5	†	†	78
15.....	1	2	†	†	1	6	†	†	74
16.....	1	2	†	†	1	7,8,9	†	†	65
17.....	1	2	†	0	2	†	†	†	77
18.....	1	2	†	1,2,3,4	2	†	†	†	74
19.....	1	2	†	5,6,7	2	†	†	†	72
20.....	1	2	†	8,9	2	†	†	†	66
21.....	2	†	†	0,1,2,3	†	†	†	†	59
22.....	2	†	†	4	†	†	†	†	56
23.....	2	†	†	5,6,7	†	†	†	†	50
24.....	2	†	†	8,9	†	†	†	†	41
25.....	3	1	†	†	†	†	0,1,2,3,4,5,6	1,2	60
26.....	3	1	†	†	†	†	7,8,9	1,2	71
27.....	3	1	†	†	†	†	†	3,4	61
28.....	3	2	†	†	†	†	†	1	59
29.....	3	2	†	†	†	0,1,2,3	†	2,3,4	76
30.....	3	2	†	†	†	4,5,6,7,8,9	†	2,3,4	67
31.....	9	†	†	†	†	†	†	†	47

† Not applicable.

¹ The estimated unit response rate is the number of completed interviews divided by the sum of the number of completed interviews, nonresponses, and 27.9 percent of the unresolved telephone numbers, weighted by the probability of selection.

Category codes: Mailable Status: 1 = address obtained; 2 = address not obtained; 3 = address obtained but mailing was returned; 9 = address obtained but not mailable (key fields missing).

Answering Machine Message Status: 1 = at least one answering machine message left; 2 = no messages left.

Median Home Value: 0 = below the 10th percentile in sample, 1 = 10th to 19th percentile in sample.

2 = 20th to 29th percentile in sample, 3 = 30th to 39th percentile in sample, 4 = 40th to 49th percentile in sample, 5 = 50th to 59th percentile in sample, 6 = 60th to 69th percentile in sample, 7 = 70th to 79th percentile in sample, 8 = 80th to 89th percentile in sample, 9 = 90th percentile in sample or higher.

Listed Status: 1 = listed residential; 2 = not listed.

Census Region: 1 = Northeast, 2 = Midwest, 3 = South, 4 = West.

Percent White, Percent Renters, Percent Owners: 0 = less than 10 percent, 1 = 10 to 19 percent, 2 = 20 to 29 percent, 3 = 30 to 39 percent, 4 = 40 to 49 percent, 5 = 50 to 59 percent, 6 = 60 to 69 percent, 7 = 70 to 79 percent, 8 = 80 to 89 percent, 9 = 90 percent or more.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Table 7-3. Control totals for poststratifying the NHES:2001 household-level weights: CPS:2001

Census region	Children under 18 in household	Control total
Total.....		104,781,947
Northeast.....	Yes	13,123,145
Northeast.....	No	6,969,672
South.....	Yes	23,970,552
South.....	No	13,343,144
Midwest.....	Yes	15,639,333
Midwest.....	No	8,900,832
West.....	Yes	14,013,486
West.....	No	8,821,783

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2001. (Independent tabulations.)

The household-level weight was used as the base weight for each of the person-level (ECPP, ASPA, and AELL interview) weights. The person-level weight for sampled person k in household j , PW_{jk} , is the product of the household weight and four weight adjustment factors:

- (1) the weight associated with sampling the person’s domain in the given household (A_{jk});
- (2) the weight associated with sampling the person from among all eligible persons in the given domain in the household (B_{jk});
- (3) the weight associated with extended interview (ECPP, ASPA, or AELL) nonresponse (C_k); and
- (4) the adjustment associated with raking the person-level weights to Census Bureau estimates of the number of persons in the target population (D_k).

The procedures for computing the person-level weight adjustments are described below.

1. The first step in developing the person-level weights was to account for the probability of sampling the person’s domain in the given household. Table 7-4 gives the weighting factors, A_{jk} , used to adjust for the probability of sampling each child domain for the ECPP and ASPA surveys. For example, if there was one preschooler, one elementary school child (enrolled in kindergarten through 5th grade), and one middle school child (enrolled in 6th through 8th grade), then the preschooler and the middle school child were sampled with certainty, and the elementary school child was sampled with probability 0.5; the domain sampling adjustment factors for the preschooler and the middle school child were 1, and the factor for the elementary school child (if sampled) was 2.

Table 7-4. Weighting factors to account for domain sampling for children: NHES:2001

Household composition (number of children)				Weight adjustment factor to account for domain sampling			
Middle schoolers	Elementary schoolers	Preschoolers	Infants	Middle schooler	Elementary schooler	Preschooler	Infant
0	0	0	1 or more	†	†	†	1.0000
0	0	1 or more	0	†	†	1.0000	†
0	1 or more	0	0	†	1.0000 ¹	†	†
0	1 or more	0	0	†	1.4286 ¹	†	†
0		1 or more	1 or more	†	†	1.0000	1.0000
0	1 or more		1 or more	†	2.0000	†	1.0000
0	1 or more	1 or more	0	†	2.0000	1.0000	†
0	1 or more	1 or more	1 or more	†	2.0000	1.0000	2.0000
1 or more	0	0	0	1.0000	†	†	†
1 or more	0	0	1 or more	1.0000	†	†	1.0000
1 or more	0	1 or more	0	1.0000	†	1.0000	†
1 or more	0	1 or more	1 or more	1.0000	†	1.0000	2.0000
1 or more	1 or more	0	0	1.0000	2.0000	†	†
1 or more	1 or more	0	1 or more	1.0000	4.0000	†	1.3333
1 or more	1 or more	1 or more	0	1.0000	2.0000	1.0000	†
1 or more	1 or more	1 or more	1 or more	1.0000	4.0000	1.0000	4.0000

† Indicates that factor is not applicable because there are no children in the domain in the household.

¹ In households with exactly one elementary schooler and no other children, the child was selected with probability 0.7. In households with two or more elementary schoolers and no other children, one child was selected with probability 1.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Table 7-5 gives the weighting factors, A_{1jk} , used to account for the probability of sampling the adult domains for the AELL survey, based on the household composition. For example, if there were no eligible children in the household and there were two eligible adults—one adult with less than a high school diploma and one adult with a high school diploma or higher—then the adult with less than a high school diploma was sampled with probability 0.5625 and the adult with a high school diploma or higher was sampled with probability 0.1875. In such an example, if the adult with less than a high school diploma was sampled, then the weighting factor A_{1jk} for that adult was 1.7778, which is the reciprocal of the probability of sampling the adult domain. If the adult with a high school diploma or higher was sampled, then the weighting factor A_{1jk} was 5.3333.

As described above, based on the educational attainment of the adults in the household, an adult was sampled. Adults were then subsampled to attain desired sampling rates for domains defined by adult education participation status by educational attainment. For adults retained in the sample after this subsampling, a weighting factor, A_{2jk} , was assigned to account for this subsampling, as follows:

$$A_{2jk} = \begin{cases} 1.0000 & \text{if the sampled adult is a participant with less than a high school diploma} \\ 3.4771 & \text{if the sampled adult is a non - participant with less than a high school diploma} \\ 1.1881 & \text{if the sampled adult is a participant with a high school diploma or higher} \\ 1.7687 & \text{if the sampled adult is a non - participant with a high school diploma or higher} \end{cases}$$

Table 7-5. Weighting factors to account for domain sampling for adults: NHES:2001

Number of eligible children in household	Household composition		Weighting factor associated with domain sampling	
	Number of adults in household, by educational attainment		Less than high school diploma	High school diploma or higher
0	0	1 or more	†	2.0000
0	1 or more	0	1.3333	†
0	1 or more	1 or more	1.7778	5.3333
1 or more	0	1 or more	†	3.0000
1 or more	1 or more	0	2.0000	†
1 or more	1 or more	1 or more	2.6667	8.0000

† Indicates that factor is not applicable because there are no children in the domain in the household.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

- The second adjustment accounted for the probability of sampling person k from among all eligible persons in the given domain in household j . For the ECPP and ASPA interviews, the adjustment is

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

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

For the AELL interview, the adjustment in general is the same as that used for the ECPP and ASPA interviews; i.e., $B_{jk} = N_{jk}$, where N_{jk} is the number of adults in household j in the same educational attainment sampling domain as adult k . There is, however, one exception. In households with more than one adult with less than a high school diploma and no adults with a high school diploma or higher, it was possible to sample two adults. In such households, the weighting factor for this subsampling was

$$B_{jk} = \frac{N_{jk}}{2}.$$

For each sampled person k , the unadjusted person-level weight, UPW_k , can be written as the product of the household-level weight and the adjustments for within-household sampling. That is, for sampled child k , the unadjusted person-level weight is

$$UPW_{jk} = HHW_j \cdot A_{jk} \cdot B_{jk}.$$

For sampled adult k , the unadjusted person-level weight is

$$UPW_{jk} = HHW_j \cdot A_{1jk} \cdot A_{2jk} \cdot B_{jk}.$$

3. The next step was to adjust for persons (most knowledgeable parents/guardians in the case of the ECPP and ASPA interviews, and the sampled adults themselves in the case of the AELL interview) who did not respond to the extended interview. Each extended interview case was classified as either a respondent (*R*) or a nonrespondent (*NR*), depending on whether or not the extended interview was completed for the sampled person. 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. For the ECPP and ASPA Interviews, the nonresponse adjustment cells were created using age/grade combinations: children age 0, children age 1, children age 2, unenrolled children ages 3 through 6, preschoolers (those enrolled in preschools, nursery schools, or other center-based programs), kindergartners, and children enrolled in each single grade for grade 1 through grade 8; enrolled children with no grade equivalent were included in the cell containing the modal grade for their age; that is, they were assigned to the grade in which most children their age are enrolled. (See tables 7-6 and 7-7 for lists of ECPP and ASPA nonresponse adjustment cells.)

Table 7-6. Interview nonresponse adjustment cells: ECPP-NHES:2001

Explanatory variables: Age or grade/equivalent from Screener	Number of respondents in cell	Unit response rate (percent) ¹
Age 0.....	899	84.4
Age 1.....	1,150	85.6
Age 2.....	1,304	88.8
Unenrolled (ages 3 through 5).....	1,494	86.8
Nursery school/prekindergarten.....	1,910	86.6

¹ The unit response rate is the number of completed interviews divided by the sum of the number of completed interviews and nonresponses, weighted by the unadjusted person-level weight.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Table 7-7. Interview nonresponse adjustment cells: ASPA-NHES:2001

Explanatory variables: Age or grade/equivalent from Screener	Number of respondents in cell	Unit response rate (percent) ¹
Kindergarten/transitional kindergarten/pre-1st grade.....	762	84.9
1st grade or equivalent.....	811	86.9
2nd grade or equivalent.....	770	88.3
3rd grade or equivalent.....	773	85.3
4th grade or equivalent.....	880	85.9
5th grade or equivalent.....	901	87.1
6th grade or equivalent.....	1,560	85.4
7th grade or equivalent.....	1,617	88.2
8th grade or equivalent.....	1,501	85.2

¹ The unit response rate is the number of completed interviews divided by the sum of the number of completed interviews and nonresponses, weighted by the unadjusted person-level weight.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

For the AELL interview, four variables were used to create the nonresponse adjustment cells. The first was the sex of the adult, the second was the adult education participation status of the adult (as reported by the Screener respondent), the third was an indicator of whether the sampled adult was the Screener respondent, and the fourth was the Census region. These variables were used because they are available for all sampled adults (both respondents and nonrespondents) and are associated with AELL interview response propensity. (See table 7-8 for a list of the AELL interview nonresponse adjustment cells.) The nonresponse adjustment factor, $C_{k(c)}$, applied to each respondent k in adjustment cell c is

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

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

$$NPW_{jk} = UPW_{jk} \cdot C_{k(c)}.$$

Extreme weights may occasionally result when households or persons are sampled at very different rates. Additionally, the procedures used for nonresponse adjustment, poststratification, and raking may contribute to extreme weights. A few unexpectedly large sampling weights can seriously inflate the variance of the survey estimates. Thus, for a very small number of records, weight trimming procedures may be used to reduce the impact of such large weights on the estimates produced from the sample. Weight trimming refers to the process of artificially adjusting a few extreme weights (those that are unusually large relative to other weights for members of the same subgroup) to reduce their impact on the weighted estimates.⁴⁴

The variability in the nonresponse adjusted person-level weights was examined by population subgroups to determine whether trimming would be desired. For the ECPP and ASPA interview weights, the variability was not sufficient to justify trimming. For the AELL interview weights, the amount of variability in the weights was greater than desired due to the earlier stages of weighting. To reduce the variability in the final weights, the weights were trimmed prior to raking. The means of the nonresponse-adjusted AELL interview weights for adults sampled as participants and those sampled as nonparticipants were 13,564 and 20,938, respectively. In all, 10 weights were trimmed: for 2 persons sampled as adult education participants with nonresponse adjusted AELL weights in excess of 100,000; and for 8 persons sampled as adult education nonparticipants with nonresponse-adjusted AELL weights in excess of 150,000. The trimmed nonresponse-AELL interview weight is denoted NAW' .

⁴⁴In some trimming procedures, the excess weight that is trimmed from cases with large weights is redistributed to the remaining cases. This redistribution step is not done in NHES because very few weights are trimmed and the excess is implicitly redistributed during the raking step.

Table 7-8. Interview nonresponse adjustment cells: AELL-NHES:2001

Explanatory variables: Indicator of whether sampled adult was the Screener respondent/Census region/adult education participation status (from Screener)/sex	Number of respondents in cell	Unit response rate (percent) ¹
Screener respondent/Northeast/adult education participant/female.....	404	90.9
Screener respondent/Northeast/adult education participant/male.....	228	88.3
Screener respondent/Northeast/adult education nonparticipant/female.....	417	85.9
Screener respondent/Northeast/adult education nonparticipant/male.....	270	81.0
Screener respondent/Midwest/adult education participant/female.....	469	92.3
Screener respondent/Midwest/adult education participant/male.....	255	90.2
Screener respondent/Midwest/adult education nonparticipant/female.....	537	87.4
Screener respondent/Midwest/adult education nonparticipant/male.....	305	86.0
Screener respondent/South/adult education participant/female.....	855	89.4
Screener respondent/South/adult education participant/male.....	434	87.8
Screener respondent/South/adult education nonparticipant/female.....	950	84.7
Screener respondent/South/adult education nonparticipant/male.....	531	86.6
Screener respondent/West/adult education participant/female.....	562	88.4
Screener respondent/West/adult education participant/male.....	302	88.8
Screener respondent/West/adult education nonparticipant/female.....	506	86.0
Screener respondent/West/adult education nonparticipant/male.....	344	87.5
Not Screener respondent/Northeast/adult education participant/female.....	141	65.6
Not Screener respondent/Northeast/adult education participant/male.....	173	63.1
Not Screener respondent/Northeast/adult education nonparticipant/female.....	128	66.4
Not Screener respondent/Northeast/adult education nonparticipant/male.....	139	53.8
Not Screener respondent/Midwest/adult education participant/female.....	191	77.6
Not Screener respondent/Midwest/adult education participant/male.....	231	75.1
Not Screener respondent/Midwest/adult education nonparticipant/female.....	132	67.8
Not Screener respondent/Midwest/adult education nonparticipant/male.....	236	70.7
Not Screener respondent/South/adult education participant/female.....	277	64.5
Not Screener respondent/South/adult education participant/male.....	370	68.0
Not Screener respondent/South/adult education nonparticipant/female.....	289	66.7
Not Screener respondent/South/adult education nonparticipant/male.....	358	59.6
Not Screener respondent/West/adult education participant/female.....	211	72.4
Not Screener respondent/West/adult education participant/male.....	245	67.9
Not Screener respondent/West/adult education nonparticipant/female.....	155	65.0
Not Screener respondent/West/adult education nonparticipant/male.....	228	63.3

¹ The unit response rate is the number of completed interviews divided by the sum of the number of completed interviews and nonresponses, weighted by the unadjusted person-level weight.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

4. The final stage of person-level weighting involved raking the nonresponse-adjusted person-level weights, *NPW* and *NAW'*, to national control totals. Raking was proposed by Deming and Stephan (1940) as a way to ensure consistency between complete counts and 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 due to households or persons not covered by the survey, e.g. households without telephones and households with unlisted telephone numbers belonging to zero-listed telephone banks. The raking procedure is carried out in a sequence of adjustments: first, the base weights are adjusted to one marginal distribution (or dimension) and then the second marginal distribution, and so on. One sequence of adjustments to the marginal distributions is known as a cycle or iteration. The procedure is repeated until convergence of weighted totals is achieved. (See Deming and Stephan 1940 for further details on raking and the convergence process.)

This additional raking adjustment, following the household-level poststratification adjustment, is required because the extended interviews involve new eligibility criteria and a new level of sampling. That is, although the household-level poststratification adjustment aligned the weighted totals of the household weights with the household level control totals, the raking of the person-level weights is 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 ASPA** weights involved raking the nonresponse-adjusted person-level weights to national totals obtained using the percentage distributions from the October 1999 CPS and the total number of children from the March 2000 CPS. The October 1999 CPS contains variables not available on the March 2000 CPS, but the totals in the latter are more current. In the procedure used in the NHES:2001, the control total for a raking cell is the proportion in that cell from the October 1999 CPS multiplied by the estimate of the total number of children from the March 2000 CPS. The three raking dimensions used for the ECPP and ASPA interview weights were a cross between race/ethnicity of the child (Black, non-Hispanic/Hispanic/other) and household income categories (\$10,000 or less/\$10,001–\$25,000/\$25,001 or more), a cross of Census region (Northeast/South/Midwest/West) and urbanicity (urban/rural), and a cross of home tenure (rent/own or other) and age or grade of child (with those enrolled in school but having no grade equivalent assigned to the modal grade for their age). These raking dimensions were used because they include important analysis variables (e.g., grade) and characteristics that have been shown to be associated with telephone coverage (e.g., race/ethnicity). Table 7-9 and 7-10 show the control totals used for raking the ECPP and ASPA interview weights.

Table 7-9. Control totals for raking the ECPP-NHES:2001 person-level weights: CPS:1999 and CPS:2000

Characteristics used in raking	Control total
Total	20,281,225
Race/ethnicity of child by household income	
Black, n[on-Hispanic]	
\$10,000 or less	903,941
\$10,001-\$25,000	786,749
\$25,001 or more	1,299,255
Hispanic	
\$10,000 or less	585,259
\$10,001-\$25,000	1,361,729
\$25,001 or more	1,747,611
Other	
\$10,000 or less	789,577
\$10,001-\$25,000	1,999,918
\$25,001 or more	10,807,186
Census region¹ by urbanicity	
Northeast	
Urban	2,932,856
Rural	783,761
South	
Urban	4,674,758
Rural	2,135,003
Midwest	
Urban	3,488,476
Rural	1,378,273
West	
Urban	4,216,150
Rural	671,948
Home tenure by age/grade of child	
Rent	
Age 0	1,515,009
Age 1	1,484,801
Age 2	1,582,170
Age 3–6, not enrolled	1,692,269
Nursery/Preschool/Head Start	1,417,237
Own or other	
Age 0	2,352,826
Age 1	2,417,177
Age 2	2,348,363
Age 3–6, not enrolled	2,302,434
Nursery/Preschool/Head Start	3,168,939

¹ The following states and the District of Columbia are in each Census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000; October 1999.

Table 7-10. Control totals for raking the ASPA-NHES:2001 person-level weights: CPS:1999 and CPS:2000

Characteristics used in raking	Control total
Total.....	36,679,001
Race/ethnicity of child by household income	
Black, non-Hispanic	
\$10,000 or less	1,254,638
\$10,001-\$25,000	1,922,579
\$25,001 or more.....	2,685,666
Hispanic	
\$10,000 or less	791,211
\$10,001-\$25,000	2,094,365
\$25,001 or more.....	2,857,845
Other	
\$10,000 or less	1,189,588
\$10,001-\$25,000	3,518,165
\$25,001 or more.....	20,364,944
Census region¹ urbanicity	
Northeast	
Urban	5,304,128
Rural	1,417,447
South	
Urban	8,454,393
Rural	3,861,196
Midwest	
Urban	6,308,980
Rural	2,492,634
West	
Urban	7,624,991
Rural	1,215,232
Home tenure by age/grade of child	
Rent	
Transitional kindergarten/Kindergarten/Pre-1st grade	1,390,202
1st grade.....	1,431,051
2nd grade	1,327,395
3rd grade.....	1,344,591
4th grade	1,314,613
5th grade	1,306,471
6th grade	1,217,448
7th grade	1,117,932
8th grade	1,102,602

See notes at end of table.

Table 7-10. Control totals for raking the ASPA-NHES:2001 person-level weights: CPS:1999 and CPS:2000—Continued

Characteristics used in raking	Control total
Own or other	
Transitional kindergarten/Kindergarten/Pre-1st grade	2,440,869
1st grade.....	2,902,274
2nd grade	2,606,563
3rd grade.....	2,998,054
4th grade	2,899,098
5th grade	2,848,472
6th grade	2,804,840
7th grade	2,767,142
8th grade	2,859,384

¹ The following states and the District of Columbia are in each Census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000; October 1999.

Once the procedures described above were completed, estimates were produced for the surveys. As a standard practice in the NHES, estimates are compared to other sources to assess the credibility of the NHES weights. One such comparison is a comparison of the age distribution from NHES to the CPS. When this comparison was done, a discrepancy was found in estimates of the number of 5-year-olds. The estimate of 3,525,163 from the NHES was considerably lower than the estimate of 4,037,191 from the CPS. Concerns about the discrepancy between the NHES:2001 and CPS estimates of the total number of 5-year-olds resulted in a detailed investigation into the reasons for this and an evaluation of alternative sets of raking dimensions. The first step in this investigation was to review the implementation of the weighting methodology. Although checks had been conducted at each stage of weighting, the procedures were reviewed again to ensure that they had been correctly computed and applied. No problems were found in the computation or application of the weighting adjustments.

The raking procedure was determined to be the probable step that led to the discrepancy since the previous weights, the nonresponse-adjusted person-level weights, did not exhibit the problem. Thus, an evaluation was undertaken in which three alternative sets of raking dimensions were considered (see exhibit 7-1). In each case, the first two dimensions (race/ethnicity by household income, and Census region by urbanicity) remained the same. In Alternative 1, the home tenure by age/grade dimension was replaced with two dimensions: single year of age (alone), and home tenure by grade. In Alternative 2, the home tenure by age/grade dimension was replaced with a single dimension: home tenure by single year of age.

In Alternative 3, the home tenure by age/grade dimension was replaced by the single dimension of home tenure crossed with grade by age category. For each grade, two age categories were created: (1) at or below modal age for the grade and (2) above modal age for the grade. Prior to classifying children into raking cells for this dimension, the age of the child was recalculated as of September 30, to match the reference age used in computing the control totals from the CPS.

Four separate but potentially related concerns addressed in this evaluation were:

- Differences in estimates of the number of kindergartners;
- Large number of iterations required for convergence of the raking algorithm;
- Inconsistent ages (CPS age is as of September 30, while the NHES age is as of December 31); and
- The effect of the interaction between age and grade in the raking procedure.

The study of the weighting procedures for the ECPP and ASPA surveys from the NHES:2001 was wide ranging and had several important findings. The weighting procedures in the NHES:2001 were executed correctly. The original weights converged to the specified control totals with a small number of iterations, and the variability of the weights was reasonable. The original weighting procedure resulted in estimates of the number of 5-year-olds that differed from the CPS estimate by about 15 percent (500,000 children). The distributions of age by grade for children as measured in the CPS and the NHES differ, and this is mainly due to the difference in the time that data are collected.

The Alternative 1 weights produced estimates that matched the CPS estimates by age and by grade, but exhibited greater variability than desired. In particular, the mean raked weight for children within a grade decreased as age increased. Another issue noted was the large number of iterations required for the raking procedure to converge. With Alternative 2, the raked NHES estimate of kindergarten enrollment was about 500,000 higher than the CPS estimate. In general, with the exception of estimates of enrollment by grade, the Alternative 3 weights produced estimates that differed more from the CPS estimates than those produced using the original weights. The additional research found that the CPS estimate of the number of kindergarten children is at the lower end of the range computed using several sources. No study of CPS procedures was undertaken, but the method of classifying a child as being enrolled in kindergarten may differ between the CPS and some of the other sources.

As a result of the findings of this study, it was decided that the original weights should be used for analysis of the ECPP-NHES:2001 and ASPA-NHES:2001 data. Each of the alternatives considered had shortcomings, and no alternative was clearly preferable to the original weights. Thus, only the weights computed using the original methodology appear on the data files.

Appendix K provides additional detail on the review of ECPP and ASPA weights.

Exhibit 7-1. Raking schemes used in the evaluation of child-level weights: NHES:2001

Original

Three raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Home tenure by age or grade of child (age 0; age 1; age 2; ages 3-6, not enrolled; nursery/preschool; kindergarten; single grade, for grades 1 through 8)

Alternative 1⁴⁵

Four raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Single year of age
- Home tenure by grade/enrollment of child (not enrolled; nursery/preschool; kindergarten; single grade, for grades 1 through 8)

Alternative 2

Three raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Home tenure by age of child (single year of age, for ages 0 through 15)

Alternative 3

Three raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Home tenure by grade/age classification of child. For each grade, two subclassifications were created: At or below modal age for the grade, and above modal age for the grade). Age was recalculated to age as of September 30, 2000, for comparability to the CPS.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

⁴⁵In addition, a “deaged” version of Alternative 1 was considered, in which age was recalculated to age as of September 30, 2000, for comparability to the CPS. Results from this version were similar to those from Alternative 1.

For the AELL interview, the four dimensions for the raking cells were a cross of the adult's race/ethnicity (Black, non-Hispanic/Hispanic/other) and household income (\$10,000 or less/\$10,001-\$25,000/\$25,001 or more), a cross of age (16–29 years/30–49 years/50 years or more) and sex, a cross of Census region (Northeast/South/Midwest/West) and urbanicity (urban/rural), and a cross of home tenure (rent/own or other) and highest educational attainment (less than high school diploma/high school diploma or equivalent/some college). These raking dimensions were used because they include important analysis variables (e.g., educational attainment) and characteristics that have been shown to be associated with telephone coverage (e.g., race/ethnicity).

The control totals for raking the AELL interview weights, shown in table 7-11, were obtained from the March 2000 CPS. The raking iterations were continued until the estimated totals were within 1 of all the control totals.

The final person-level weight for each sampled person k is

$$PW_{jk} = NPW_{jk} \cdot D_{k(d)},$$

where $D_{k(d)}$ is the raking adjustment factor for raking cell d , where person k has the attributes corresponding to the levels of the dimensions of raking cell d .

Table 7-11. Control totals for raking the AELL-NHES:2001 person-level weights: CPS:2001

Characteristics used in raking	Control total
Total.....	198,802,843
Race/ethnicity by household income	
Black, non-Hispanic	
\$10,000 or less.....	3,613,624
\$10,001-\$25,000.....	5,979,160
\$25,001 or more.....	12,593,627
Hispanic	
\$10,000 or less.....	2,577,983
\$10,001-\$25,000.....	6,595,603
\$25,001 or more.....	12,363,290
Other	
\$10,000 or less.....	9,241,027
\$10,001-\$25,000.....	26,763,611
\$25,001 or more.....	119,074,918
Age by sex	
16–29 years	
Male.....	20,715,422
Female.....	21,600,780
30–49 years	
Male.....	41,005,133
Female.....	42,618,407
50 years or more	
Male.....	33,234,159
Female.....	39,628,942
Census region¹ by urbanicity	
Northeast	
Urban.....	30,223,175
Rural.....	8,076,682
South	
Urban.....	48,406,360
Rural.....	22,107,612
Midwest	
Urban.....	32,690,941
Rural.....	12,915,964
West	
Urban.....	38,281,068
Rural.....	6,101,041

See notes at end of table.

**Table 7-11. Control totals for raking the AELL-NHES:2001 person-level weights: CPS:2001—
Continued**

Characteristics used in raking	Control total
Home tenure by highest educational attainment	
Rent	
Less than high school diploma	12,578,690
High school diploma or equivalent.....	28,686,587
Some college.....	13,401,253
Own or other	
Less than high school diploma	19,431,575
High school diploma or equivalent.....	76,837,457
Some college.....	47,867,281

¹ The following states and the District of Columbia are in each Census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000.

Methods for Computing Sampling Errors

In surveys with complex sample designs, such as the NHES:2001, direct estimates of the sampling errors assuming a simple random sample will typically underestimate the variability in the estimates. The NHES:2001 sample design and estimation included procedures that deviate from the assumption of simple random sampling, such as oversampling in areas with higher concentrations of minorities, sampling persons within households with differential probabilities, and raking to control totals.

Replication Sampling Errors

One method for computing sampling errors to reflect these aspects of the sample design and estimation 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 of the replicates 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.

A total of 80 replicates were defined for the NHES:2001 based on the sampling of telephone numbers. This number was chosen to provide reliable estimates of sampling errors with reasonable data processing costs. The specific replication procedure used for the NHES:2001 was a jackknife replication method (Wolter 1985). It involved dividing the sample into 80 random subsamples (replicates) for the computation of the replicate weights. The 80 replicates were formed based on the minority status and listed stratum, and the sampling order of the telephone numbers. In each replicate, a replicate weight was developed using the same weighting procedures that were used to develop the full sample weight.

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. (For the NHES:2001, $G = 80$.)

Replicate weights were created for each of the NHES:2001 surveys: the ECPP, the ASPA, and the AELL. In order to appropriately reflect the two-phase sampling of telephone numbers, 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, Navarro, and Fuller (2000).

1. The 206,182 sampled telephone numbers in the phase 1 sample were divided into the two minority strata used for the first phase of sampling. Within each of the two strata, the telephone numbers were sorted in the same order as that used in the selection of the phase 1 sample.
2. Eighty replicates were formed using all 206,182 telephone numbers. This was done by assigning the 1st, 81st, 161st, ... telephone numbers in the list to replicate 1; the 2nd, 82nd, 162nd,... telephone numbers in the list to replicate 2; ...; and the 80th, 160th, 240th,... telephone numbers in the list to replicate 80. Thus, there were 2,577 telephone numbers assigned to each of 58 replicates and 2,578 telephone numbers assigned to each of the remaining 22 replicates. Due to the subsampling used in the second phase of selection and to differences in residency and unit response rates among replicates, however, there is more variation in the number of units per replicate having positive final household weights.
3. The telephone numbers for residential households were then assigned 80 weight variables (REPL1 through REPL80) using the following procedures. The replicate phase 1 base weights were assigned to all 206,182 telephone numbers 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 is assigned to residential households from REPL1, and the base weights of all residential households in REPL2 through REPL80 are multiplied by a factor of 80/79. Next, the phase 2 sample (the 179,211 telephone numbers that were fielded) was 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. Using the exact same weighting procedures described earlier in this chapter⁴⁶ for each of the sets of full sample weights, the other adjustments (i.e., sampling adjustments, nonresponse adjustments, and raking adjustments) were applied to every replicate phase 2 base weight for completed interviews. In other words, the weighting steps were applied 80 times.

⁴⁶These steps do not include adjustments to take into account the effect of imputation on the variance of estimates. See chapter 6 for a discussion of this issue.

5. The difference in the methods used for the full sample and for the replicate weights was that the raking iterations were stopped when the replicate weights converged to within 10 of the control totals rather than 1, which was used in the full sample weighting.

These replicate weights are included in the ECPP file as FEWT1 through FEWT80. In the ASPA file, they are FSWT1 through FSWT80, and in the AELL file, they are FAWT1 through FAWT80. The replication procedure for the NHES:2001 surveys involves the calculation of 81 estimates, including an estimate using the full sample weight and estimates using each of the 80 replicate weights. 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. The computation of the sampling errors using these replicate weights can be done easily using the Windows-based software package *WesVar Complex Samples Software*; the replication method should be specified as JK1. The current version of *WesVar Complex Samples* (version 4) is available from Westat. Information can be obtained at <http://www.westat.com/wesvar>. A previous version of *WesVarPC* (version 2.12) is available free of charge at that Web site or by sending an e-mail message to wesvar@westat.com. Please note that version 2.12 of *WesVarPC* is no longer being updated or revised.

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), two variables are required 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 (telephone number or sampled person) was selected. The PSU is an arbitrary numeric identification number for the unit within the stratum. For the NHES:2001, the stratum variable signifies the minority stratum used in the first phase of sampling; the PSU variable was assigned sequentially based on the selection order of the telephone number within the minority 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 two-phase sampling has on the precision of the estimates.

The PSU and stratum variables appear on each of the extended interview files. On the ECPP file, the PSU and stratum variables are called EPSU and ESTRATUM; on the ASPA file, they are SPSU and SSTRATUM; and on the AELL file, they are APSU and ASTRATUM. 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.

For example, for estimates from the ASPA interview file, use SSTRATUM SPSU in the NEST statement. (Information on obtaining SUDAAN can be found at <http://www.rti.org/sudaan>.)

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 obtaining STATA is available at <http://www.stata.com>.) To specify the stratum, PSU and weight variables in STATA use the svyset strata, svyset psu, and svyset pweight commands. For example, for estimates from the ASPA interview file, use the following commands to specify these design parameters:

```
svyset strata sstratum
svyset psu spsu
svyset pweight fswt
```

Data users should be aware that the use of 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 nearly always very similar, but not identical. For a discussion of this issue see Broene and Rust (2000).

Approximate Sampling Errors

Although calculating the sampling errors using the methods described above is recommended for many applications, simple approximations of the sampling errors may be valuable for some purposes. One such approximation is discussed below.

Most statistical software packages compute standard errors of the estimates based upon 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 the estimated proportion (p) times its complement ($1-p$) 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 the NHES:2001.

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 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 mean DEFT.

In complex sample designs, like the NHES:2001, the DEFT is typically greater than 1 due to the clustering of the sample and the differential weights attached to the observations. In the NHES:2001 both of these factors contributed to making the average DEFT greater than 1.

The average DEFT computed for estimates in the three interviews in the NHES:2001 ranged from 1.2 to 1.4. For the ECPP file estimates, the average DEFT was 1.2 overall. For estimates by path of child (infant or preschooler), the average DEFT was also 1.2. For estimates by race/ethnicity, the average DEFT was 1.2 for Hispanics and for White, non-Hispanics and was 1.3 for Black, non-Hispanics. Therefore, a DEFT of 1.2 is recommended to approximate the standard error of overall estimates in the ECPP interview file. For estimates by race/ethnicity, a DEFT of 1.2 is also recommended, with the exception of estimates of characteristics of Black, non-Hispanic children; for this subgroup, a DEFT of 1.3 is recommended.

The average DEFT for estimates from the ASPA file was 1.3. For estimates by path of student (grades kindergarten through 8 or homeschoolers), the average DEFT was also 1.3. For estimates by race/ethnicity, the average DEFT was 1.3 for Hispanics and for White, non-Hispanics and was 1.4 for Black, non-Hispanics. Therefore, a DEFT of 1.3 is recommended to approximate the standard error of overall estimates in the ASPA interview file. For estimates by race/ethnicity, a DEFT of 1.3 is also recommended, with the exception of estimates of characteristics of Black, non-Hispanic children; for this subgroup, a DEFT of 1.4 is recommended.

For estimates from the AELL file, the average DEFT is 1.3, and this did not vary for estimates by race/ethnicity, adult education participation status, or educational attainment. Therefore, a DEFT of 1.3 is recommended to approximate the standard error of estimates from the AELL interview file.

As stated above, the average DEFT can be used to approximate the standard error for an estimate. An example of how to do this on a percent estimate is as follows. If a weighted estimate of 46

percent is obtained for some characteristic in the AELL file (suppose that 46 percent of adults participated in adult education activities, excluding full-time credential programs), 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 46 percent statistic would be 0.48 percent (the square root of $(46*54)/10,873$, where the weighted estimate (p) is 46 percent, 54 is 100 minus the estimated percent ($1-p$), and the unweighted sample size (n) is 10,873). The approximate standard error of the estimate from the NHES:2001 is this quantity (the simple random sample standard error) multiplied by the DEFT for the AELL file estimates of 1.3. In this example, the estimated standard error would be 0.62 percent (1.3×0.48 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 ASPA file. First, the mean is estimated using the full sample weight and a standard statistical package like 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 ASPA file estimates of 1.3 to approximate the standard error of the estimate under the NHES:2001 design. For example, suppose the average total number of hours per week students in grades kindergarten through 8 spend in nonparental care arrangements or programs is 4.2 hours and the simple random sampling standard error (unweighted) is 0.08 hours. Then, the approximate standard error for the estimate would be 0.10 hours ($0.08 \text{ hours} \times 1.3$).

Users who wish 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 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:2001 design. For example, if a given parameter in a model involving items from the ECPP file has a weighted estimate of 2.33 and a simple random sample standard error of 0.45, then the adjusted standard error would be $1.2 \times 0.45 = 0.54$.

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 infants and preschoolers, sum the final weights for all 6,749 cases on the ECPP file. Next, divide this sum by the

number of cases to generate an average final weight. (In the above example, the number of cases is 6,749). Multiply the average final weight by the square of the DEFT for the population of interest. (In the above example, the average final weight would be multiplied by the square of 1.2, or 1.44.) Divide the final weight by the adjusted average weight and save the quotient as a new final weight. (In the above example, the new final weight is equal to the final weight divided by the product of 1.44 and the average final weight.) 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.

Direct computation of the standard errors is always recommended. It is particularly important when the statistical significance of statements would be affected by small differences in the estimated standard errors.

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8. COMPARISON OF NHES:2001 ESTIMATES WITH OTHER DATA SOURCES

Introduction

This chapter presents a comparison of selected estimates from the 2001 National Household Education Survey (NHES:2001) with estimates from previous NHES collections, the Current Population Survey (CPS), and other relevant extant data sources. The comparisons provide an indication of the reasonableness of selected NHES:2001 estimates. Where differences were found between NHES:2001 estimates and those from other sources, possible reasons are presented. All differences noted are significant at the 0.05 level; a Bonferroni adjustment was made for multiple comparisons.⁴⁷

The NHES:2001 was designed to cover a wide range of educational topics in three surveys, the Early Childhood Program Participation (ECPN-NHES:2001) survey, the Before-and After-School Programs and Activities Survey (ASPA-NHES:2001), and the Adult Education and Lifelong Learning Survey (AELL-NHES:2001). The Screener collected information about household composition and determined which members of the household were eligible for which extended interview(s), if any. Because the NHES:2001 covered a wide variety of topics relating to education, no single data source can be used for comparative purposes. The various data sources used for this comparative analysis were selected because they included topical information and samples similar to those used in one or more of the NHES:2001 interviews.

Populations of Interest and Data Sources

The estimates presented in this chapter reflect answers given by respondents representing three populations of interest. First, the NHES:2001 collected information about children age 0 through 6 who were not yet enrolled in kindergarten. Information on this population is reflected in parent responses to ECPN survey items. Second, the NHES:2001 collected data on children in kindergarten through grade 8, age 15 or younger, whose parents had completed an ASPA interview. The third population of interest was civilian, noninstitutionalized adults ages 16 and older who were not enrolled in grade 12 or below. These respondents reported on a number of adult education items. Estimates in this chapter include those from the ECPN, ASPA, and AELL surveys.

⁴⁷The Bonferroni adjustment for multiple comparisons is discussed in numerous books and articles on statistical analysis. See, for example, Neter, Wasserman, and Kutner (1983), p. 158.

Appendix B contains descriptions of each survey with which the NHES estimates are compared. The descriptions include information about the topics and populations covered, sample sizes, methods of survey design and administration, dates and periodicity of the surveys, sponsorship of the studies, and availability of the data. In the sections that follow, the data sources used to compare to each survey component are described briefly. Estimates from the NHES:1993, NHES:1995, NHES:1996, NHES:1999, and the CPS supplements contained in this chapter were generated from their respective data files; estimates from the other surveys were obtained from published sources. All data reported are weighted estimates.

Methodological Considerations in Data Comparisons

Sample and nonsampling errors, sample sizes, methods of survey administration, the timing of surveys, and unit response rates all affect the data collected and any comparisons made (Bradburn 1983; Groves 1989). In addition, question wording variation, question order, question context, and respondent recall can have a major impact on survey responses (Bradburn 1983; Groves 1989). As a result, it is important to note some general methodological issues.

Every survey, including the NHES:2001, is subject to both sampling error and nonsampling error. Sampling errors occur because the data are collected from a sample rather than a census of the population. Because the sample of telephone households selected for the NHES:2001 is just one of the many possible samples that could have been selected, estimates produced from the NHES:2001 sample may differ from estimates that would have been produced from other samples. In the same way, the data from the other surveys used for comparison are also subject to sampling error. Nonsampling error, however, are errors made in the collection and processing of data and may be caused by population coverage limitations and data collection, processing, and reporting procedures. The sources of nonsampling error are typically problems like unit and item nonresponse, the differences in respondents' interpretations of the meaning of the questions, response differences related to the particular time the survey was conducted, mistakes in data preparation, and response bias. Although the NHES surveys are designed to account for sampling error and minimize nonsampling error, the estimates presented in this chapter from the NHES and from other data sources are inclined to both types of error.

Population coverage is an issue that arises in the examination of results of any telephone survey because households without telephones are excluded from the sample. Approximately 5 percent of adults age 16 years or older and not enrolled in elementary or secondary school, about 8 percent of infants and preschoolers (children not yet enrolled in kindergarten), and about 6 percent of children

enrolled in kindergarten through grade 8 live in households without telephones (based on independent tabulations of the October 1999 Current Population Survey). Low-income persons, minority group members, and persons who do not own their own homes are more likely than others to live in nontelephone households (Groves and Kahn 1979; Thornberry and Massey 1988; Anderson, Nelson, and Wilson 1998).

The NHES:2001 data were statistically adjusted to reduce the effects of population undercoverage due to lack of telephone ownership. As a result, the estimates from the NHES:2001 sum to the total number of persons in all households, not just those in households with telephones.⁴⁸ Although these statistical adjustments may be useful in reducing biases in aggregates for the whole population, more serious biases may exist for estimates of segments of the population with relatively low telephone coverage rates (Brick, Burke, and West 1992).

Apart from population coverage, responses to survey items can vary depending upon the method of survey administration. Data collection modes differed for several of the survey sources used in this chapter. For example, the NHES:2001, NHES:1999, NHES:1996, NHES:1995, and the NHES:1993 were conducted by telephone in centralized facilities. The CPS surveys were primarily conducted by telephone from interviewers' homes, but about one-fourth to one-third of CPS interviews were conducted in person. Also, the context of the survey questions may produce different responses to similar questions. For example, surveys from the Department of Education that focus on educational issues may have similar items but different responses when compared to those from the Bureau of Labor Statistics, where the focus is on issues related to the labor force. These differences in mode and survey context may underlie some of the differences across survey estimates that are presented in this chapter.

Timing of survey administration in terms of the years in which surveys were conducted or the time of year they were administered also may affect responses. Where possible, estimates from surveys that were administered close in time to the NHES:2001 have been provided. However, in some cases, time gaps exist between administrations of the NHES:2001 and the extant sources most comparable for certain items. In such cases, the historical context of the surveys may vary substantially.

Another important consideration is the time of the year when the data are collected, which can affect responses to questions related to specific topics such as school attendance. For example, the relationship between age and grade in school can be affected by the time of year data are collected. A child at a given age in October (the time of the CPS Education Supplement) is most likely enrolled in the

⁴⁸ Similar statistical adjustments were made for the NHES:1999, NHES:1996, NHES:1995, and the NHES:1993 data, which are also included in comparisons in this chapter.

grade appropriate for his or her age during the fall. About one-sixth of those children, however, will have turned a year older by the new year, and would appear in the NHES:2001 as being a year older.

In this analysis, the NHES:2001 estimates have been adjusted to account for differences in the timing of the surveys, if appropriate. For example, to facilitate meaningful comparisons between the CPS Education Supplement conducted in October and the NHES:2001 conducted in January to April, ages of children whose birthdays fell in October, November, or December in the NHES:2001 were recoded (for this comparative analysis only) to more closely match the CPS convention. Despite these adjustments, it is important to keep in mind that the data collection period can be an important factor to consider when comparing estimates.

Variation in unit response rates across surveys can also result in differences in the estimates. To the extent that nonrespondents are different from respondents, low unit response rates may introduce biases into the survey estimates. The NHES:2001 Screener unit response rate was 69.2 percent. The unit response rate for the ECPP survey was 86.6 percent; thus, the overall unit response rate for the ECPP survey was 59.9 percent (69.2 percent times 86.6 percent). For the ASPA survey, the unit response rate was 86.4 percent, and the overall unit response rate was 59.7 percent (69.2 percent times 86.4 percent). For the AELL survey, the unit response rate was 77.2 percent and the overall unit response rate was 53.4 percent (69.2 percent times 77.2 percent). The issue of unit response rates for the NHES:2001 is addressed more thoroughly in chapter 6. Unit response rates for the comparable data sources discussed in this chapter were CPS March 2000 85.6 percent; CPS October 1999 89.7 percent; and IPEDS 1997 94.7 percent. The unit response rates of the previous NHES surveys that are used as comparisons in this chapter included the NHES:1999, which had a Screener unit response rate of 74.1 percent, the Parent survey overall unit response rate was 66.7 percent, and the Adult Education survey overall unit response rate was 62.3 percent. The NHES:1996 had a Screener unit response rate of 69.9 percent and the Parent and Family Involvement survey had an overall unit response rate of 62.5 percent. The NHES:1995 had a Screener unit response rate of 73.3 percent, the ECPP survey overall unit response rate was 66.3 percent, and the Adult Education survey overall unit response rate was 58.6 percent. The NHES:1993 Screener unit response rate was 82.1 percent and the School Readiness survey overall unit response rate was 73.6 percent. In 1991, the NHES had a Screener unit response rate of 81.0 percent and the Adult Education survey overall unit response rate was 68.6 percent.

Variations in question wording and operational definitions between surveys are other potential sources of differences between estimates. These issues are discussed for each survey in conjunction with the comparisons presented later in this chapter.

Any NHES estimate of a characteristic not specifically controlled for in the raking adjustment would not be expected to match CPS totals for one or more of the reasons discussed above.

General Comments on the NHES:2001 Estimates

The estimates to be presented here are just some of the multitude of comparisons that could be made between NHES:2001 estimates and those of other sources using different variables and categorizations of those variables. When many comparisons are made, some will undoubtedly show statistically significant differences. The multiple comparison adjustments are made assuming that the only comparisons being made are those in the particular table. This approach is still useful because the main purpose is to explore the data to determine whether there are some substantial differences in estimates that need to be investigated further.

Methodology for Significance Testing

Wherever possible, comparisons in this chapter were examined to ensure that the differences discussed were statistically significant at the 95 percent level of confidence. For comparisons in which NHES:2001 data and data from previous NHES studies are involved, the standard errors of estimates could be obtained and are provided in the tables. However, standard errors were not always available for the estimates from published data. Approximate determination of possible significant differences was made under the assumption that the comparison data set had standard errors about the same as the NHES.

For example, statistical significance testing was conducted with the assumption that the standard error of the CPS estimates was the same as the standard error for the NHES:2001 estimates. Because the CPS used roughly the same number of sampled households as the NHES:2001, one would expect the CPS standard errors to be roughly equivalent to NHES:2001 standard errors. Therefore, it is reasonable to use the same standard errors for both surveys.

Due to large sample sizes, some relatively small differences (3 to 5 percent) may be significant when all cases are included in an analysis. AELL interviews, for example, yielded responses from 10,873 respondents. In other cases, such as estimates from the ECPP file, differences of 3 to 5 percent may not be significant because of somewhat smaller sample sizes (6,730) or larger numbers of comparisons.

Other Data Considerations

Imputation. As is true for most surveys, responses were not obtained for all the NHES:2001 data items for all interviews. Despite the high item response rate, all NHES:2001 missing data items were imputed.⁴⁹ The CPS estimates provided as comparison data also contain imputed data.

Studies using adult respondents also differed from the AELL-NHES:2001 in their age criteria for inclusion in the survey. The CPS includes respondents age 15 and older, whereas AELL-NHES:2001 adults were at least 16 years old. Again, whenever possible, NHES comparisons with these sources include estimates from subsamples that most closely match the extant source. However, when such analyses are not possible using the available data, sample age differences may complicate comparisons with different data sources.

⁴⁹The median item response rate for items in the ECPP, ASPA, and AELL surveys were 99.29, 98.35, and 99.34 percent, respectively.

ECPP, ASPA, and AELL Comparisons with CPS Estimates

The Current Population Survey

The Current Population Survey is a monthly household survey conducted by the Bureau of the Census to provide information about employment, unemployment, and other characteristics of the civilian noninstitutionalized population. The CPS respondent is a household member age 15 or older and the survey is conducted each month in a sample of approximately 50,000 households, with interviews for approximately 120,000 individuals. The U.S. Department of Education is a joint sponsor of the annual October supplement to the CPS, which provides specific information on educational topics.

CPS data from October 1999 were used for comparison with estimates from the NHES:2001 ECPP and ASPA surveys, while the AELL survey was compared against the CPS March 2000 estimates. At the time this analysis was conducted, the October 1999 supplement contained the most recent available CPS data regarding child care arrangements and data relating enrollment status and grade to age and the March 2000 supplement contained the most recent CPS data on age, race/ethnicity by educational attainment, industry, and occupation. The data comparisons CPS and the ECPP, ASPA, and AELL surveys of the NHES:2001 cover the key estimates including the topics of age of subjects of interviews, student grade, enrollment status, and school type, and age, sex, and highest level of educational attainment of the adult population.

Comparability of the NHES:2001 and 1999 CPS Distributions for Age of Persons

Table 8-1 shows NHES:2001 and 1999 CPS estimates of the age distribution of the population as indicated by the age of persons who were subjects of NHES interviews (i.e., children from birth to age 15 and enrolled in grade 8 or below and noninstitutionalized adults age 16 or older and not enrolled in grade 12 or below). On the whole, the estimates of the two surveys were consistent, differing by 1 percent or less.

Table 8-1. Percentage distribution for age of subjects of interviews: ECPP-NHES:2001, ASPA-NHES:2001, AELL-NHES:2001, and CPS:1999

Age category	ECPP-NHES:2001, ASPA-NHES:2001, and AELL-NHES:2001 ¹		CPS:1999
	Percent	s.e.	Percent
0 through 2 years.....	5	<0.1	5
3 through 5 years.....	4	<0.1	5
6 through 9 years.....	6	0.1	6
10 through 15 years ²	7	<0.1	7
16 through 19 years ³	3	0.2	3
20 through 29 years.....	14	0.2	14
30 through 39 years.....	16	0.3	16
40 through 49 years.....	16	0.3	16
50 through 59 years.....	12	0.2	11
60 or more years.....	17	0.2	17

¹ Estimates of children (age 0 through 15 and enrolled in 8th grade or below) were obtained from the Early Childhood Program Participation (ECPP) Survey, and the Before- and After-School Programs and Activities (ASPA) Survey. Estimates of adults (age 16 and older and not enrolled in 12th grade or below) were obtained from the Adult Education and Lifelong Learning (AELL) Survey. Parent respondents to the ECPP and ASPA Surveys are not included in calculations for adult estimates.

² Age category 10 through 15 years only includes students enrolled in grade 8 or below.

³ Age category 16 through 19 years only includes persons **not** enrolled in grade 12 or below.

NOTE: s.e. is standard error.

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), 2001; Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001; and Adult Education and Lifelong Learning (AELL) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

School enrollment and grade level by age. Tables 8-2 and 8-2A provide the NHES:2001 and 1999 CPS estimates and standard errors for estimates of enrollment and current grade level among 0- to 15-year-olds. Since the CPS estimates were gathered in October, the ages of children in the NHES:2001 were recalculated to reflect their ages as of September 30, 2000, rather than the NHES standard of December 31, 2000.

A comparison of the number of 5-year-old children in tables 8-2 and 8-2A revealed a shortfall of about 500,000 children of this age in the NHES:2001 estimates. This anomaly led to the investigation of the NHES:2001 weights, summarized in chapter 7 and described in more detail in appendix K. The investigation indicated that the NHES:2001 weighting procedures were correctly applied, and no alternative weighting approach was found to be superior to the original approach.

Table 8-2. Percentage distribution of children ages 0 through 15 not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
NHES:2001												
0.....	3,905	100										
1.....	3,850	100										
2.....	4,027	94	6									
3.....	3,845	55	44	1								
4.....	3,779	27	64	9	#							
5.....	3,522	1	7	86	6	#						
6.....	4,217	#	#	11	83	6	#					
7.....	3,839				15	79	6	#				
8.....	4,090				1	15	77	6				
9.....	4,343					1	21	73	6	#		
10.....	4,177						1	17	75	7	#	
11.....	3,940							1	19	74	6	#
12.....	3,873							#	1	20	74	5
13.....	3,674								#	1	19	80
14.....	861									1	10	89
15.....	86								7		4	89

See notes at end of table.

**Table 8-2. Percentage distribution of children ages 0 through 15 not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—
Continued**

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
CPS:1999												
0.....	3,861	100										
1.....	3,895	100										
2.....	3,924	100										
3.....	3,862	61	38	1								
4.....	4,021	31	61	8								
5.....	4,037	6	15	74	5	#						
6.....	4,060	2	2	11	81	4	1					
7.....	4,083	1		1	18	73	6	#				
8.....	3,955				2	18	75	5	#			
9.....	4,269				1	1	23	70	5	1		
10.....	4,053					#	2	22	70	5	#	
11.....	4,042						#	2	24	68	4	1
12.....	3,905							1	3	23	68	6
13.....	3,709								#	3	25	71
14.....	1,020									1	8	90
15.....	166										24	76

Rounds to zero.

NOTE: For the NHES, kindergarten (K) includes grades classified as kindergarten, transitional kindergarten, and prefirst grade. Age in the NHES:2001 was recalculated to match the CPS definition of the child's age as of September 30. Homeschoolers are excluded from the NHES estimates, but not the CPS estimates. 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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table 8-2A. Standard errors of the percentage distribution of children ages 0 through 15 not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001 and ASPA-NHES:2001

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Center-based care	K	1	2	3	4	5	6	7	8
NHES:2001												
0.....	4,417	(1)										
1.....	4,130	(1)										
2.....	3,800	0.7	0.7									
3.....	3,421	1.1	1.1	0.2								
4.....	3,749	1.1	1.3	1.1	(1)							
5.....	3,495	0.4	0.8	1.1	0.8	(1)						
6.....	4,062	(1)	(1)	1.1	1.4	1.0	(1)					
7.....	3,817				1.5	1.5	1.0	(1)				
8.....	4,178				0.5	1.1	1.5	1.0				
9.....	4,264					0.4	1.6	1.6	0.7	(1)		
10.....	4,146						0.4	1.2	1.4	0.7	(1)	
11.....	4,021							0.5	1.5	1.6	0.6	(1)
12.....	3,969							(1)	0.4	1.1	1.2	0.5
13.....	3,754								(1)	0.3	1.0	1.0
14.....	1,546									0.7	1.8	1.9
15.....	192									6.7	3.1	7.3

¹ Standard errors are not provided for estimates of 100 percent or estimates of less than 1 percent.

NOTE: Standard errors increase for children who are 14 and 15 years old. This is because there are small numbers of those children in the grade categories shown above.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001.

Estimates of the number of children age 3 through 8th grade, by school type and by student grade level, are presented in table 8-3 for the ECPP and ASPA surveys and for CPS:1999. No differences were detected in comparisons of NHES:2001 and CPS:1999 estimates for numbers of children age 3 through 8th grade enrolled in public and private schools. The NHES:2001 estimated that there were 31,885,000 children enrolled in public schools and 3,896,000 enrolled in private schools. The CPS:1999 estimated that there were 32,192,000 children enrolled in public schools and 4,259,000 enrolled in private schools. Estimates of the number of children at each grade level from age 3 through grade 8 are consistent; this was expected to some degree because child weights were raked to estimates of grade by home tenure from the CPS.

Table 8-3. Number of children age 3 through 8th grade, by school type and by student grade level: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

School type and grade	NHES:2001		CPS:1999
	Number (thousands)	s.e. (thousands)	Number (thousands)
Total number of children age 3 through 8th grade	45,260	99	45,183
School type¹			
Public	31,885	173	32,192
Private	3,896	138	4,259
Student grade level			
Not enrolled	3,995	0	3,988
Preschool/nursery school	4,586	0	4,578
K	3,831	0	3,825
1	4,333	0	4,326
2	3,934	0	3,927
3	4,343	0	4,335
4	4,214	0	4,207
5	4,155	0	4,148
6	4,022	0	4,015
7	3,885	0	3,878
8	3,962	0	3,955

¹ Preschoolers and children who are homeschooled are not included.

NOTE: s.e. is standard error. Age in the NHES:2001 estimates was recalculated to match the CPS definition of the child's age as of September 30. 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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table 8-4 shows estimates of the number of children enrolled in kindergarten through 8th grade at each grade level in public versus private schools. There were no differences detected between the

ASPA-NHES:2001 and CPS:1999 with respect to enrollment in public and private schools across grade levels.

Table 8-4. Number and percentage of children in kindergarten through 8th grade enrolled in public and private schools: ASPA-NHES:2001 and CPS:1999

Child's current grade	School type					
	Public			Private		
	Number (thousands)	Percent	s.e.	Number (thousands)	Percent	s.e.
ASPA-NHES:2001						
K	3,125	84	1.6	575	16	1.6
1	3,750	89	1.5	484	11	1.5
2	3,368	88	1.2	477	12	1.2
3	3,829	90	1.2	436	10	1.2
4	3,585	88	1.5	490	12	1.5
5	3,667	92	0.9	337	8	0.9
6	3,549	90	0.9	404	10	0.9
7	3,448	91	0.8	343	9	0.8
8	3,535	91	0.8	343	9	0.8
CPS:1999						
K	3,167	83	—	658	17	—
1	3,802	88	—	524	12	—
2	3,502	89	—	426	11	—
3	3,817	88	—	519	12	—
4	3,773	90	—	433	10	—
5	3,701	89	—	447	11	—
6	3,590	89	—	426	11	—
7	3,405	89	—	434	11	—
8	3,435	90	—	393	10	—

—Not available.

NOTE: s.e. is standard error. For the NHES:2001, kindergarten (K) includes grades reported as kindergarten, transitional kindergarten, and prefirst grade. Grades reported as nursery school, preschool, or prekindergarten are not included. Preschoolers and children who are home schooled are not included.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Enrollment by household income. Table 8-5 presents NHES and CPS estimates of the percentage of children age 0 through 5, not yet enrolled in kindergarten who resided in households with particular income ranges. No differences were detected by income. Across income categories, estimates from both surveys were quite similar; only one difference was greater than 1 percent. The NHES:2001 estimates were raked to income figures from the CPS:1999 using three income categories: \$10,000 or less; \$10,001-\$25,000; and over \$25,000. Had these income categories been used for comparison, no differences between the NHES:2001 and the CPS:1999 would have been detected.

Table 8-5. Percentage of children ages 0 through 5 not yet enrolled in kindergarten, by household income: ECPP-NHES:2001 and CPS:1999

Household income	ECPP-NHES:2001		CPS:1999
	Percent	s.e.	Percent
\$5,000 or less	5	0.4	5
\$5,001 to \$10,000	7	0.4	6
\$10,001 to \$15,000	6	0.3	7
\$15,001 to \$20,000	7	0.4	6
\$20,001 to \$25,000	7	0.4	7
\$25,001 to \$30,000	6	0.4	7
\$30,001 to \$35,000	6	0.3	7
\$35,001 to \$40,000	6	0.3	6
\$40,001 to \$50,000	10	0.4	10
\$50,001 to \$60,000	10	0.5	10
\$60,001 to \$75,000	10	0.5	10
Over \$75,000.....	20	0.6	18

NOTE: s.e. is standard error. CPS estimates exclude cases with missing income data. Details 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), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Enrollment by household income and race/ethnicity. Few differences are observed in table 8-6, which compares NHES:2001 and CPS:1999 estimates of household income by race/ethnicity for children age 0 through 5. The NHES:2001 showed a lower percentage of Blacks in the \$30,001 to \$50,000 income category when compared to CPS estimates (15 versus 19 percent). There was also a significant difference found between Hispanics in the over \$50,000 income category; NHES:2001 showed a higher percentage of Hispanics in this category than did the CPS:1999 (20 versus 16 percent). Neither of these differences was large. The differences in these estimates may be accounted for in part by the different procedures used to deal with missing data in the two surveys. While missing income data from the NHES were imputed, missing income data from the CPS were dropped and therefore not included in the analyses. Further, the income categories presented in table 8-6 are somewhat different from the raking categories used in the NHES:2001.

Table 8-6. Number and percentage of children ages 0 through 5 not yet in kindergarten, by household income level and race/ethnicity: ECPP-NHES:2001 and CPS:1999

Race/ethnicity	Number of children (thousands)	Household income							
		Less than \$15,000		\$15,001 to \$30,000		\$30,001 to \$50,000		More than \$50,000	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
ECPP-NHES:2001									
White, non-Hispanic	12,353	9	0.5	16	0.7	24	0.8	51	0.9
Black, non-Hispanic	2,988	39	1.0	25	1.4	15	1.2	21	1.4
Hispanic	3,693	29	1.0	31	1.2	20	0.9	20	0.9
Other	1,219	18	2.8	19	2.2	19	2.1	44	2.8
CPS:1999									
White, non-Hispanic	12,493	10	—	16	—	24	—	49	—
Black, non-Hispanic	2,985	40	—	22	—	19	—	18	—
Hispanic	3,688	29	—	35	—	21	—	16	—
Other	1,080	13	—	21	—	20	—	45	—

—Not available.

NOTE: s.e. is standard error. CPS percentage estimates exclude cases with missing income data. 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), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table 8-7 presents estimates of children in kindergarten through 8th grade, by household income, from the ASPA-NHES:2001 and CPS:1999. For most estimates the ASPA and CPS estimates were within 2 percent or less. However, fewer children were from households with incomes between \$25,001 and \$30,000 in the ASPA:NHES:2001 than in the CPS:1999 (6 percent versus 8 percent). Also, fewer children were from households that earned between \$40,001 and \$50,000 per year in the ASPA:NHES:2001 than in the CPS:1999. Finally, 22 percent of households in the ASPA-NHES:2001 reported earnings of over \$75,000, compared to 19 percent of households according the CPS:1999. These differences are not large in magnitude but are statistically significant. These differences may be due in part to the fact that CPS estimates did not include missing income data and may also reflect that the income categories presented here are more detailed than the raking adjustment categories used in weighting.

Table 8-7. Percentage of children in kindergarten through 8th grade, by household income: ASPA-NHES:2001 and CPS:1999

Household income	ASPA-NHES:2001		CPS:1999
	Percent	s.e.	Percent
\$5,000 or less	3	0.3	4
\$5,001 to \$10,000	5	0.3	5
\$10,001 to \$15,000	6	0.3	7
\$15,001 to \$20,000	7	0.3	6
\$20,001 to \$25,000	7	0.3	8
\$25,001 to \$30,000	6	0.3	8
\$30,001 to \$35,000	6	0.3	6
\$35,001 to \$40,000	6	0.3	6
\$40,001 to \$50,000	9	0.4	11
\$50,001 to \$60,000	10	0.4	10
\$60,001 to \$75,000	11	0.4	11
Over \$75,000.....	22	0.5	19

NOTE: s.e. is standard error. CPS estimates exclude cases with missing income data. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table 8-8 presents ASPA-NHES:2001 and CPS:1999 estimates of household income by race/ethnicity for children in kindergarten through 8th grade. While most estimates were consistent across

surveys, there were some differences. For instance, whereas 9 percent of children from other racial/ethnic⁵⁰ groups came from households with annual incomes of less than \$15,000 in the ASPA-NHES:2001, this was the case for 19 percent of children from other racial/ethnic groups from households in the CPS:1999. Also, more Hispanic children came from households earning more than \$50,000 in the ASPA-NHES:2001 than in the CPS:1999 (22 percent versus 16 percent), and fewer White, non-Hispanic children came from households earning \$30,001 to \$50,000 per year in the ASPA-NHES:2001 than in the CPS:1999 (22 percent versus 25 percent). These results might be due in part to the fact that CPS estimates exclude cases with missing income data. Also, these differences might be attributed in part to the 2-year time difference between surveys and because the income categories presented in this table are somewhat different from the raking categories used in the NHES:2001.

Table 8-8. Number and percentage of children in kindergarten through 8th grade, by household income and race/ethnicity: ASPA-NHES:2001 and CPS:1999

Race/ethnicity	Number of children (thousands)	Household income							
		Less than \$15,000		\$15,001 to \$30,000		\$30,001 to \$50,000		More than \$50,000	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
ASPA-NHES:2001									
White, non-Hispanic	22,938	8	0.3	15	0.6	22	0.6	55	0.6
Black, non-Hispanic	5,863	32	1.1	30	1.5	18	1.1	20	1.0
Hispanic	5,743	26	0.9	33	1.1	19	1.0	22	1.0
Other	2,135	9	1.6	23	2.7	22	2.3	46	2.8
CPS:1999									
White, non-Hispanic	23,047	8	—	16	—	25	—	51	—
Black, non-Hispanic	5,853	35	—	28	—	19	—	18	—
Hispanic	5,734	26	—	37	—	22	—	16	—
Other	1,983	19	—	20	—	19	—	43	—

—Not available.

NOTE: s.e. is standard error. CPS percentage estimates exclude cases with missing income data. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

⁵⁰“Other” race includes Asians or Pacific Islanders, American Indians or Alaskan Natives, those who describe themselves as biracial or multiracial, and others who did not identify themselves as White, non-Hispanic; Black, non-Hispanic; or Hispanic.

Estimates from the ASPA-NHES:2001 and CPS:1999 for the number and percent of White, Black, Hispanic, and children of other races in kindergarten through grade 8 in public and private schools are presented in table 8-9. No differences were detected across surveys.

Table 8-9. Number and percentage of children enrolled in kindergarten through 8th grade in public and private schools, by race/ethnicity: ASPA-NHES:2001 and CPS:1999

Race/ethnicity	ASPA-NHES:2001					CPS:1999		
	Number of children (thousands)	Public		Private		Number of children (thousands)	Public	Private
		Percent	s.e.	Percent	s.e.		Percent	Percent
White, non-Hispanic.....	22,173	87	0.5	13	0.5	23,047	86	14
Black, non-Hispanic	5,827	92	1.0	8	1.0	5,853	92	8
Hispanic.....	5,690	95	0.4	5	0.4	5,734	94	6
Other.....	2,091	86	2.2	14	2.2	1,983	90	10

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.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Adult population, by sex and age. Table 8-10 shows estimates of the adult population by sex and age. As discussed in the previous chapter, the adult education weights were raked to control totals of age by sex from the CPS. Therefore, estimates from the two surveys were expected to be similar. The age estimates for both males and females from the NHES:2001 and the CPS:2000 were almost identical.

Table 8-10. Percentage distribution of the adult population, by sex and age: AELL-NHES:2001 and CPS:2000

Age	AELL-NHES:2001				CPS:2000	
	Male		Female		Male	Female
	Estimate	s.e.	Estimate	s.e.	Estimate	Estimate
Total number of adults ¹ (thousands).....	94,955	0.0	103,848	0.0	94,955	103,848
16 to 24 years	6%	0.2	6%	0.2	6%	6%
25 to 34 years	9	0.3	10	0.3	9	10
35 to 44 years	11	0.3	11	0.3	11	11
45 to 54 years	9	0.3	10	0.4	9	9
55 years and older	12	0.2	16	0.2	13	16

¹ Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

NOTE: The percentages provided in this table are cell percentages and sum to 100 over females and males for each data set.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000.

Adult population by highest educational attainment and race/ethnicity. Race/ethnicity and educational attainment were also used in raking the adult education and lifelong learning weights. Since the CPS:2000 was the source of the control totals for raking the NHES:2001, estimates of educational attainment and race/ethnicity were expected to be similar. Educational attainment estimates shown here are not identical, however, because the NHES:2001 data were raked to a three-category educational attainment variable (less than high school, high school diploma or equivalent, and some college or more), whereas a four-category education attainment variable was used in the comparison.

As depicted in table 8-11, the NHES:2001 and the CPS:2000 estimates of educational attainment by race/ethnicity were quite consistent in most cases; however, some differences were observed for White, non-Hispanics and Hispanics. The NHES:2001 showed a 4 percent lower estimate of adults without a high school diploma for Hispanics. On the other hand, the NHES:2001 showed a 5 percent higher estimate of adults with a bachelor’s degree or higher for Hispanics and a 2 percent higher estimate of adults with a bachelor’s degree or higher for White, non-Hispanics than CPS. For all other races, the estimates of educational attainment by race/ethnicity were consistent between surveys.

Table 8-11. Percentage distribution of the adult population by highest educational attainment and race/ethnicity: AELL-NHES:2001 and CPS:2000

Race/ethnicity	Number of adults (thousands)	Highest educational attainment							
		Less than high school		High school diploma		Associate's or some college		Bachelor's or higher	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
AELL-NHES:2001									
Total adults ¹	198,803	16	0.1	33	0.4	26	0.5	25	0.2
White, non-Hispanic	144,147	11	0.3	33	0.6	28	0.6	28	0.4
Black, non-Hispanic	22,186	24	1.7	34	1.8	26	1.6	15	1.2
Hispanic	21,537	39	2.0	29	1.7	19	1.1	14	1.2
All other races	10,932	12	1.6	26	2.3	28	2.4	34	2.6
CPS:2000									
Total adults (thousands).....	198,803	16	—	33	—	27	—	23	—
White, non-Hispanic	146,164	12	—	34	—	28	—	26	—
Black, non-Hispanic	22,737	21	—	36	—	28	—	15	—
Hispanic	20,818	43	—	28	—	20	—	9	—
All other races	9,083	15	—	24	—	25	—	36	—

—Not available.

¹ Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000.

ECPP Survey Comparisons

Data comparisons in this section cover some of the major topical areas of the Early Childhood Program Participation survey for the NHES:2001. The 2001 estimates were compared to previous NHES cycles, which contained the same or similar items, as described below.

The 1993, 1995, 1996, and 1999 National Household Education Surveys

Information on early childhood education was collected in the NHES:1993, NHES:1995, NHES:1996, and NHES:1999. Data from these previous NHES administrations were used in comparisons of ECPP-NHES:2001 survey estimates concerning participation in child care arrangements and programs, participation in literacy-related activities with family members, disabling conditions, and parent and

household characteristics. The NHES:1993 School Readiness (SR) survey included 10,888 children age 3 to 7 years or in 2nd grade or below. The NHES:1995 Early Childhood Program Participation (ECP) survey contained 14,064 children age 10 and younger who were enrolled in 3rd grade or below. The NHES:1996 Parent and Family Involvement in Education and Civic Involvement (PFI/CI) survey contained 20,792 children ages 3 through 20 years enrolled in 12th grade or below. The NHES:1999 Parent survey included 24,600 children birth through 20 years of age who were either being homeschooled or in the 12th grade or below. The comparison of ECP-NHES:2001 survey estimates to estimates from previous NHES surveys is intended to reveal potential problems by identifying major differences or a difference in an unexpected direction.

Participation in care arrangements by race/ethnicity. Table 8-12 presents NHES:2001, NHES:1999, and NHES:1995 estimates of participation in various types of care arrangements by the race/ethnicity of the child. There were no differences detected between the estimates from NHES:2001 and the estimates from NHES:1999. However, differences were observed when comparing NHES:2001 to NHES:1995. The percentage of White children in both relative and nonrelative care was lower in 2001 than it was in 1995 (20 versus 28 percent and 19 versus 21 percent, respectively). Differences by race between NHES:2001 and NHES:1995 also existed with regard to children in center-based care or educational programs. In 2001, the NHES estimated that 21 percent of Hispanic children participated in center-based care, 40 percent of Black children did so, as did 37 percent of children from other racial or ethnic backgrounds. This was an increase in each of these racial/ethnic groups from 1995, which estimated 17 percent of Hispanic children, 33 percent of Black children, and 28 percent other race or ethnicity. The only difference with respect to parental care only was a decrease in percentage for Black children, from 34 percent in 1995 to 26 percent in 2001, perhaps offset by the increase in Black children in center-based programs.

Table 8-12. Percentage of children ages 0 through 5 not yet in kindergarten participating in different care arrangements, by race/ethnicity: ECPP-NHES:2001, Parent-NHES:1999, and ECPP-NHES:1995

Child's race/ethnicity	Number of children (thousands)	Type of arrangement								
		Relative care		Nonrelative care		Center- or school-based program		Parental care		
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	
ECPP-NHES:2001										
Hispanic	3,693	23	1.3	12	1.1	21	0.9	52	1.6	
White, non-Hispanic	12,353	20	0.8	19	0.7	35	0.7	38	0.9	
Black, non-Hispanic	2,988	35	2.3	13	1.3	40	2.0	26	2.3	
Other	1,219	23	2.5	15	2.2	37	2.6	35	3.1	
Parent-NHES:1999										
Hispanic	3,496	26	1.6	13	1.0	23	1.1	53	1.7	
White, non-Hispanic	12,515	20	0.8	19	0.8	35	0.7	39	0.9	
Black, non-Hispanic	2,867	36	2.2	13	1.3	43	2.0	25	1.8	
Other	1,347	29	3.2	12	1.6	34	2.7	34	3.2	
ECPP-NHES:1995										
Hispanic	2,838	23	1.3	12	1.0	17	1.1	54	1.6	
White, non-Hispanic	13,996	28	0.7	21	0.7	33	0.8	38	0.9	
Black, non-Hispanic	3,344	31	1.8	12	1.2	33	1.8	34	2.0	
Other	1,243	25	2.7	12	1.8	28	2.6	42	3.1	

NOTE: s.e. is standard error. Center-based programs include nursery schools, preschools, center-based Head Start programs, and prekindergartens. Relative and nonrelative care could also have been designated as Head Start in 2001. Row percentages do not sum to 100 because children may participate in more than one child care arrangement or program.

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), 2001; Parent Survey of the NHES, 1999; and Early Childhood Program Participation (ECPP) of the NHES, 1995.

Participation in center-based programs by income. Table 8-13 presents NHES:2001, NHES:1999, NHES:1996, NHES:1995, and NHES:1993 estimates of differences in center-based program participation rates by high and low household income for children ages 3- through 5-years of age who are not yet in kindergarten. A decrease in participation in center-based care programs has occurred among children from high-income families between 1993-2001. The NHES:2001 estimate of center-based enrollment was lower than the NHES:1995 and NHES:1993 estimates. While the NHES:2001 estimated that 69 percent of children in this age and income group participated in center-based programs, the NHES:1995 estimated that 76 percent of children did so, and the NHES:1993 estimated that 75 percent participated. A difference also occurred with respect to children from low-income families. The NHES:1999 estimated that 56 percent of low-income children in this age group participated in center-based programs, which was statistically higher than NHES estimates from 1996 and 1993. NHES:2001 placed participation at 46 percent, some 10 percentage points below NHES:1999 estimates. Given that the 2001 estimate for low income children is most similar to those from 1996, 1995, and 1993, it is likely that the data for this category in 1999 were anomalous.

Table 8-13. Percentage of children ages 3 through 5 not yet in kindergarten participating in center-based programs, by high and low income: ECPP-NHES:2001, Parent-NHES:1999, PFI/CI-NHES:1996, ECPP-NHES:1995, and SR-NHES:1993

Income level	ECPP-NHES:2001		Parent-NHES:1999		PFI/CI-NHES:1996		ECPP-NHES:1995		SR-NHES:1993	
	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
High income	69	1.3	71	1.4	72	1.6	76	1.8	75	1.4
Low income	46	3.8	56	3.2	43	2.9	49	3.2	47	2.0

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 \$10,000 or less.

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), 2001; Parent Survey of the NHES, 1999; Parent and Family Involvement in Education/Civic Involvement (PFI/CI) Survey of the NHES, 1996; Early Childhood Program Participation (ECPP) Survey of the NHES, 1995; and School Readiness (SR) Survey of the NHES, 1993.

Participation in center-based programs by household income. The percent of children age 0 through 5 who were not yet in kindergarten and were participating in a center-based program, by household income, are presented in Table 8-14. Differences between the NHES:2001 and the NHES:1999 estimates were not detected, with the exception of the \$40,001 to \$50,000 household income category. In this category, there was a decrease in the percentage of children participating in center-based care or programs, from 35 percent in 1999 to 26 percent in 2001. The estimates from the ECPP-NHES:2001 showed a higher percentage of children in this age group as participating in center-based care than did the ECPP-NHES:1995 for three income categories. For example, in 1995, 17 percent of children in families with incomes of \$10,000 or less were estimated to be participating in center-based care or programs, compared to 25 percent in 2001. Participation was also higher in 2001 for children in families with incomes from \$10,001 to \$20,000, \$20,001 to \$30,000, and \$30,001 to \$40,000. In 1995, 18 percent of children in the \$10,001 to \$20,000 range were in center-based programs compared with 30 percent in 2001. Twenty-three percent of children in the \$30,001 to \$40,000 category were estimated to be in this type of care in 1995 versus 30 percent in 2001. These increases are consistent with the increases from 1995 estimates to 1999 estimates and might be due to increased public awareness of the importance of early educational programs for children’s learning and development, welfare-to-work requirements, or to increased programs and locations of programs geared towards low- and middle-income families, such as Head Start.

Table 8-14. Percentage of children ages 0 through 5 not yet in kindergarten participating in center-based programs, by household income: ECPP-NHES:2001, Parent-NHES:1999, and ECPP-NHES:1995

Household income	ECPP-NHES:2001		Parent-NHES:1999		ECPP-NHES:1995	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
\$10,000 or less	25	2.2	29	2.0	17	1.5
\$10,001–\$20,000.....	30	1.5	30	1.7	18	1.4
\$20,001–\$30,000.....	27	1.6	30	1.6	21	1.2
\$30,001–\$40,000.....	30	1.9	31	1.6	23	1.6
\$40,001–\$50,000.....	26	2.0	35	1.8	31	1.8
Over \$50,000.....	42	0.9	42	1.1	43	1.2

NOTE: s.e. is standard error. Center-based programs include nursery schools, preschools, Head Start programs, and prekindergartens.

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), 2001; Parent Survey of the NHES, 1999; and Early Childhood Program Participation (ECPP) Survey of the NHES, 1995.

Family structure and household urbanicity. Estimates of the percentage of children age 0 through 5, not yet in kindergarten, by family structure, parents' highest education, and by household urbanicity for the NHES:2001, NHES:1999, and NHES:1995 are presented in table 8-15. The NHES:2001 estimates for family structure were found to be different from 1999 and 1995. For example, percentages of children in families with both a mother and father present were higher in 2001 than they were in 1995 (77 percent versus 73 percent in both 1999 and 1995), and percentages of children in families with a mother only or a nonparent guardian were lower than the 1999 or 1995 estimates (20 percent versus 23 and 24 percent and 1 percent versus 2 percent, in 1999 and 1995).

With regard to parents' educational attainment, no differences were detected between 2001 estimates and those from 1999. However, differences between 2001 and 1995 were observed. The estimated percentage of children with parents having graduated high school or having less than a high school diploma declined from 1995 to 2001. The NHES:1995 estimated that 11 percent of children in this age group had parents with less than a high school diploma and 32 percent had parents with a high school diploma. The NHES:2001 estimates were 9 percent and 26 percent for these categories, respectively. Conversely, the estimated percentage of children with parents having a college degree or graduate school increased from 1995 to 2001. In 1995, 17 percent of children in this age group had parents with a college degree and 13 percent had parents with a graduate school level of education. In 2001, the percentages increased to 20 percent and 16 percent, respectively, indicating that more parents of children in this age group were now continuing their education after high school in 2001 than in previous survey years. While these changes were significant, they were not large in magnitude.

The differences with respect to household urbanicity were for children living in rural areas, and these differences were less than 1 percent. In 2001, 24 percent of children were estimated to live in rural areas, slightly higher than the 23 percent in both the NHES:1999 and the NHES:1995.

Table 8-15. Percentage of children ages 0 through 5 not yet in kindergarten, by family structure, parents' highest level of education, and urbanicity of ZIP Code area: ECPP-NHES:2001, Parent-NHES:1999, and ECPP-NHES:1995

Family and community characteristics	ECPP-NHES:2001		Parent-NHES:1999		ECPP-NHES:1995	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
Family structure						
Mother and father.....	77	0.5	73	0.7	73	0.5
Mother.....	20	0.5	23	0.7	24	0.6
Father	2	0.2	2	0.2	1	0.1
Nonparent guardian(s)	1	0.2	2	0.2	2	0.2
Parents' highest education						
Less than high school.....	9	0.5	9	0.5	11	0.5
High school graduate	26	0.8	26	0.6	32	0.7
Some college.....	29	0.7	30	0.8	28	0.6
College graduate	20	0.5	20	0.6	17	0.5
Graduate school	16	0.5	15	0.5	13	0.6
Household urbanicity						
Urban, inside urbanized area	64	0.5	65	0.6	65	0.6
Urban, outside urbanized area	11	0.5	12	0.5	11	0.4
Rural	24	<0.1	23	0.5	23	0.4

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.

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), 2001; Parent Survey of the NHES, 1999; and Early Childhood Program Participation (ECPP) Survey of the NHES, 1995.

Parents' highest level of education by race/ethnicity of child. Table 8-16 presents parents' highest level of education by race/ethnicity of the child. The only difference detected between the NHES:2001 and the NHES:1999 estimates was for children of parents with a graduate education, who were of "other" race or ethnicity. Specifically, 29 percent of these children had parents with a graduate education in 2001, which was an increase from 21 percent in 1999. Wide differences in estimates for this small and diverse racial/ethnic group are not uncommon. The 2001 estimate for this category was also different from the NHES:1995 estimate, which was 18 percent. The NHES:2001 and the NHES:1995 estimates also differed with respect to Black children whose parents had a college degree (11 percent versus 8 percent) and for Black children whose parents had attended graduate school (8 versus 4 percent). These differences in level of education across survey years are consistent with previous research indicating increases in minorities seeking and obtaining postsecondary degrees and may reflect increases in educational requirements to maintain employment (U.S. Department of Education, 2002a).

Table 8-16. Number and percentage of children ages 0 through 5 not yet in kindergarten, by parents' highest level of education and race/ethnicity: ECPP-NHES:2001, Parent-NHES:1999, and ECPP-NHES:1995

Race/ethnicity	Number of children (thousands)	Parents' highest level of education									
		Less than high school		High school		Some college		College graduate		Graduate school	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
ECPP-NHES:2001											
White, non-Hispanic	12,353	4	0.5	23	0.9	29	0.9	24	0.8	19	0.8
Black, non-Hispanic.....	2,988	16	2.0	31	2.4	33	2.3	11	1.0	8	1.0
Hispanic	3,693	24	1.3	34	1.6	25	1.2	11	0.8	7	0.7
Other.....	1,219	5	1.2	24	2.8	23	2.5	20	2.2	29	2.7
Parent-NHES:1999											
White, non-Hispanic	12,515	3	0.4	22	0.8	30	1.0	25	0.9	19	0.8
Black, non-Hispanic.....	2,867	13	1.4	34	2.0	34	1.8	12	1.4	8	1.2
Hispanic	3,496	26	1.6	32	1.4	27	1.4	10	1.0	6	0.7
Other.....	1,347	10	2.2	21	2.2	25	2.3	23	2.5	21	2.4
ECPP-NHES:1995											
White, non-Hispanic	13,996	5	0.5	28	0.8	29	0.8	21	0.6	17	0.8
Black, non-Hispanic.....	3,344	19	2.0	41	2.1	28	1.6	8	1.1	4	0.7
Hispanic	2,838	30	1.4	35	1.4	23	1.3	6	0.6	6	0.7
Other.....	1,243	9	2.1	26	3.2	30	3.1	17	2.5	18	2.0

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), 2001; Parent Survey of the NHES, 1999; and Early Childhood Program Participation (ECPP) Survey of the NHES, 1995.

Literacy-related activities with family members. Table 8-17 presents results from the NHES:2001, NHES:1999, NHES:1996, NHES:1995, and the NHES:1993 with respect to parent reports of reading to or telling stories to their 3- to 5-year-old children. While no differences were detected between the 2001 and 1999 estimates, the estimates between NHES:2001 and the other survey years were significantly different. Specifically, the NHES:2001 reports that 84 percent of children had parents whom reported reading or telling stories to them regularly, which is 12 percentage points higher than the 1996 and 1995 estimates of 72 percent. This was also higher than the 1993 estimate of 66 percent.

Table 8-17. Percentage of children ages 3 through 5 whose parents reported reading or telling stories to them regularly: ECPP-NHES:2001, Parent-NHES:1999, PFI/CI-NHES:1996, ECPP-NHES:1995, and SR-NHES:1993

Survey	Percent	s.e.
ECPP-NHES:2001	84	0.8
Parent-NHES:1999	82	0.7
PFI/CI-NHES:1996	72	1.2
ECPP-NHES:1995	72	0.7
SR-NHES:1993	66	0.8

NOTE: s.e. is standard error. Children enrolled in kindergarten or above are not included. "Regularly" is defined as reading every day or telling a story three times a week or more.

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), 2001; Parent Survey of the NHES, 1999; Parent and Family Involvement in Education/Civic Involvement (PFI/CI) Survey of the NHES, 1996; Early Childhood Program Participation (ECPP) Survey of the NHES, 1995; and School Readiness (SR) Survey of the NHES, 1993.

Specific disabilities. The final table presenting comparative estimates for the ECPP-NHES:2001 relates to the percentage of children with specific disabilities (table 8-18). The estimates for each disability were generally consistent across survey years; however, very small but significant differences in several disability categories between 2001, 1999, and 1996. The estimates in 2001 show a decrease of 1 percentage point in the category of learning disability, which is different from both 1999 and 1996 (1 percent in 2001 versus 2 percent in 1999 and 1996). There was also a 1 percentage decrease with respect to orthopedic impairment from 1996 to 2001 (2 versus 1 percent). For the category of blindness or another visual impairment, the estimate from the NHES:2001 is 2 percent, slightly higher than the estimate of 1 percent from 1996. The data did not suggest any explanations for these very small differences.

Table 8-18. Percentage of children ages 3 through 5 with specific disabilities: ECPP-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996

Disability	ECPP-NHES:2001		Parent-NHES:1999		PFI/CI-NHES:1996	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
Learning disability	1	0.2	2	0.3	2	0.4
Mental retardation.....	#	(1)	#	(1)	#	(1)
Speech impairment	6	0.5	7	0.5	7	0.6
Serious emotional disturbance	1	0.2	1	0.2	1	0.2
Deafness or another hearing impairment ²	1	0.3	1	0.2	1	0.3
Blindness or another visual impairment ²	2	0.3	2	0.3	1	0.2
An orthopedic impairment.....	1	0.2	1	0.2	2	0.3
Another health impairment lasting 6 months or more.....	5	0.5	5	0.4	6	0.6
Percent with any disability.....	13	0.8	14	0.8	14	0.7

Rounds to zero.

¹ Standard errors are not provided for estimates of less than 1 percent.

² In the ECPP-NHES:1995, blindness was asked separately from another visual impairment and deafness was asked separately from another hearing impairment. In the later surveys, blindness was combined with another visual impairment and deafness was combined with another hearing impairment.

NOTE: s.e. is standard error.

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), 2001; Parent Survey of the NHES, 1999; and Parent and Family Involvement/Civic Involvement (PFI/CI) Survey of the NHES, 1996.

ASPA Survey Comparisons

The data comparisons for the Before- and After-School Programs and Activities interview include topics such as school size, family structure, parents' highest level of education, children's disabilities, participation rates in before- and after-school arrangements (i.e., relative care, nonrelative care, center- or school-based programs, and self-care), and arrangement participation by child and household characteristics.

The data sources used for comparisons include the NHES:1999 Parent Interview, the NHES:1996 Parent and Family Involvement and Civic Involvement (PFI/CI) interview, and the NHES:1995 Early Childhood Program Participation (ECP) interview. Estimates from the 1995, 1996, and 1999 National Household Education Surveys can provide especially meaningful comparisons with the NHES:2001 Before- and After-School Programs and Activities (ASPA) data. For several ASPA-NHES:2001 estimates, there exist corresponding estimates from the ECP-NHES:1995, the PFI/CI-NHES:1996, and Parent-NHES:1999 administrations based on identical or nearly identical item wording and sampling. In some cases, however, wording changes were made to improve item clarity, and these changes may affect comparisons of estimates. The comparison of ASPA-NHES:2001 survey estimates to estimates from previous NHES surveys is intended to reveal potential problems by identifying major differences or a difference in an unexpected direction.

Participation rates among minorities in center- or school-based programs and self-care.

ASPA-NHES:2001 and Parent-NHES:1999 estimates involving after-school arrangement participation, by race/ethnicity, are presented in table 8-19. While there were no differences detected across years with respect to relative care and nonrelative care, there were some increases for center- or school-based program participation and self-care. Specifically, the percentage of Hispanic children that participated in center- or school-based programs increased from 15 in 1999 to 21 percent in 2001. This increase might be related to the greater availability of center- or school-based programs in urban settings for lower income families (see also tables 8-20 and 8-21), but might also be related to increasing household incomes among Hispanic families (see table 8-8), greater mobility, and the consequent need for patchworks of arrangements, since relatives may not be as readily available to care for children. This increase is consonant with slight increases in participation in center- or school-based programs for other ethnic groups. Table 8-19 also shows increases in rates of self-care among Hispanic, White, non-Hispanic, and Black, non-Hispanic children between 1999 and 2001 (from 11 to 13 percent for White children, 11 to 19 percent for Black children, and from 8 to 12 percent for Hispanic children). This might stem from the change in wording of the self-care questions in 2001, where parents were asked whether

their children were “responsible for themselves,” rather than “took care of themselves” during out-of-school time. This may also be related to welfare reform requirements to work and a lack of other available care arrangements for families that are no longer receiving welfare.

Table 8-19. Percentage of children enrolled in kindergarten through 8th grade participating in various types of care arrangements or programs after school, by race/ethnicity: ASPA-NHES:2001 and Parent-NHES:1999

Child’s race/ethnicity	Number of children (thousands)	Type of arrangement							
		Relative care		Nonrelative care		Center- or school-based program		Self-care	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
ASPA-NHES:2001									
Hispanic	5,743	17	1.2	7	0.8	21	1.2	12	0.8
White, non-Hispanic	22,938	15	0.6	6	0.4	15	0.6	13	0.4
Black, non-Hispanic	5,863	26	1.6	6	0.8	29	1.8	19	1.3
Other	2,135	14	1.8	4	0.8	23	2.2	14	1.7
Parent-NHES:1999									
Hispanic	5,394	20	1.0	6	0.6	15	0.9	8	0.7
White, non-Hispanic	23,273	15	0.5	7	0.4	15	0.5	11	0.4
Black, non-Hispanic	5,869	27	1.4	6	0.8	27	1.6	11	1.0
Other	1,850	21	2.4	7	1.1	20	1.9	11	1.6

NOTE: s.e. is standard error. Does not include homeschooled children. Children may have participated in more than one type of child care arrangement or program.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; and Parent Survey of the NHES, 1999.

After-school center- or school-based program participation, by income. Estimates of differences in center- or school-based program participation rates by income for children in kindergarten through 3rd grade are presented in table 8–20, for the ASPA-NHES:2001, Parent-NHES:1999, and ECPP-NHES:1995. The percentage of K–3rd grade children from high-income families who participated in some form of center- or school-based arrangement increased from 1995 and 1999 to 2001. A similar increase occurred for K–3rd grade children from low-income families between 1995 and 2001.

Table 8-20. Percentage of students in kindergarten through 3rd grade participating in center- or school-based programs after school, by high and low income: ASPA-NHES:2001, Parent-NHES:1999, and ECPP-NHES:1995

Income level	ASPA-NHES:2001		Parent-NHES:1999		ECPP-NHES:1995	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
High income.....	25	1.3	18	0.6	20	1.1
Low income	25	4.4	19	1.8	11	1.6

NOTE: s.e. is standard error. High income was defined as household income of over \$50,000. Low income was defined as household income of \$10,000 or less.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; Parent Survey of the NHES, 1999; and Early Childhood Program Participation (ECP) Survey of the NHES, 1995.

Table 8-21 shows the percent of children enrolled in kindergarten through 8th grade who participated in center- or school-based programs after school by household income for the ASPA:2001 and the Parent-NHES:1999 surveys. No differences were detected in estimates across surveys were observed. Differences between surveys that appeared to be large were not statistically significant because of relatively high standard errors across some of the income categories. Participation rates ranged from 15 percent to 24 percent for both surveys across all household income categories.

Table 8-21. Percentage of children enrolled in kindergarten through 8th grade participating in center- or school-based programs after school, by household income: ASPA-NHES:2001 and Parent-NHES:1999

Household income	ASPA-NHES:2001		Parent-NHES:1999	
	Percent	s.e.	Percent	s.e.
\$10,000 or less	24	2.7	19	1.8
\$10,001–\$20,000.....	22	1.6	17	1.3
\$20,001–\$30,000.....	18	1.5	18	1.0
\$30,001–\$40,000.....	16	1.2	17	1.0
\$40,001–\$50,000.....	18	1.7	15	1.0
Over \$50,000.....	19	0.7	18	0.6

NOTE: s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; and Parent Survey of the NHES, 1999.

School size. Comparisons of ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996 estimates concerning school size are presented in table 8-22. There were no differences detected in the percentages of kindergarten through 8th grade children attending schools with fewer than 300, 300–599, 600–999, and 1,000 or more students between 1996 and 2001.

Table 8-22. Percentage of children in kindergarten through 8th grade, by school size: ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996

School size	ASPA-NHES:2001		Parent-NHES:1999		PFI/CI-NHES:1996	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
Under 300	20	0.6	21	0.6	21	0.5
300–599	44	0.6	45	0.6	45	0.6
600–999	22	0.5	22	0.5	22	0.4
1,000 or more	13	0.4	13	0.4	13	0.4

NOTE: s.e. is standard error. Students who are homeschooled are not represented. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; Parent Survey of the NHES, 1999; and Parent and Family Involvement/Civic Involvement (PFI/CI) Survey of the NHES, 1996.

Family structure, parents’ highest level of education, and household urbanicity. Table 8-23 presents estimates of the percentage of children in kindergarten through grade 8 by family structure, parents’ highest level of education, and by household urbanicity for the ASPA:NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996. Differences in estimates ranged from 1 to 3 percentage points. Although the number of two-parent households increased slightly between 1999 and 2001 from 66 percent to 70 percent, it is more likely that the 1999 data were anomalous. First, the 2001 data were in line with those of PFI/CI-NHES:1996. Second, the 2001 data are very close to those of the CPS 1999, where 68 percent of households had both a mother and a father, and 24 percent had a mother only.

With respect to parents’ highest level of education, estimates for percentages of children who had at least one parent with a college degree or at least one parent who had been in graduate school differed between the PFI/CI-NHES:1996 and the ASPA-NHES:2001. In 1996, 15 percent of children had a parent with a college degree, and 13 percent had a parent who had been in graduate school, compared to 18 percent and 15 percent respectively in 2001. There were no differences detected with respect to parents’ highest level of education between the ASPA-NHES:2001 and the Parent-NHES:1999 surveys.

Table 8-23. Percentage of children in kindergarten through 8th grade, by family structure, parents' highest level of education, and urbanicity of ZIP Code area: ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996

Family and community characteristics	ASPA-NHES:2001		Parent-NHES:1999		PFI/CI-NHES:1996	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
Family structure						
Mother and father.....	70	0.6	66	0.4	69	0.5
Mother.....	24	0.5	27	0.4	25	0.4
Father	3	0.3	4	0.2	3	0.2
Nonparent guardian(s)	3	0.2	3	0.2	3	0.2
Parents' highest education						
Less than high school.....	9	0.4	9	0.3	10	0.3
High school graduate	29	0.7	28	0.5	31	0.5
Some college.....	29	0.6	30	0.5	30	0.6
College graduate	18	0.5	17	0.4	15	0.4
Graduate school	15	0.4	16	0.5	13	0.4
Household urbanicity						
Urban, inside urbanized area	63	0.5	63	0.4	62	0.5
Urban, outside urbanized area	12	0.5	12	0.4	14	0.5
Rural	25	0.0	25	0.4	25	0.3

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.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; Parent Survey of the NHES, 1999; and Parent and Family Involvement/Civic Involvement (PFI/CI) Survey of the NHES, 1996.

Parents' highest level of education by race/ethnicity. Table 8-24 presents ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996 estimates related to parents' highest level of education by child's race/ethnicity, for children in kindergarten through grade 8. There were no differences detected.

Table 8-24. Number and percentage of students in kindergarten through 8th grade, by parents' highest level of education and race/ethnicity: ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996

Race/ethnicity	Number of children (thousands)	Parents' highest level of education									
		Less than high school		High school		Some college		College graduate		Graduate school	
		Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.	Percent	s.e.
ASPA-NHES:2001											
White, non-Hispanic	22,938	3	0.3	26	0.8	31	0.9	22	0.7	18	0.6
Black, non-Hispanic.....	5,863	13	1.4	38	2.0	31	1.7	12	0.9	6	0.6
Hispanic	5,743	28	1.4	32	1.4	24	1.3	9	0.7	6	0.6
Other.....	2,135	5	1.0	23	2.5	23	2.2	20	2.2	29	2.8
Parent-NHES:1999											
White, non-Hispanic	23,273	3	0.3	25	0.6	32	0.7	20	0.7	20	0.6
Black, non-Hispanic.....	5,869	11	1.1	41	1.4	30	1.4	10	0.7	8	0.8
Hispanic	5,394	30	1.4	29	1.4	25	1.1	9	0.7	7	0.6
Other.....	1,850	5	1.2	22	2.0	27	2.7	20	1.9	25	2.5
PFI/CI-NHES:1996											
White, non-Hispanic	23,738	5	0.4	28	0.6	32	0.7	19	0.6	16	0.4
Black, non-Hispanic.....	5,792	15	1.1	42	1.6	30	1.4	8	0.6	5	0.6
Hispanic	4,677	31	1.4	34	1.5	21	1.3	7	0.9	7	0.8
Other.....	1,506	6	1.2	26	2.1	31	2.4	20	2.3	18	1.8

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, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; Parent Survey of the NHES, 1999; and Parent and Family Involvement/Civic Involvement (PFI/CI) Survey of the NHES, 1996.

There were, however, several differences for children whose parents' highest level of education was a college degree or at least some graduate school. The ASPA-NHES:2001 found that 22 percent of White children had parents whose highest level of education was a college degree, compared to 19 percent in the PFI/CI-NHES:1996. Similarly 18 percent of White children in the ASPA-NHES:2001 had at least one parent with at least some graduate school, compared to 16 percent in the PFI/CI-NHES:1996. More Black children had parents whose highest level of education was a college degree in 2001 than in 1999 (12 percent versus 8 percent), and more children of other racial/ethnic groups had parents whose highest level of education was graduate school in 2001 than in 1996 (29 percent versus 18 percent). These general increases in level of education across survey years may be indicative of increased access to higher education and higher retention rates among minority groups.

School contacts with family. Table 8-25 compares ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996 estimates of kindergarten through 8th grade children whose parents reported that they were never contacted by their children’s schools about their children’s academic performance or behavior. Survey findings over the 5-year period between 1996 and 2001 showed what appeared to be a continuing modest trend in the direction of parent reports of less contact by schools for both indicators.

Table 8-25. Percentage of students enrolled in kindergarten through 8th grade whose parents reported selected school contacts with family: ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996

School effort to contact family	ASPA-NHES:2001		Parent-NHES:1999		PFI/CI-NHES:1996	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
School never contacted parents about student’s academic performance	78	0.5	76	0.5	73	0.4
School never contacted parents about student’s behavior	83	0.4	80	0.3	76	0.4

NOTE: s.e. is standard error. Students who are homeschooled are not represented.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; Parent Survey of the NHES, 1999; and Parent and Family Involvement/Civic Involvement (PFI/CI) Survey of the NHES, 1996.

Disability. Estimates from the ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996 surveys of children in kindergarten through 8th grade with specific disabilities are shown in table 8-26. Estimates reveal a gradual but slight decrease in the reported percentages of children with specific disabilities. For instance, 2 percent of children in the ASPA-NHES:2001 were reported as having serious emotional disturbance, compared to 3 percent in the Parent-NHES:1999 and PFI/CI-NHES:1996 surveys. Similarly, 4 percent of children were reported to have blindness or another visual impairment in the APSA-NHES:2001, compared to 5 percent in the Parent-NHES:1999 and PFI/CI-NHES:1996 surveys. Overall, since 1996, where 24 percent of children were reported in the PFI/CI-NHES:1996 survey to have any disability, the percent decreased to 19 percent, according to the ASPA-NHES:2001. The data did not suggest a ready explanation for these differences. The very large sample sizes and inclusion of all children might have shown significant differences due to low standard errors.

Table 8-26. Percentage of children in kindergarten through 8th grade with specific disabilities: ASPA-NHES:2001, Parent-NHES:1999, and PFI/CI-NHES:1996

Disability	ASPA-NHES:2001		Parent-NHES:1999		PFI/CI-NHES:1996	
	Percent	s.e.	Percent	s.e.	Percent	s.e.
Learning disability	9	0.4	9	0.4	9	0.4
Mental retardation.....	1	0.2	1	0.1	1	0.1
Speech impairment.....	5	0.3	5	0.3	7	0.3
Serious emotional disturbance	2	0.2	3	0.3	3	0.3
Deafness or another hearing impairment.....	1	0.1	1	0.1	2	0.2
Blindness or another visual impairment.....	4	0.2	5	0.2	5	0.3
An orthopedic impairment	1	0.1	1	0.1	2	0.2
Another health impairment lasting 6 months or more	6	0.3	6	0.3	7	0.3
Percent with any disability.....	19	0.5	21	0.4	24	0.7

NOTE: s.e. is standard error.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; Parent Survey of the NHES, 1999; and Parent and Family Involvement/Civic Involvement (PFI/CI) Survey of the NHES, 1996.

AELL Survey Comparisons

The data comparisons for the Adult Education and Lifelong Learning (AELL) Survey of the NHES:2001 include employment status, participation rates in educational activities, and demographic characteristics of adults. Brief descriptions of the data sources (other than CPS, which is described above) used for the AELL comparisons follow.

The 1995 and 1999 National Household Education Surveys Program

Data collected in the Adult Education (AE) survey of the NHES:1995 and the Adult Education (AE) survey of the NHES:1999 provide information on participation rates of adults in educational activities by a number of demographic characteristics, such as age, gender, race/ethnicity, household income, marital status, highest education credential attained, and years of school completed. The AE-NHES:1995 survey contains records on 19,722 adults 16 and older, not enrolled in elementary or

secondary school at the time of the interview. The AE-NHES:1999 survey includes 6,697 adults 16 and older, not enrolled in elementary or secondary school. The comparison of AELL-NHES:2001 survey estimates to estimates from previous NHES surveys is intended to reveal potential problems by identifying major differences or a difference in an unexpected direction.

Integrated Postsecondary Education Data System (IPEDS)

The Integrated Postsecondary Education Data System (IPEDS) surveys are conducted annually to collect various data from all postsecondary education institutions. The Fall Enrollment survey of the 1997 IPEDS collected data on student access to postsecondary education institutions. The 1997 IPEDS data were the most recent information available when analyses were conducted for this chapter. Estimates of adults participating in credential programs were compared to those from the AELL-NHES:2001.

Adult Education Program Facts

Each year the Office of Vocational and Adult Education (OVAE) of the U.S. Department of Education publishes an annual fact sheet reporting estimates of adults who took part in adult basic education (ABE), adult secondary education (ASE), or English as a second language (ESL) programs. OVAE collects adult education participation information exclusively from adult education programs that receive federal funding. The OVAE's 1998 estimates of adults participating in ABE and ESL programs were compared to those from the AELL-NHES:2001.

Adult Education and Lifelong Learning Survey Findings

The data comparisons for AELL cover most of the major topics included in the questionnaire. The estimates compared below include employment status, adult education participation rates, and demographic characteristics of adults.

Employment status and demographic characteristics. The comparisons in this section include employment status and percentage of the employed adults by industry and occupation. For occupational comparisons, the March 2000 CPS was used. As shown in tables 8-27 to 8-29, most of the AELL estimates were consistent with comparable estimates from the CPS:2000.

In table 8-27, the estimates of employment status from the AELL-NHES:2001, AE-NHES:1999, and the CPS:2000 are presented for adults aged 16 or older. There was a slight decrease in estimates of employment from AE-NHES:1999 to AELL-NHES:2001 (76 percent versus 73 percent). About 73 percent of adults reported that they worked for pay or income in the past 12 months in the AELL and about 71 percent reported working in the CPS:2000. The slightly higher rate of employment observed in the AELL may be partly attributed to the decrease in the unemployment rate from 2000 to 2001.

Table 8-27. Percentage of adults who worked for pay or income in the past 12 months: AELL-NHES:2001, AE-NHES:1999, and CPS:2000

Worked in the past 12 months	AELL-NHES:2001		AE-NHES:1999		CPS:2000
	Estimate	s.e.	Estimate	s.e.	Estimate
Total number of adults ¹ (thousands).....	198,803	0.0	194,625	0.0	198,803
Worked in the past 12 months.....	73%	0.4	76%	0.6	71%
Not worked in the past 12 months	27	0.4	24	0.6	29

¹ Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000.

Estimates of the percentage of the employed adult population by industry and occupation from the AELL-NHES:2001 and the CPS:2000 appear in tables 8-28 and 8-29. The estimates are generally consistent. No differences were detected by industry. By occupation, estimates of technologists and technicians (excluding health) and teachers (college, university, and other postsecondary institution) were slightly higher in the AELL, while two occupations (executive and precision production occupations) were slightly higher in the CPS:2000.

Table 8-28. Percentage distribution of the employed adult population, by industry: AELL-NHES:2001 and CPS:2000

Industry	AELL-NHES:2001		CPS:2000
	Estimate	s.e.	Estimate
Total number of adults ¹ (thousands).....	198,803	0	198,803
Number of adults reporting industry (thousands)	145,249	852	137,808
Agriculture, forestry, and fishing.....	3%	0.3	3%
Mining.....	1	0.1	#
Construction.....	6	0.4	7
Manufacturing.....	15	0.5	15
Transportation, communication, utility, and sanitary services	7	0.4	7
Wholesale trade.....	1	0.2	4
Retail trade.....	15	0.6	16
Finance, insurance, and real estate.....	6	0.3	7
Services.....	22	0.6	20
Health services.....	8	0.4	8
Educational services	10	0.4	9
Public administration	6	0.4	5
Nonclassifiable establishment/not employed.....	1	0.1	#

Rounds to zero.

¹Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

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, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000.

Table 8-29. Percentage distribution of the employed adult population, by occupation: AELL-NHES:2001 and CPS:2000

Occupation	AELL-NHES:2001		CPS:2000
	Estimate	s.e.	Estimate
Total number of adults (thousands).....	198,803	0	198,803
Number of adults reporting occupation (thousands).....	145,249	852	137,808
Executive, administrative, and managerial occupations.....	12%	0.4	15%
Engineers, surveyors, and architects	2	0.2	2
Natural scientists and mathematicians	1	0.2	2
Social scientists, social workers, religious workers, and lawyers	2	0.2	2
Teachers: college, university, and other post-secondary institution; counselors, librarians, archivists	2	0.2	1
Teachers, except postsecondary institutions.....	4	0.2	4
Health diagnosing and treating practitioners.....	1	0.1	1
Registered nurses, pharmacists, dieticians, therapists, and physician's assistants	2	0.1	2
Writers, artists, entertainers, and athletes.....	2	0.2	2
Health technologists and technicians	2	0.2	1
Technologists and technicians, except health.....	4	0.3	2
Marketing and sales occupations.....	12	0.5	12
Administrative support occupations, including clerical	15	0.5	14
Service occupations.....	14	0.4	14
Agricultural, forestry, and fishing occupations	2	0.3	2
Mechanics and repairers.....	4	0.3	4
Construction and extractive occupations.....	5	0.3	5
Precision production occupations.....	1	0.2	3
Production working occupations	7	0.4	6
Transportation and material moving occupations	5	0.4	4
Handlers, equipment cleaners, helpers, and laborers.....	2	0.3	4
Miscellaneous occupation	1	0.1	#

Rounds to zero.

¹ Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

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, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000.

Participation rates, by demographic characteristics. This section provides estimates concerning participation rates in adult education activities. Since there are few data sources for comparing participation rates in adult education activities, particularly from individual respondents, the previous NHES estimates were used for comparisons. Table 8-30 shows estimates of participation rates in adult education from the AELL-NHES:2001, the AE-NHES:1999, and the AE-NHES:1995. The estimates of participation rates in the AELL-NHES:2001 are higher than the AE-NHES:1995, and the observed difference may be largely related to changes in adults' participation in training, retraining, and other educational activities over the 6 years (Snyder & Hoffman, 2001; U.S. Department of Education, 2002b).

Table 8-30. Percentage of adults who participated in adult education activities in the past 12 months: AELL-NHES:2001, AE-NHES:1999, and AE-NHES:1995

Types of adult education participation	AELL-NHES:2001		AE-NHES:1999		AE-NHES:1995	
	Estimate	s.e.	Estimate	s.e.	Estimate	s.e.
Total number of adults ¹ (thousands)	198,803	0	194,625	0	189,576	153
Participation in any adult education, including full-time credential programs only	49%	0.5	48%	0.8	45%	0.5
Participation in any adult education, excluding full-time credential programs only	46	0.5	45	0.7	40	0.5

¹ Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

NOTE: Adult education includes adult basic education, ESL classes, credential programs, apprenticeship programs, work-related education or training, and personal interest/development courses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; Adult Education (AE) Survey of the NHES, 1999; Adult Education (AE) Survey of the NHES, 1995.

Table 8-31 shows overall participation rates in adult education activities (excluding participation in full-time credential programs only) from the AELL-NHES:2001, the AE-NHES:1999, and the AE-NHES:1995 by a number of demographic characteristics. There was no difference detected between the overall estimate of participation in the AELL-NHES:2001 and that reported in the AE-NHES:1999 (46 percent versus 45 percent). Both years had higher participation rates than reported in the AE-NHES:1995 (40 percent). In the AELL-NHES:2001, the AE-NHES:1999, and the AE-NHES:1995, a greater percentage of adults who earned more than \$50,000 a year or already had a Bachelor's degree indicated that they participated in education within the past 12 months. Also, a lower percentage of adults over 55 years of age indicated that they participated in education across the AELL-NHES:2001, the AE-NHES:1999, and the AE-NHES:1995 compared to that of younger adults.

Table 8-31. Number and percentage of adults who participated in adult education activities in the past 12 months, by characteristics of adults: AELL-NHES:2001, AE-NHES:1999, and AE-NHES:1995

Characteristics	Number (thousands)	Adult education participants in the past 12 months			
		Number (thousands)	s.e. (thousands)	Percent	s.e.
AELL-NHES:2001					
Total adults ¹	198,803	92,278	1,089	46	0.5
Age					
16–24 years	23,523	12,420	533	53	2.0
25–34 years	38,325	20,432	669	53	1.6
35–44 years	43,355	23,304	689	54	1.2
45–54 years	38,109	20,368	664	53	1.4
55 years and over	55,490	15,755	537	28	0.9
Sex					
Male	94,955	40,897	788	43	0.8
Female.....	103,848	51,382	808	50	0.8
Race/ethnicity					
White, non-Hispanic	144,147	68,335	923	47	0.6
Black, non-Hispanic.....	22,186	9,605	333	43	1.5
Hispanic	21,537	8,984	490	42	2.3
Other race, non-Hispanic	10,932	5,355	402	49	2.5
Household income					
\$10,000 or less	15,433	4,153	305	27	2.0
\$10,001 to 30,000	52,027	17,277	597	33	1.1
\$30,001 to 50,000	44,696	20,848	690	47	1.3
\$50,001 to 75,000	40,725	22,699	793	56	1.5
More than \$75,000.....	45,922	27,302	688	59	1.3
Marital status					
Never married	41,829	21,089	696	50	1.4
Currently married.....	121,455	57,644	984	47	0.7
Other	35,519	13,545	488	38	1.3
Educational attainment					
Less than high school.....	31,343	6,957	473	22	1.5
High school.....	64,606	21,692	677	34	0.9
Associate’s degree or some college	52,559	30,273	815	58	1.1
Bachelor’s degree or higher.....	50,295	33,357	676	66	1.1

See notes at end of table.

Table 8-31. Number and percentage of adults who participated in adult education activities in the past 12 months, by characteristics of adults: AELL-NHES:2001, AE-NHES:1999, and AE-NHES:1995—Continued

Characteristics	Number (thousands)	Adult education participants in the past 12 months			
		Number (thousands)	s.e. (thousands)	Percent	s.e.
AE-NHES:1999					
Total adults ¹	194,625	86,659	1,437	45	0.7
Age					
16–24 years	23,438	11,739	740	50	2.7
25–34 years	37,851	21,314	970	56	2.0
35–44 years	45,299	22,781	841	50	1.8
45–54 years	35,193	17,082	737	49	2.1
55 years and over	52,845	13,743	700	26	1.2
Sex					
Male	93,137	38,831	1,039	42	1.1
Female.....	101,488	47,828	963	47	1.0
Race/ethnicity					
White, non-Hispanic	143,201	63,589	1,224	44	0.8
Black, non-Hispanic.....	22,129	10,241	482	46	2.2
Hispanic	19,491	8,045	415	41	2.1
Other race, non-Hispanic	9,804	4,785	465	49	3.9
Household income					
\$10,000 or less	14,335	3,329	381	23	2.7
\$10,001 to \$30,000	54,902	17,791	797	32	1.4
\$30,001 to \$50,000	49,496	22,985	918	46	1.6
\$50,001 to \$75,000	35,984	19,828	745	55	1.9
More than \$75,000.....	39,909	22,726	795	57	1.7
Marital status					
Never married	40,190	19,296	826	48	1.8
Currently married.....	120,250	55,504	1,225	46	0.9
Other	34,185	11,859	543	35	1.4
Educational attainment					
Less than high school.....	33,343	7,287	568	22	1.7
High school	95,674	39,416	1,251	41	1.1
Associate's degree or some college	11,275	6,384	428	57	2.7
Bachelor's degree or higher	54,332	33,572	1,183	62	1.4

See notes at end of table.

Table 8-31. Number and percentage of adults who participated in adult education activities in the past 12 months, by characteristics of adults: AELL-NHES:2001, AE-NHES:1999, and AE-NHES:1995—Continued

Characteristics	Number (thousands)	Adult education participants in the past 12 months			
		Number (thousands)	s.e. (thousands)	Percent	s.e.
AE-NHES:1995					
Total adults ¹	189,576	76,272	921	40	0.5
Age					
16–24 years	22,439	10,550	289	47	1.1
25–34 years	40,326	19,508	449	48	1.0
35–44 years	42,304	20,814	450	49	0.9
45–54 years	31,807	14,592	428	46	1.2
55 years and over	52,700	10,808	466	21	0.8
Sex					
Male	90,275	34,453	584	38	0.7
Female.....	99,301	41,818	594	42	0.6
Race/ethnicity					
White, non-Hispanic	144,602	59,988	774	41	0.5
Black, non-Hispanic.....	20,808	7,705	302	37	1.5
Hispanic	15,705	5,284	187	34	1.2
Other race, non-Hispanic	8,461	3,294	210	39	2.1
Household income					
\$10,000 or less	30,212	6,888	305	23	1.0
\$10,001 to \$30,000	56,851	18,336	487	32	0.9
\$30,001 to \$50,000	49,076	21,787	508	44	0.8
\$50,001 to \$75,000	29,161	15,169	460	52	0.9
More than \$75,000.....	24,277	14,091	369	58	1.3
Marital status					
Never married	38,658	17,105	398	44	0.8
Currently married.....	114,680	48,200	731	42	0.6
Other	36,238	10,967	400	30	1.1
Educational attainment					
Less than high school.....	29,347	4,621	303	16	1.1
High school	62,957	19,343	522	31	0.8
Associate’s degree or some college	50,736	25,230	428	50	0.8
Bachelor’s degree or higher	46,535	27,078	560	58	1.0

¹ Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

NOTE: s.e. is standard error. Adult education includes ESL classes, adult basic education, credential programs, apprenticeship programs, work-related education or training, and personal interest/development courses. Detail may not sum to totals because of rounding..

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; Adult Education (AE) Survey of the NHES, 1999; and Adult Education (AE) Survey of the NHES, 1995.

Participation was higher for females (50 percent in AELL-NHES:2001, 47 percent in AE-NHES:1999, and 42 percent in AE-NHES:1995) than males (43 percent, 42 percent, and 38 percent, respectively). There was an increase in White participants in AELL-NHES:2001 from the AE-NHES:1999. There were also differences in participation rates by race/ethnicity in the AELL-NHES:2001 versus the AENHES:1995 such that a higher percentage of White (47 percent versus 41 percent), Black (43 percent versus 37 percent), Hispanic (42 percent versus 34 percent), and others (49 percent versus 39 percent) participated in AELL-NHES:2001.

Table 8-32 shows participation rates for persons 16 years and older who were employed in the previous 12 months by occupation. The observed participation rates are higher than the total rates for all adults. This is reasonable, because work-related adult education is one of the two most common types of adult education and lifelong learning and employed adults are more likely to participate in such educational activities (Darkenwald, Kim, & Stowe, 1998). With a few exceptions, the results also showed that the relative rates of participation within occupations were consistent in the AELL-NHES:2001, the AE-NHES:1999, and the AE-NHES:1995. There was an increase in participation among executive, administrative, and managerial occupations in AELL-NHES:2001 from AE-NHES:1999 (66 percent versus 57 percent and 56 percent respectively) as well as an increase among those in marketing and sales (51 percent in AELL-NHES:2001 versus 44 percent in AE-NHES:1999 and AE-NHES:1995) and administrative support (59 percent in AELL-NHES:2001 versus 50 percent in AE-NHES:1999 and 52 percent in AE-NHES:1995). Also, there were increases in AELL-NHES:2001 from AE-NHES:1999 in percentages of health technologists and technicians (86 percent versus 67 percent) and non-health technologists and technicians (70 percent versus 60 percent). The reader should note that the standard errors were quite large for some estimates, due to small numbers of cases in a given occupational group, and for this reason, some differences that may appear rather large were not statistically significant.

Table 8-32. Percentage of employed adults who participated in adult education activities during the past 12 months, by occupation: AELL-NHES:2001, AE-NHES:1999, and AE-NHES:1995

Occupation	AELL-NHES:2001		AE-NHES:1999		AE-NHES:1995	
	Estimate	s.e.	Estimate	s.e.	Estimate	s.e.
Number of adults ¹ (thousands).....	198,803	0	194,625	0	189,576	153
All employed adults (thousands).....	145,249	852	148,629	1,131	131,899	760
Executive, administrative, and managerial occupations.....	66%	1.6	57%	2.2	56%	3.5
Engineers, surveyors, and architects	68	4.5	80	6.1	66	6.4
Natural scientists and mathematicians	74	4.5	61	6.9	72	4.9
Social scientists, social workers, religious workers, and lawyers.....	84	3.1	79	3.9	77	3.4
Teachers: college, university, and other post-secondary institution; counselors, librarians, archivists	69	4.6	66	5.5	55	8.5
Teachers, except postsecondary institution	80	3.0	78	3.3	77	2.6
Health diagnosing and treating practitioners.....	78	6.4	80	9.2	71	8.1
Registered nurses, pharmacists, dieticians, therapists, and physician's assistants.....	83	3.8	85	3.8	87	2.9
Writers, artists, entertainers, and athletes.....	47	6.0	50	6.0	50	8.8
Health technologists and technicians	86	3.2	67	6.4	75	4.9
Technologists and technicians, except health.....	70	3.3	60	4.4	64	4.4
Marketing and sales occupations.....	51	2.1	44	2.7	44	3.0
Administrative support occupations, including clerical	59	1.7	50	2.7	52	2.4
Service occupations.....	49	2.2	51	2.3	47	3.0
Agricultural, forestry, and fishing occupations	46	6.8	34	6.8	26	13.5
Mechanics and repairers.....	35	3.4	42	5.3	48	5.7
Construction and extractive occupations.....	32	3.2	35	5.1	38	6.4
Precision production occupations.....	35	6.2	38	7.6	43	10.1
Production working occupations.....	39	2.8	38	3.7	31	4.2
Transportation and material moving occupations.....	30	3.3	33	3.7	28	8.2
Handlers, equipment cleaners, helpers, and laborers.....	18	3.2	21	5.0	25	10.8
Miscellaneous occupation	65	7.1	43	9.3	57	6.4

¹ Includes civilian, noninstitutionalized adults, age 16 or older, not enrolled in elementary or secondary school at the time of the interview.

NOTE: s.e. is standard error. Adult education includes ESL classes, adult basic education, credential programs, apprenticeship programs, work-related education or training, and personal interest/development courses.

SOURCE: SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; Adult Education (AE) Survey of the NHES, 1999; and Adult Education (AE) Survey of the NHES, 1995.

Adult basic education/GED preparation and English as a second language programs.

Table 8-33 presents estimates of participants in basic skills education and English as a second language (ESL) programs from the Office of Vocational and Adult Education (OVAE) of the U.S. Department of Education and from the AELL-NHES:2001. The 1998 OVAE data estimated that about 2 million adults participated in basic skills education and about 1.9 million adults participated in ESL programs, as compared to about 3.2 million and 2.3 million, respectively, estimated in the AELL.

Table 8-33.—Number of adults who participated in basic skills education and ESL classes: AELL-NHES:2001, AE-NHES:1999, and 1998 Adult Education Program Facts of the Office of Vocational and Adult Education (OVAE)

Adult basic education	AELL-NHES:2001		AE-NHES:1999		OVAE (1998)
	Number of participants	s.e.	Number of participants	s.e.	Number of participants
Basic skills education.....	3,214,070	310,566	3,259,000	392,538	2,024,077
English as a second language.....	2,319,004	331,430	1,791,436	293,928	1,920,448

NOTE: s.e. is standard error.

SOURCE: SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; and Adult Education (AE) Survey of the NHES, 1999. U.S. Department of Education, Office of Vocational and Adult Education (OVAE), 1998 Adult Education Program Facts.

The OVAE estimate of basic skills education participants included only those who participated in federal grant-receiving adult basic education programs, whereas the AELL-NHES:2001 estimate counted participants irrespective of how the adult basic education program was funded. This may explain why the AELL estimate was larger than that indicated by OVAE. The same difference in approaches to counting participants existed between OVAE and AELL counts of ESL participants. However, the two estimates appear fairly consistent. Part of the reason for this may be due to the fact that while OVAE only counted those participants who were in federal grant-receiving ESL programs and AELL counted participants irrespective of how the ESL program was funded, OVAE counted participants regardless of what language they spoke. In contrast, because the AELL survey was conducted only in English or Spanish, it only counted ESL participants who could speak English and/or Spanish. Thus, though AELL was less restrictive in terms of funding sources for ESL programs, it was more restrictive than OVAE in terms of language spoken.

Credential programs. Table 8-34 shows estimates from the AELL-NHES:2001, AE-NHES:1999, and the 1997 IPEDS data for enrollment in postsecondary credential programs. The AELL-NHES:2001 estimate of participation in college or university degree programs was about 19.3 million adults, and the estimate of participation in vocational or technical programs was about 3.7 adults. Thus, the AELL estimates that about 22.9 million adults participated in some form of postsecondary credential program over the 12-month period covered by the survey.

The IPEDS estimates were quite different. According to the 1997 IPEDS, about 15.1 million people were enrolled in postsecondary institutions in the fall of 1997, about 9.1 million in 4-year colleges and universities and about 6.1 million in 2-year or less than 2-year institutions. Although the numbers of participants in vocational or technical programs were not reported separately in the IPEDS data, it can be assumed that they were included in the estimate of 6.1 million participants in less-than-2-year institutions (an estimate that also includes many associate degree seekers in 2-year colleges). The AELL-NHES:2001 estimate of the number of adults enrolled in vocational or technical diploma programs was about 3.7 million.

Table 8-34. Number of adults who participated in credential programs: AELL-NHES:2001, AE-NHES:1999, and 1997 Integrated Postsecondary Education Data System (IPEDS)

Type of degree program	Number of participants	
	Number	s.e.
AELL-NHES:2001		
College or university.....	19,274,562	637,978
Vocational or technical	3,650,401	273,894
AE-NHES:1999		
College or university.....	22,733,309	783,126
Vocational or technical	11,644,949	693,157
1997 IPEDS		
4-year colleges and universities	9,064,878	—
2-year or less than 2-year colleges.....	6,068,785	—

—Not available.

NOTE: s.e. is standard error.

SOURCE: SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; and Adult Education (AE) Survey of the NHES, 1999. U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1997.

The differences observed between IPEDS and AELL estimates might result from important methodological differences between the two surveys. First, the NHES data were collected by type of credential program, whereas the IPEDS estimates were collected by type of institution. These were not directly comparable approaches, since some college degree seekers (e.g., associate's degree candidates) as well as vocational/technical students were enrolled in the same institution type (2-year or less than 2-year).

Second, the NHES included those who had been postsecondary credential seekers in the 12-month time frame addressed in the survey, whereas IPEDS included all students regardless of degree candidate status. This might have led to a higher estimate from the IPEDS given the broader population, but this was mitigated by another methodological difference. Specifically, while the AELL represents participation in a 12-month period (and therefore includes more than one academic year), IPEDS estimates represent fall enrollment for one academic year.

Finally, differences between AELL estimates and the AE-NHES:1999 estimates might have been in part the result of a change in the structure of the credential sections in the AELL instrument. In surveys prior to 2001, postsecondary credential programs (including college and vocational programs) were collected in the same section of the questionnaire. In the AELL, these two sections were separated so that college degree programs were collected in one section and vocational/technical in another. The changes in the structure of the credential sections might have resulted in some differences in estimates.

Summary

Overall, the comparisons of selected estimates from the NHES:2001 with comparable data sources have provided an indication of the reasonableness of the NHES:2001 estimates. Although the estimates presented here were just some of the multitude of comparisons that could be made between NHES:2001 estimates and those of other sources using different variables and categorizations, this approach has proven useful in determining whether significant differences in estimates existed, and if so, providing possible reasons for these differences.

9. ASPA-NHES:2001 REINTERVIEW

This chapter describes a reinterview study that was conducted for the ASPA-NHES:2001. As with the reinterview studies conducted for the SR-NHES:1993, SSD-NHES:1993, the AE-NHES:1995, the PFI/CI-NHES:1996, and the YCI-NHES:1996, this study was done in order to assess data item reliability and to inform future NHES surveys. The ASPA reinterview questionnaire is in appendix L.

Introduction

This chapter examines measurement errors arising in interviewing respondents in the ASPA-NHES:2001 survey. The estimates from this survey and every survey are subject to both sampling error and nonsampling error. Sampling errors, the differences between the population values and the sample estimates that arise because data are obtained from only a sample of the population, are generally well understood and can be estimated from the survey data themselves. Nonsampling errors, on the other hand, arise from a variety of sources and are more difficult to measure. Important components of nonsampling error for the NHES include coverage, nonresponse, and measurement errors. Population coverage and nonresponse are addressed in previous chapters of this report; this chapter examines measurement error, specifically response variability.

For the ASPA-NHES:2001, measurement errors were estimated by reinterviewing a sample of respondents and asking them a subset of the same questions included in the original interview. The reinterview procedure does not account for all the measurement errors in the interviewing process. For example, systematic errors that might be made in both the original interview and the reinterview are not discovered with this approach. Rather, the statistics produced by comparing the original interview and reinterview responses estimate the consistency of reporting, assuming both interviews were conducted under the same general conditions. A general review of the design and analysis of reinterviews is given by Forsman and Schreiner (1991). Brick et al. (1994) discuss the use of reinterviews in the context of other nonsampling errors. Brick, Collins, and Chandler (1997), Brick, Wernimont, and Montes (1996), and Montaquila, Brick, and Brock (1997) used these methods in the analysis of the SR-NHES:1993 and SSD-NHES:1993; the AE-NHES:1995; and the PFI/CI-NHES:1996 and YCI-NHES:1996 reinterview data.

When the same respondents are asked the same questions on different occasions, different responses may be obtained. Not all the differences are necessarily the result of measurement error. Discrepancies in responses can be grouped into four categories:

- Circumstances related to the topic under study may have changed between the first report and the second; both answers, although different, may be correct.
- The original response may have been recorded (interviewer error) or reported (respondent error) incorrectly.
- The reinterview response may have been recorded or reported incorrectly.
- Both the original and reinterview responses may have been recorded or reported incorrectly.

The primary objectives for the NHES:2001 reinterview program were:

- To identify survey questions that were not reliable, i.e., the two interviews did not elicit the same response;
- To quantify the magnitude of the response variance for groups of questions collected from the same respondent at two different times; and
- To provide feedback to improve the design of questions for future surveys.

An objective in some reinterview programs is to provide a check on interviewers who might be recording entire interviews without speaking to the respondents. Since the NHES:2001 was a computer-assisted telephone interview (CATI) survey operated in a centralized location, there was no need to design reinterviews to verify that the interviews were genuine. The CATI interviews were routinely monitored throughout data collection, and it was highly unlikely that a telephone interviewer could invent whole interviews.⁵¹

A subset of the original ASPA-NHES:2001 questions was included in the reinterview. This was done to reduce the burden on respondents who had already completed one or more full interviews

⁵¹Monitoring of interviews involved simultaneously listening to the interview and observing the entry of responses into the CATI system.

and to avoid asking some questions that were very time dependent.⁵² In general, the items administered in the reinterview (see appendix L) were selected based on the following criteria:

- Questions that were key statistics or were used for calculating critical estimates;
- Questions required for critical skip patterns or that provided information for displays for the subsequent sections and questions;
- Questions that were not time dependent; and
- Questions that were new to the ASPA-NHES:2001 and had not been tested in other NHES surveys.

For the ASPA-NHES:2001 reinterview, questions were selected from the following specific subject areas:

- School characteristics;
- Relative care;
- Nonrelative care;
- Center- or school-based programs;
- Before- and after-school activities;
- Self-care;
- Parental care;
- Perceptions of quality and factors in parental choice;
- Health and disability;
- Mother items; and
- Father items.

⁵²An item is considered time dependent if the reference is to a specific time period and/or the response is likely to change over time. Examples would be events associated with the school year, or sports activities typically associated with a given season of the year.

Reinterview Design

The ASPA-NHES:2001 reinterviews were conducted with the original interview respondents and were designed to provide information about the reliability of the data collected. Twelve random samples of completed interviews were selected on a weekly basis, beginning during the third week of data collection and ending on April 4, two weeks before the close of data collection. The reinterview sampling was terminated on April 4 to allow resources at the end of the data collection period to be devoted mainly to the primary (ECP, ASPA, and AELL) interviews.

Table 9-1 gives the number and percent of households eligible for reinterview sampling as well as the reasons for ineligibility. The exclusions given in the table were determined by reviewing completed ASPA interviews for eligibility.

Table 9-1. Number of interviews eligible for reinterview sampling: ASPA-NHES:2001

Characteristic	Number of completed ASPA-NHES:2001 interviews	Percent of completed ASPA-NHES:2001 interviews
Total number of completed ASPA-NHES:2001 interviews	9,583	100.0
Total number sampled for the reinterview	902	9.4
Total number eligible but not sampled for the reinterview	5,121	53.4
Total number excluded from reinterview sampling	3,560	37.1
Homeschooler or enrolled in grades K-2	2,409	†
At least one interview in the household not conducted in English	454	†
Not all interviews in household finalized and sufficiently “aged” by time of reinterview sampling	697	†

† Not applicable.

NOTE: Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Reinterview Survey of the National Household Education Surveys Program (NHES), 2001.

One criterion for determining whether an ASPA interview was eligible for the reinterview was that all of the interviews in the household had to have been completed (all completes or a combination of completes and ineligibles). Thus, if some of the interviews in the household were not completed and others were completed, then a completed ASPA interview in the household was not eligible for reinterview sampling. This restriction in the sample was implemented to prevent the reinterview activity from disrupting the completion of the original interviews. Additionally, to be eligible for the reinterview, the original ASPA interview must have been completed at least 2 weeks (14 days)

prior to the reinterview sampling date. This restriction was implemented so that respondents were unlikely to simply remember and repeat their earlier responses. The time restriction was relaxed near the end of the data collection period so that more interviews had an opportunity to be sampled.⁵³ A total of 697 ASPA interviews were ineligible for the reinterview because either not all interviews within their household were completed and/or the ASPA interview itself was not sufficiently “old” enough at the time of the final reinterview sampling.

Interviews were reviewed for other eligibility criteria before they were included in the reinterview sample. One such restriction was that only those interviews in households in which all interviews were conducted in English were eligible. A total of 454 interviews were ineligible for sampling because not all interviews in the household were conducted in English.

Table 9-2 shows the target and actual numbers of cases sampled for and completing the reinterview, by type of care arrangement. In order to ensure that items pertaining to different types of care were asked of sufficient numbers of people during the reinterview, ASPA interviews were sampled for the reinterview at different rates depending upon the type(s) of care the child received. Specifically, ASPA interviews of children with no reported nonparental care arrangements were sampled at the lowest rate (about 1 in 12.7); ASPA interviews of children with either self-care, center- or school-based care, or relative care were sampled at a rate of about 1 in 6.3; and ASPA interviews of children with either non-relative care or multiple care arrangements were sampled at the highest rate (about 1 in 3.2). Late in the data collection period, it became apparent that the reinterview yield would fall short of the target and as a result, the reinterview sampling rates were changed. The rate for children with self-care remained fixed at about 1 in 6.3. The rates for children having non-relative or multiple care arrangements were changed to about 1 in 1.6; the rates for children in center- or school-based or relative care arrangements were changed to about 1 in 3.2; and the rates for children with no nonparental care arrangements were changed to about 1 in 6.3. The reinterview data are weighted to reflect these different selection probabilities based on different types and combinations of care arrangements and based on the time of selection.

A sample of 902 ASPA-NHES:2001 interviews was selected for reinterview. A total of 730 ASPA-NHES:2001 reinterviews were completed for an estimated unit response rate of 84.5 percent. Unit response rates varied among subgroups defined by the types of care arrangements. Thus, a separate reinterview nonresponse adjustment was performed, using the types of care arrangements to form cells. After the reinterview nonresponse adjustment was applied, a poststratification adjustment was applied in

⁵³Specifically, in the 11th week of reinterview sampling (March 30, 2001), the time restriction was relaxed to 1 week; in the 12th week of reinterview sampling (April 4, 2001), the time restriction was relaxed to 3 days.

order to align the totals of the person-level reinterview weights to grade by home tenure control totals from the CPS. The control totals used for this adjustment are the same as those used in raking the ASPA interview weights. (See table 7-8.)

Table 9-2. Target and actual numbers of interviews sampled for and completing the reinterview, by type of care arrangement: ASPA-NHES:2001

Type of care arrangement	Target		Actual		
	Number sampled for reinterview	Number of completed reinterviews	Number sampled for reinterview	Number of completed reinterviews	Estimated unit response rate (%)
Total	1,110	1,000	902	730	84.5
Self-care.....	225	203	242	201	86.2
Non-relative care	102	92	78	60	77.3
Multiple care arrangements	112	101	81	65	82.3
Center- or school-based care	156	140	116	87	79.2
Relative care	183	165	130	99	80.3
No care arrangements	332	299	255	218	86.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Reinterview Survey of the National Household Education Surveys Program (NHES), 2001.

The main reason for not completing a reinterview was the refusal of the respondent to participate. Approximately 61 percent of the sampled reinterviews that were not completed were final respondent refusals. The majority of the remaining nonresponse was due to the inability of interviewers to contact the respondent during the reinterview time period. Twenty-seven percent of the nonresponse cases received 14 or more call attempts without being completed. Other reasons for not completing a reinterview were that the telephone number had been disconnected or changed, or the ASPA interview respondent had moved to a new household with no telephone or forwarding number.

The reinterview was conducted using the same CATI system that was used in the original interview, modified to display the selected reinterview items instead of all the original items. For nearly all questions, the interviewers read identical words to the same respondent who completed the original interview. Exceptions were a revised introduction, in which the respondent was informed that a subset of questions was being asked again for quality control purposes, questions for which an introductory statement was added about an answer given in the original interview to introduce a reinterview topic (for example, “When we spoke with you last time, you told us child is cared for by (his/her) (RELATIVE)...”), and questions regarding temporal changes in activities, discussed below.

One question in the ASPA-NHES:2001 reinterview asked about activities in which the child participated (ASNOW2). When the reinterview response was different from the original response, the interviewer asked the respondent either whether any of the child's activities had ended since the original interview (ACTEND2), or whether the child had started any new activities since the original interview (ACTNEW2). For example, if the respondent said in the original interview that the child was not participating in activities on weekdays before or after school on a regular basis, but reported in the reinterview that the child was participating in activities on weekdays before or after school on a regular basis, then the respondent was asked during the reinterview whether the child had started any new activities since the original interview. These follow-up items (ACTEND2 and ACTNEW2) were used to reconcile some discrepancies between the original response and the reinterview response. In the above example, if the respondent reported that the child had started new activities since the original interview, then it is likely that the original interview response was correct; if the respondent reported that the child had not started new activities since the original interview, then there appears to be a discrepancy in the responses. This discrepancy may be attributable to a number of reasons, such as recall error, recording error, or reporting error. The two follow-up items were used to create a new variable, called a "presumed true value" variable, that is based on the responses to the four questions. If the reinterview respondent reported an activity (ASNOW2 = 1) but no activity was reported in the original interview (ASNOW = 2), the reinterview respondent was asked whether the child had started a new activity since the original interview (ACTNEW2). If so (ACTNEW2 = 1), then this discrepancy was deemed to have been resolved. Similarly, if the reinterview respondent reported no activity (ASNOW2 = 2) but an activity was reported in the original interview (ASNOW = 1), the reinterview respondent was asked whether the child had finished an activity since the original interview (ACTEND2). If so (ACTEND2 = 1), then this discrepancy was also deemed to have been resolved. All other combinations were deemed unresolved discrepancies and treated as such in the analysis.

Analysis Methods

Several statistics have been developed to assess the reliability of responses using reinterview data. The two statistics used in this report are the gross difference rate and the net difference rate. These two statistics were used in previous NHES reinterview reports (Brick and West 1992, Brick Wernimont, and Montes 1996, Brick, Collins, and Chandler 1997, and Montaquila, Brick, and Brock 1997) and are well documented in the reinterview literature (Hansen et al. 1964; Forsman and Schreiner 1991).

For dichotomous response variables, the gross difference rate measures the proportion of cases with different responses in the two administrations of the interview. Thus, it is an estimate of the reliability or consistency of reporting. The net difference rate, which is the average difference between the original interview and reinterview responses, takes account of offsetting misclassifications. If the second interview contains the true value for the respondent, the net difference rate estimates the bias.

Table 9-3 shows the general format of the possible reporting outcomes from the original interviews and reinterviews when the question has only two possible values. From tables formatted in this fashion, it is possible to estimate several features of the consistency of the reporting between the original survey and the reinterview. For example, the off-diagonal cells estimate the responses that were reported differently in the original interview and the reinterview. The definitions of the statistics used in this report are given below, where the cell counts are the weighted totals. Cases with missing values for the characteristic are dropped from the analysis.

Table 9-3. General format of interview-reinterview results: ASPA-NHES:2001

Reinterview	Original interview		Total
	Number of cases with characteristic	Number of cases without characteristic	
Total.....	a + c	b + d	n = a + b + c + d
Number of cases with characteristic	a	b	a + b
Number of cases without characteristic	c	d	c + d

NOTE: All values given in the table represent weighted counts.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001.

Gross Difference Rate

The gross difference rate is the weighted ratio of the gross difference divided by the estimated total number of cases. The gross difference rate is:

$$gdr = \frac{1}{\sum_1^n w_i} \sum_1^n w_i \{x_{1i} - x_{2i}\}^2 \tag{9.1}$$

where x_{1i} is the response to the original interview question for case i ;
 x_{2i} is the response to the reinterview question for case i ; and
 w_i is the full sample weight for case i .

For characteristics that have exactly two possible outcomes, the gross difference rate, expressed as a percentage, can be written using the terms from table 9-3 as

$$gdr = 100 \frac{b+c}{n} \quad (9.2)$$

This can easily be seen to be a special case of (9.1) where the x_i terms only take on the values of 0 or 1. The gross difference rates for all questions were computed using (9.2) and only data from the original and reinterview responses, unless otherwise noted. For binary data, it is clear from (9.2) that the gross difference rate is an estimate of the percentage of cases not reported the same in both interviews, i.e., those falling in the off-diagonal cells. The gross difference rate divided by 2 is a measure of the response variance. Forsman and Schreiner (1991) show that this is an unbiased estimate of response variance if the observations are independent and identically distributed. The response variance is defined as the variation associated with the responses to the same question when the survey is repeated under the same general conditions.

For nominal variables, neither (9.1) nor (9.2) can be used to compute the gross difference rate because the values assigned to the levels of the characteristic are not scaled. For such questions, a set of binary variables was computed based on the response to the original variable, and then the gross difference rate was computed for each new variable using (9.2). The number of binary variables created from each original variable was equal to the number of response categories for the original variable. For example, one of the questions in the ASPA-NHES:2001 reinterview (RCQUAL2) asked how the respondent would rate the quality and care of the child's activities in his/her arrangement. This item had four response categories: Excellent, good, fair, and poor. Four binary variables were created from this variable. The first binary variable has the value 1 if the response was "Excellent" and has the value 0 otherwise; the second binary variable has the value 1 if the response was "Good" and has the value 0 otherwise; the third binary variable has the value 1 if the response was "Fair" and has the value 0 otherwise; and the fourth binary variable has the value 1 if the response was "Poor" and 0 otherwise. The same procedure of creating binary variables was used for net difference rates as discussed below.

Net Difference Rate

The net difference rate can be defined for characteristics that are binary or continuous. The net difference rate for a continuous variable is given by

$$ndr = \frac{1}{\sum_1^n w_i} \sum_1^n w_i \{x_{1i} - x_{2i}\} \quad (9.3)$$

where the variables are defined as in (9.1). The net difference rate is thus the average difference between the original and reinterview responses.

For the binary case, the net difference is the difference between the weighted number of cases with a characteristic as reported in the original interview and the weighted number of cases in the reinterview. That is, $(a + c) - (a + b) = c - b$, using the terms in table 9-3. Thus, a positive net difference rate indicates that more adults reported having the characteristic in the original interview than in the reinterview. While the gross difference indicates differences in both directions, the net difference is the nonoffsetting part of the gross difference. Written as a percentage, the net difference rate is:

$$ndr = 100 \frac{c - b}{n} \quad (9.4)$$

If the reinterview response is the “true” value, or at least a better approximation to the true value, then the net difference rate is a measure of the bias (or reduction in bias) of the estimate. Generally speaking, this was not the case in the ASPA-NHES:2001 since the reinterview responses were collected under the same conditions as the original interview (i.e., using the same mode of data collection, virtually the same questionnaire, and the same respondent as in the original interview). Brick, et al. (1994) discuss this issue in more detail. In some surveys, it is assumed that when the original and reinterview differences are reconciled with the respondent, more accurate responses result. In these cases the net difference rate computed using the original and the reconciled responses is a valid estimate of the response bias. Brick and West (1992) and Brick, et al. (1994) found that there was little empirical support for this assumption, even for reconciled data.

The net difference rate computed from the original and reinterview data can be used to evaluate one of the assumptions associated with the gross difference rate. If the reinterview is an independent replication of the original interview, then the gross difference rate is a valid measure of response variance. Generally, it is assumed that this condition holds, but the net difference rate provides a

means of partially evaluating this assumption. If the interviews are replications, then the estimated net difference rate should be equal to zero in expectation (the original interview and reinterview should have the same average value). Biemer and Forsman (1992) discuss this issue more fully. Thus, the net difference rates for the questions in the ASPA-NHES:2001 reinterview study presented below are used for this purpose.

Findings

The gross and net difference rates for the reinterview questions are presented below along with a discussion of the implications of the results for the analysis of estimates from the ASPA-NHES:2001 survey and the planning of future NHES studies that address similar topics. A number of items were selected for analysis, including several key items of interest, and all items with a gross difference rate larger than 20 percent or a net difference rate that was significantly different from zero. For these select items, the estimates and their standard errors are presented along with the gross and net difference rates and their standard errors. The estimates are the weighted percent of respondents reporting in the first response category of the question based only on the data from the respondents to the reinterview. Since these are restricted to the reinterview subsample, the estimates may differ from those from the full ASPA-NHES:2001 sample. The sample sizes vary from item to item because of skip patterns in the interviews.

The primary focus of the ASPA-NHES:2001 reinterview study was to measure the random component of measurement error using the gross difference rate based on the reinterview data. Some rough rules of thumb for interpretation may be employed when using the gross difference rate as an estimator of the impact of measurement error on the estimates (Brick, Wernimont, and Montes 1995; U.S. Census Bureau 1985). These rules are most applicable when the estimated characteristic is between 20 and 80 percent. The rules are, if the gross difference rate is:

- Less than 20, the impact of measurement error is low;
- Between 20 and 45, the impact of measurement error is moderate; or
- Greater than 45, the impact of measurement error is high.

If it is determined that measurement error is nonnegligible, the next step might be to characterize the nature of the measurement error. For example, it would be useful to know whether the measurement error tends to be due to response error as opposed to a true change in conditions. Another

hypothesis is that the time between the original interview and the reinterview might influence the response errors. A specific concern is that if the time between the interviews is short then the respondents might simply be recalling their previous responses. If this is true then the general expectation is that response error should increase as this lag time increases. In order to examine this hypothesis, gross difference rates for the reinterview variables and for the original variables are tabulated by LAGCAT, a variable that classifies the amount of time between the two interviews. One additional hypothesis is that parents' level of education may influence the response errors. To examine this, gross difference rates for the reinterview variables and for the original variables are tabulated by PARGRADE, a variable that classifies the parents' highest level of education.

Table 9-4 shows the estimates, the gross and net difference rates, and the standard errors for the questions from the ASPA reinterview. The variable names given in the table can be referenced to the specific questions by looking at the reinterview questionnaire in appendix L. For example, SSCHOMM2 is the question that asks how long it usually takes for the child to get home from school.

Gross and net difference rates were computed for all variables in the ASPA reinterview. The gross and net difference rates are tabulated in this chapter for a select subset of 143 items. Key measures of interest in the survey (such as participation in activities) are included in these tabulations. All items with gross difference rates of at least 20 percent are presented. In addition, all items with net difference rates significantly different from zero are presented. An additional 159 items of the 302 total items in the reinterview are not shown in the tabulations presented here; all of those items had gross difference rates under 20 and net difference rates not significantly different from zero.

The overall gross difference rates for the ASPA reinterview questions are all either low or moderate for all questions. Of the 143 items in the table, 60 have low gross difference rates and 69 have moderate gross difference rates.⁵⁴ Among the 69 items that have moderate gross difference rates, 54 have rates of 20 to 30 percent, and 15 have rates of 31 to 45 percent. The gross difference rates for the remaining 14 items could not be computed due to insufficient sample sizes in one or more of the four required cells for computing the gross difference rate, as defined in Table 9-3. None of the items in the ASPA reinterview was found to have a high gross difference rate.

⁵⁴ Items are individual measures as described earlier in this chapter, and not interview questions. As noted earlier, recoding into dichotomous items was done for questions with more than two response categories. Thus, a question with four response categories would have yielded four items for this analysis: 1 or otherwise, 2 or otherwise, 3 or otherwise, and 4 or otherwise.

Some insight into the nature of the measurement error encountered in the ASPA survey can be obtained by examining those items that have moderate gross difference rates. In general, these items fall into 6 groups:

- Items pertaining to the parent/guardian's satisfaction with the child's care arrangements, addressed in reinterview questions RSF26, RSG25, and SH34;
- Items pertaining to specific after-school activities within before- or after-school arrangements, including:
 - Outdoor and indoor play and television viewing in relative care arrangements (SF24);
 - Reading, indoor and play, and television viewing in nonrelative care arrangements (SG23);
 - Homework or educational activities, reading, arts, outdoor play, and other activities for center- or school-based programs (SH25);
 - Homework or educational activities, outdoor play, and television viewing for self-care (SJ15); and
 - Homework or educational activities, using a computer, reading, arts, outdoor and indoor play, and television viewing for after-school hours in parental care (SK6);
- Items pertaining to reasons for choosing parental care for the child (SM0);
- Items pertaining to the parents' perspective on the child's participation in care, including preferred arrangement, obstacles and degree of difficulty in obtaining care, having more than one option to consider, and feeling there are good choices for care (RSM1, SM3, SM4, SM5, SM6);
- Items pertaining to parent ratings of the importance of specific characteristics of care arrangements including enrichment education, sports or physical activity, a small number of children in the group, convenient location, reasonable cost, and transportation to the arrangement (SM8).
- A small number of various other items including whether the child spends time after school outdoors at home while in self-care (RSJ14), or parental care (SK5), whether the child's care needs influenced the mother's choice of a job or work schedule (PH16), and how easy it is for the child's father to leave work if the child gets sick or needs him unexpectedly (PV16).

It is interesting to note that the great majority of items cited above are subjective or perceptual items. That is, they are items pertaining to satisfaction and preferences. While some of the items are factual (with a number pertaining to several specific activities while in arrangements), these represent the minority of items with moderate response variance. In addition, for the factual items

involving activities within arrangements, parents were asked to list spontaneously up to 3 activities in which their children usually participated. Given the time lapse between the original and reinterview surveys, it is not surprising that some parents reported different activities.

As noted above, only 69 of the items in the ASPA reinterview (out of a total of 302 items) had moderate response variance. Among these, many of the items are at the lower end of the moderate range (that is, under 30). The findings suggest that the overall impact of measurement error is low or moderate.

The net difference rates in table 9-4 are based on the comparison of the original interview and reinterview values. The net difference rates for only 25 of the 143 items presented here would be statistically different from zero with a significance level of 0.05. Thus, for the most part, the estimates are consistent with the assumption that the reinterview was an independent replication of the original interview, at least for these questions. The assumption that the gross difference rate is a valid measure of response variability is supported by these results.

Table 9-5 presents statistics on continuous variables for which a difference was computed between the original response variable and the reinterview variable. For example, the variable SSCHOMM2 asks how long it usually takes the child to get home from school in minutes. The difference variable was computed as SSCHOMM – SSCHOMM2. There were two special cases in creating the difference variables. For the set of variables SSTRTHR2, SSTRTMN2, and SSTRAMP2, the information from all three variables was combined to create one time value. This was done for the corresponding set of original variables as well, and then the difference between the two was computed. Additionally, this combining was done for the set of variables SENDHR2, SENDMN2, and SENDAMP2, as well as their corresponding original variables. For the 23 continuous items, the means and standard errors for the original variable and for the new difference variable are reported. There were no differences detected in the difference variables for any of the items. These results reinforce the findings that the overall impact of measurement error is low or moderate.

Table 9-6 presents the gross difference rates, where cases are classified according to the amount of time between the original interview and the reinterview. Of the 730 completed ASPA reinterviews, 312 occurred within 21 days of the original interview and 418 occurred more than 22 days after the original interview. These categories do not represent large differences in lag time between interviews, but the tight interviewing schedule for the NHES limits the possible variability in the lag times between the original interviews and the reinterviews, and it is not possible to further differentiate

the lag times in an analytically meaningful way. The gross difference rates in table 9-6 correspond to the reinterview variable. This table shows that, in general, time between interviews does not play a significant role in the magnitude of the measurement error. There are eight variables out of 153 that show a significant difference between gross difference rates for the two categories of LAGCAT. In some of these cases, the length of time could have had an effect due to the respondent's recall of his or her original response. However, the variables that show significance are a very small percentage of those assessed. Thus, in this limited study there appears to be little support for the hypothesis that the time between interviews is important. Of course, shorter lag times between interviews might show effects, but it is not possible to examine this from these data.

Table 9-7 presents the gross difference rates, where cases are classified into two categories according to the parent's education; whether they have less than a high school diploma or a high school diploma or higher. Of the 730 completed ASPA reinterviews, 251 respondents have less than a high school diploma and 479 have a high school diploma or higher. There are eight variables out of 162 that show a significant difference between gross difference rates for the two categories of PARGRADE. This indicates that perhaps a few items are less reliable for one group than the other, but the very low prevalence of significant differences indicates that there is little support for the hypothesis that parent's education level is important in this regard.

Table 9-4. Estimated percentage, gross and net difference rates based on unreconciled reinterview responses, by ASPA questions: ASPA-NHES:2001

Question	Sample size	Prevalence estimate		Gross difference rate		Net difference rate	
		Percent	s.e	Percent	s.e	Percent	s.e
Relative care							
RCAEDUC2.....	157	77	4.6	19	4.0	2	4.7
RCAOUTP2.....	156	34	5.3	28	5.4	5	5.1
RCAINPL2.....	156	15	3.7	23	4.0	-7	5.0
RCATV2.....	156	52	6.1	22	4.2	-4	5.1
RCQUAL2(1).....	161	55	5.0	23	3.9	7	4.3
RCQUAL2(2).....	161	37	4.9	30	4.5	-4	5.7
RCQUAL2(3).....	161	6	1.8	11	2.5	-1	3.0
RCQUAL2(4).....	161	(1)	(1)	(1)	(1)	(1)	(1)
RCAFFOR2(1).....	161	79	3.8	22	4.0	4	4.4
RCAFFOR2(2).....	161	16	3.5	21	4.3	-5	4.0
RCAFFOR2(3).....	161	3	2.0	4	1.8	-1	1.9
RCAFFOR2(4).....	161	(1)	(1)	(1)	(1)	(1)	(1)
RCRELIAB2(1).....	161	81	3.7	19	4.0	4	4.6
RCRELIAB2(2).....	161	17	3.5	21	4.1	-3	4.8
RCRELIAB2(3).....	161	2	1.6	3	1.3	-1	1.3
RCRELIAB2(4).....	161	(1)	(1)	(1)	(1)	(1)	(1)
RCTRANS2(1).....	70	78	6.2	21	5.7	4	6.2
RCTRANS2(2).....	70	18	6.1	19	5.7	-5	6.0
RCTRANS2(3).....	70	(1)	(1)	(1)	(1)	(1)	(1)
RCTRANS2(4).....	70	(1)	(1)	(1)	(1)	(1)	(1)
Non-relative care							
NCAREAD2.....	68	12	5.9	22	7.7	-14	8.2
NCAOUTP2.....	68	45	8.4	20	6.1	0	6.7
NCAINPL2.....	68	37	8.2	31	7.2	1	8.0
NCATV2.....	68	48	8.1	32	8.2	16	9.7
NCQUAL2(1).....	77	47	7.5	18	5.9	-4	7.0
NCQUAL2(2).....	77	35	6.7	22	5.7	5	5.4
NCQUAL2(3).....	77	17	6.8	16	6.0	0	6.7
NCQUAL2(4).....	77	(1)	(1)	(1)	(1)	(1)	(1)
NCAFFOR2(1).....	76	53	7.4	31	7.1	7	8.9
NCAFFOR2(2).....	76	41	7.8	34	7.2	0	9.1
NCAFFOR2(3).....	76	3	2.3	10	3.7	-6	3.7
NCAFFOR2(4).....	76	2	1.7	3	2.1	-1	2.1
NCTRANS2(1).....	51	70	9.2	26	9.1	-16	9.6
NCTRANS2(2).....	51	22	6.8	18	6.2	8	6.1
NCTRANS2(3).....	51	(1)	(1)	(1)	(1)	(1)	(1)
NCTRANS2(4).....	51	(1)	(1)	(1)	(1)	(1)	(1)
Center-based programs							
CPSIGNU2.....	153	83	4.9	17	5.7	-10	4.5
CPAEDUC2.....	120	60	6.1	25	5.7	-4	4.9
CPAREAD2.....	120	20	8.4	30	8.2	-2	11.6
CPAART2.....	120	31	7.8	22	4.4	-7	5.2
CPAOUTP2.....	120	37	6.7	23	5.1	6	5.3

See notes at end of table.

Table 9-4. Estimated percentage, gross and net difference rates based on unreconciled reinterview responses, by ASPA questions: ASPA-NHES:2001—Continued

Question	Sample size	Prevalence estimate		Gross difference rate		Net difference rate	
		Percent	s.e	Percent	s.e	Percent	s.e
CPAOTHE2	120	26	4.4	20	3.9	18	3.9
CPQUAL2(1)	144	50	6.7	26	5.1	8	5.6
CPQUAL2(2)	144	39	6.1	28	5.4	-10	6.1
CPQUAL2(3)	144	9	2.3	4	1.7	0	1.7
CPQUAL2(4)	144	(1)	(1)	(1)	(1)	(1)	(1)
CPAFFOR2(1)	140	64	6.0	23	5.3	13	5.3
CPAFFOR2(2)	140	26	5.3	29	5.4	-13	5.2
CPAFFOR2(3)	140	8	2.9	5	1.9	-1	2.0
CPAFFOR2(4)	140	(1)	(1)	(1)	(1)	(1)	(1)
CPRELIA2(1)	143	75	4.5	21	4.0	-1	4.6
CPRELIA2(2)	143	22	4.4	24	4.1	-1	4.5
CPRELIA2(3)	143	3	1.5	3	1.5	2	1.5
CPRELIA2(4)	143	(1)	(1)	(1)	(1)	(1)	(1)
CPTRANS2(1)	137	73	4.5	21	4.7	1	4.8
CPTRANS2(2)	137	20	4.5	28	5.1	0	5.5
CPTRANS2(3)	137	(1)	(1)	(1)	(1)	(1)	(1)
CPTRANS2(4)	137	2	1.0	4	2.2	-2	2.2
CPSAFTY2(1)	144	73	4.5	21	4.7	1	4.8
CPSAFTY2(2)	144	22	4.0	24	5.2	-4	5.1
CPSAFTY2(3)	144	4	2.2	5	2.3	3	2.3
CPSAFTY2(4)	144	(1)	(1)	(1)	(1)	(1)	(1)
Before and after school programs							
ASNOW2 ⁺⁺	718	55	2.5	17	2.2	2	2.1
ASNOW2 ⁺⁺	718	55	2.7	14	1.9	3	2.2
ASACAD2	391	20	2.8	13	2.5	5	2.0
ASSCSPO2	268	35	4.1	11	2.8	-7	2.8
ASWEEK2	392	90	1.8	15	2.4	5	2.4
ASCOVER2	333	21	3.7	10	2.2	3	2.0
Self-care							
SCAHOMI2	165	88	3.9	10	2.7	-1	2.6
SCAHOMO2	165	26	5.1	30	4.4	1	6.4
SCAEDUC2	162	87	3.4	23	4.8	12	4.6
SCAOUTP2	162	19	4.7	23	4.9	0	5.9
SCATV2	162	57	4.7	30	3.9	-5	4.3
Parental care							
PAAHMOU2	226	56	4.5	36	4.3	2	5.2
PAAFRND2	226	16	3.4	20	4.0	-1	4.8
PAAEDUC2	226	64	4.8	23	4.1	1	5.1
PAACOMP2	226	47	4.3	38	4.7	25	6.5
PAAREAD2	226	41	4.3	37	4.4	25	5.1
PAAOUTP2	226	56	5.1	26	3.8	1	4.1
PAAINPL2	226	20	4.0	25	4.6	-6	5.2
PAATV2	226	46	4.3	33	4.3	-14	5.2
PACHOOS2	194	22	4.6	15	3.3	1	3.3

See notes at end of table.

Table 9-4. Estimated percentage, gross and net difference rates based on unreconciled reinterview responses, by ASPA questions: ASPA-NHES:2001—Continued

Question	Sample size	Prevalence estimate		Gross difference rate		Net difference rate	
		Percent	s.e	Percent	s.e	Percent	s.e
Perceptions of quality, etc.							
PPNOWOR2	162	14	3.5	26	4.4	-14	5.4
PPWORKH2	162	1	0.6	3	1.4	-3	1.4
PPBEST2	162	35	5.3	43	5.1	-21	6.0
PPRESPO2.....	162	23	3.5	43	4.8	-12	7.3
PPOther2	162	40	4.9	38	4.8	36	4.9
PPREFE2(1).....	525	9	1.8	9	1.6	1	2.0
PPREFE2(2).....	525	4	0.9	4	0.9	0	1.0
PPREFE2(3).....	525	23	2.5	20	2.0	-7	2.3
PPREFE2(4).....	525	5	1.0	7	1.2	-3	1.3
PPREFE2(5).....	525	41	2.8	25	2.3	-1	2.8
PPREFE2(6).....	525	4	0.8	8	1.6	-2	1.5
PPREFE2(7).....	525	15	1.9	18	2.2	11	2.1
PPOBStC2(1).....	117	19	4.5	13	3.7	-3	4.1
PPOBStC2(2).....	117	9	3.1	12	4.0	-3	4.0
PPOBStC2(3).....	117	2	1.5	5	2.3	-4	2.2
PPOBStC2(4).....	117	14	3.6	13	4.1	0	4.3
PPOBStC2(5).....	117	(1)	(1)	(1)	(1)	(1)	(1)
PPOBStC2(6).....	117	34	7.1	23	4.7	-4	5.4
PPOBStC2(7).....	117	20	5.4	20	5.3	14	5.1
PPDIFCL2(1).....	498	6	1.1	8	1.4	-1	1.7
PPDIFCL2(2).....	498	10	1.6	12	1.8	4	1.9
PPDIFCL2(3).....	498	7	1.5	9	1.4	1	1.6
PPDIFCL2(4).....	498	64	2.3	26	2.6	-3	3.2
PPDIFCL2(5).....	498	13	1.6	14	2.0	-1	2.4
PPOPTIO2	502	59	2.6	24	2.2	2	2.7
PPBCHOI2(1).....	521	44	2.7	23	2.8	0	2.5
PPBCHOI2(2).....	521	43	3.0	23	2.3	2.5	2.5
PPBCHOI2(3).....	521	13	1.9	16	2.2	-2	2.3
PPHWHL2(1).....	558	85	2.5	15	2.6	-5	2.4
PPHWHL2(2).....	558	12	2.5	13	2.7	3	2.4
PPHWHL2(3).....	558	3	0.9	2	0.8	2	0.7
PPENRCH2(1).....	559	57	2.8	28	2.6	-1	2.5
PPENRCH2(2).....	559	38	2.5	31	2.8	0	2.8
PPENRCH2(3).....	559	5	1.2	9	2.0	0	1.7
PPSPORT2(1).....	558	45	3.0	32	2.5	-2	3.3
PPSPORT2(2).....	558	48	3.0	33	2.9	2	3.6
PPSPORT2(3).....	558	7	1.3	10	1.5	0	1.9
PPCONV2(1).....	556	75	2.7	20	1.9	3	2.1
PPCONV2(2).....	556	23	2.7	19	1.9	-2	2.2
PPCONV2(3).....	556	2	0.8	3	0.8	-1	0.9
PPCOST2(1).....	558	74	2.9	20	2.7	-5	2.9
PPCOST2(2).....	558	24	2.9	20	2.8	6	0.9
PPCOST2(3).....	558	2	0.6	3	0.7	-1	0.7
PPKIDS2(1).....	558	52	2.7	30	2.6	-1	2.7
PPKIDS2(2).....	558	37	2.9	35	2.3	2	3.2

See notes at end of table.

Table 9-4. Estimated percentage, gross and net difference rates based on unreconciled reinterview responses, by ASPA questions: ASPA-NHES:2001—Continued

Question	Sample size	Prevalence estimate		Gross difference rate		Net difference rate	
		Percent	s.e	Percent	s.e	Percent	s.e
PPKIDS2(3)	558	11	1.7	15	2.3	-1	2.3
PPTRANS2(1)	558	64	2.8	25	3.0	-5	3.4
PPTRANS2(2)	558	25	2.9	24	2.8	4	3.4
PPTRANS2(3)	558	10	1.5	10	1.9	1	1.6
Health and disability							
HDADD2	720	8	1.4	2	0.5	0	0.6
Mother items							
MOMCHOI2	539	53	3.2	24	2.5	-1	2.9
MOMACCT2(1)	458	28	2.9	5	1.3	-1	1.4
MOMACCT2(2)	458	69	2.8	9	2.0	3	2.0
MOMACCT2(3)	458	3	0.9	4	1.3	-3	1.3
Father items							
DADLVEA2(1)	481	54	3.3	18	2.6	5	3.0
DADLVEA2(2)	481	26	2.7	24	2.8	-2	3.6
DADLVEA2(3)	481	11	2.6	12	2.1	-3	2.0
DADLVEA2(4)	481	9	1.6	6	1.3	0	1.2
DADACCT2(1)	391	20	2.2	4	1.1	2	1.2
DADACCT2(2)	391	74	2.6	14	3.1	5	3.4
DADACCT2(3)	391	6	1.7	10	3.0	-8	3.0

++The first row of ASNOW2 results contains the information from the unreconciled variables. The second row of ASNOW2 results contains the information after reconciliation of the original and reinterview variables using ACTEND2 and ACTNEW2.

¹ Estimates, gross difference rates, and net difference rates cannot be computed for variables without all four cells as defined in Table 9-3.

NOTE: Gross difference rates of 20 percent or higher for variables CPBEDUC2, CPBCOMP2, CPBOUTP2, CPBINPL2, CPBEAT2, CPBTV2, PPLANG2(1), PPLANG2(2), and PPLANG2(3) are not presented due to sample sizes less than thirty. The following 25 variables have values significantly different from zero: PPOTHER2, PPCOST2(2), PPPREFE2(7), PAAREAD2, CPAOTHE2, PAACOMP2, PPBEST2, PPPREFE2(3), PPHWHL2(3), PPOBSTC2(7), PAATV2, DADACCT2(3), SCAEDUC2, PPNOWOR2, CPAFFOR2(2), ASACAD2, ASSCSPO2, CPAFFOR2(1), PPPREFE2(4), MOMACCT2(3), CPSIGNU2, PPWORKH2, PPDIFICL2(2), ASWEEK2, PPHWHL2(1).

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001, and ASPA Reinterview Survey of the NHES, 2001.

Table 9-5. Means and standard errors for original ASPA continuous variables and computed difference variables: ASPA-NHES:2001

Question	Original variable		Reinterview sample size	Difference variable	
	Mean	s.e		Mean	s.e
School characteristics					
SSTRTHR, MN, AMPM.....	(1)	(1)	728	-1.5	0.67
SENDHR, MN, AMPM.....	(1)	(1)	730	0.2	0.68
SSCHOMM2.....	17.8	0.74	722	0.2	0.50
Relative care					
RCHOMM2.....	9.9	1.09	68	0.5	0.47
RCSCMM2.....	13.9	0.89	69	-0.6	0.83
RCAFT62.....	1.6	0.32	149	-0.2	0.50
Non-relative care					
NCHOMM2.....	6.5	1.16	52	-0.8	1.30
NCSCMM2.....	13.5	1.25	49	-0.2	0.76
NCAFT62.....	0.7	0.22	68	-4.5	4.01
Center- or school-based care					
CPHOMM2.....	9.9	1.49	41	0.2	1.18
CPSCMM2.....	8.5	0.94	36	-1.1	1.23
CPAFT62.....	0.5	0.15	130	0.0	0.13
CPKIDS2.....	19.6	1.77	119	0.5	1.38
CPADLTS2.....	2.6	0.22	133	0.0	0.29
Before and after school programs					
ASDAYS2.....	2.3	0.10	240	-0.1	0.07
ABSHRS2.....	2.1	0.35	15	0.2	0.36
ASHRS2.....	3.8	0.21	234	-0.1	0.10
ASAFT62.....	1.6	0.15	236	0.1	0.20
Self-care					
SCAFT62.....	0.4	0.09	156	-0.2	0.27

¹ Means and standard errors were not reported for school start and end time values due to lack of analytical interest.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001, and ASPA Reinterview Survey of the NHES, 2001.

Table 9-6. Gross difference rates (GDR) by LAGCAT, a categorization of the number of days between the original ASPA interview and the ASPA reinterview: ASPA-NHES:2001

Question	Length of time between interviews less than 22 days			Length of time between interviews 22 days or more		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Relative care						
RCAEDUC.....	49	26	8.1	107	15	4.3
RCAOUTP.....	49	29	11.7	107	28	5.1
RCAINPL.....	49	17	6.4	107	27	5.3
RCATV.....	49	27	8.5	107	19	4.2
RCQUAL2(1).....	50	17	7.3	111	26	4.3
RCQUAL2(2).....	50	31	8.3	111	30	5.3
RCQUAL2(3).....	50	11	4.0	111	11	3.3
RCQUAL2(4).....	50	(1)	(1)	111	(1)	(1)
RCAFFOR2(1).....	50	22	8.9	111	22	4.2
RCAFFOR2(2).....	50	21	8.9	111	20	4.7
RCAFFOR2(3).....	50	(1)	(1)	111	5	2.8
RCAFFOR2(4).....	50	(1)	(1)	111	(1)	(1)
RCRELIAB2(1).....	50	15	6.0	111	21	5.7
RCRELIAB2(2).....	50	16	6.0	111	24	5.8
RCRELIAB2(3).....	50	(1)	(1)	111	4	2.0
RCRELIAB2(4).....	50	(1)	(1)	111	(1)	(1)
RCTRANS2(1).....	[a]	[a]	[a]	49	25	7.8
RCTRANS2(2).....	[a]	[a]	[a]	49	23	7.7
RCTRANS2(3).....	[a]	[a]	[a]	49	(1)	(1)
RCTRANS2(4).....	[a]	[a]	[a]	49	(1)	(1)
Non-relative care						
NCAREAD2.....	32	19	9.0	36	25	12.3
NCAOUTP2.....	32	11	6.8	36	27	9.8
NCAINPL2.....	32	35	10.2	36	28	9.8
NCATV2.....	32	31	10.9	36	32	13.3
NCQUAL2(1).....	37	17	7.5	40	19	9.4
NCQUAL2(2).....	37	23	8.6	40	20	7.3
NCQUAL2(3).....	37	18	8.3	40	14	9.1
NCQUAL2(4).....	37	(1)	(1)	40	(1)	(1)
NCAFFOR2(1).....	37	33	9.9	39	29	10.5
NCAFFOR2(2).....	37	34	9.9	39	33	10.7
NCAFFOR2(3).....	37	(1)	(1)	39	(1)	(1)
NCAFFOR2(4).....	37	(1)	(1)	39	(1)	(1)

See notes at end of table.

Table 9-6. Gross difference rates (GDR) by LAGCAT, a categorization of the number of days between the original ASPA interview and the ASPA reinterview: ASPA-NHES:2001—Continued

Question	Length of time between interviews less than 22 days			Length of time between interviews 22 days or more		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Center-based programs						
CPSIGNU2.....	62	19	9.5	91	16	5.9
CPCHANGE2(1) ⁺⁺	57	27	5.9	86	11	4.1
CPCHANGE2(2).....	57	(1)	(1)	86	(1)	(1)
CPCHANGE2(3).....	57	8	4.8	86	7	3.3
CPCHANGE2(4).....	57	20	6.8	86	6	3.0
CPAEDUC2.....	50	28	10.8	70	23	6.2
CPAREAD2.....	50	18	6.9	70	38	13.0
CPAART2.....	50	25	6.2	70	20	6.3
CPAOUTP2.....	50	21	7.9	70	24	7.5
CPAOTHE2.....	50	10	4.7	70	(1)	(1)
CPPHYS2 ⁺⁺	58	23	5.7	85	8	3.3
CPQUAL2(1).....	58	26	8.3	86	26	6.5
CPQUAL2(2).....	58	26	8.0	86	30	7.0
CPQUAL2(3).....	58	8	3.6	86	1	0.9
CPQUAL2(4).....	58	(1)	(1)	86	(1)	(1)
CPAFFOR2(1).....	56	16	7.2	84	29	7.4
CPAFFOR2(2).....	56	25	8.4	84	33	7.6
CPAFFOR2(3).....	56	9	4.4	84	2	1.3
CPAFFOR2(4).....	56	(1)	8	84	(1)	(1)
CPRELIA2(1).....	58	26	7.5	85	16	4.7
CPRELIA2(2) ⁺⁺	58	33	6.7	85	16	4.7
CPRELIA2(3).....	58	7	3.4	85	(1)	(1)
CPRELIA2(4).....	58	(1)	(1)	85	(1)	(1)
CPTRANS2(1).....	55	25	7.1	82	37	10.2
CPTRANS2(2).....	55	28	7.2	82	29	7.4
CPTRANS2(3).....	55	(1)	(1)	82	(1)	(1)
CPTRANS2(4).....	55	5	2.7	82	(1)	(1)
CPSAFTY2(1).....	58	22	8.2	86	19	5.5
CPSAFTY2(2).....	58	23	8.2	86	24	7.0
CPSAFTY2(3).....	58	(1)	(1)	86	(1)	(1)
CPSAFTY2(4).....	58	(1)	(1)	86	(1)	(1)
Before and after school programs						
ASNOW2 ⁺	308	15	3.2	410	19	2.5
ASNOW2 ⁺	308	13	3.1	410	15	2.2
ASACAD2.....	165	11	3.1	226	15	3.6
ASSCART2.....	66	10	4.8	95	8	3.2
ASSCSPO2.....	118	15	4.4	150	7	2.4
ASWEEK2.....	166	12	3.3	226	18	3.4
ASCOVER2 ⁺⁺	145	6	2.5	188	15	3.7

See notes at end of table.

Table 9-6. Gross difference rates (GDR) by LAGCAT, a categorization of the number of days between the original ASPA interview and the ASPA reinterview: ASPA-NHES:2001—Continued

Question	Length of time between interviews less than 22 days			Length of time between interviews 22 days or more		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Self-care						
SCAHOMI2	66	7	3.7	96	11	4.1
SCAHOMO2.....	66	33	8.0	96	27	5.2
SCAEDUC2.....	66	27	7.9	96	19	4.3
SCAOUTP2.....	66	26	8.5	96	20	5.2
SCAPHON2.....	66	7	2.9	96	16	4.1
SCAEAT2 ⁺⁺	66	6	2.4	96	20	5.6
SCATV2.....	66	29	7.1	96	15	4.2
Parental care						
PAAHMIN2.....	306	9	3.9	415	22	5.5
PAAHMOU2.....	111	39	7.5	115	32	4.9
PAAFRND2.....	111	23	6.3	115	18	5.1
PAAEDUC2.....	111	24	5.8	115	23	4.8
PAACOMP2.....	111	33	6.8	115	44	6.8
PAAREAD2.....	111	37	6.2	115	39	6.5
PAAOUTP2.....	111	29	4.8	115	24	5.8
PAAINPL2.....	111	29	7.1	115	20	5.0
PAATV2.....	111	31	6.5	115	35	5.3
PACHOOS2.....	95	14	4.3	99	16	4.3
Perceptions of quality, etc.						
PPNOWOR2.....	76	22	5.2	86	30	6.8
PPWORKH2.....	76	1	0.5	86	(1)	(1)
PPBEST2.....	76	40	8.0	86	46	6.5
PPRESPO2.....	76	51	7.1	86	36	6.4
PPOTHER2.....	76	37	7.5	86	(1)	(1)
PPPREFE2(1).....	217	10	3.3	308	9	1.6
PPPREFE2(2).....	217	3	1.2	308	4	1.3
PPPREFE2(3).....	217	20	3.2	308	20	2.6
PPPREFE2(4) ⁺⁺	217	10	2.0	308	5	1.3
PPPREFE2(5).....	217	30	3.7	308	22	2.9
PPPREFE2(6).....	217	10	2.6	308	7	1.6
PPPREFE2(7).....	217	20	3.8	308	17	2.6
PPOBSTC2(1).....	40	16	7.1	77	12	4.4
PPOBSTC2(2).....	40	19	9.3	77	9	3.9
PPOBSTC2(3).....	40	(1)	(1)	77	5	2.4
PPOBSTC2(4).....	40	23	7.2	77	8	5.0
PPOBSTC2(5).....	40	(1)	(1)	77	(1)	(1)
PPOBSTC2(6).....	40	37	10.1	77	18	4.9
PPOBSTC2(7).....	40	(1)	(1)	77	22	6.5
PPDIFCL2(1).....	201	6	1.7	297	10	1.8
PPDIFCL2(2).....	201	12	2.9	297	12	2.4

See notes at end of table.

Table 9-6. Gross difference rates (GDR) by LAGCAT, a categorization of the number of days between the original ASPA interview and the ASPA reinterview: ASPA-NHES:2001—Continued

Question	Length of time between interviews less than 22 days			Length of time between interviews 22 days or more		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
PPDIFCL2(3).....	201	7	2.0	297	10	2.0
PPDIFCL2(4).....	201	24	3.9	297	27	3.3
PPDIFCL2(5).....	201	14	3.0	297	15	2.8
PPOPTIO2.....	205	26	4.3	297	22	3.3
PPACHOI2(1).....	220	24	3.4	317	17	2.2
PPACHOI2(2).....	220	19	3.2	317	15	2.5
PPACHOI2(3).....	220	12	3.1	317	11	2.1
PPBCHOI2(1) ⁺⁺	213	29	5.0	308	18	2.4
PPBCHOI2(2).....	213	25	4.0	308	21	2.6
PPBCHOI2(3).....	213	13	2.7	308	19	2.8
PPHWHL2(1).....	229	14	2.7	329	16	3.9
PPHWHL2(2).....	229	12	2.7	329	15	3.9
PPHWHL2(3).....	229	3	1.3	329	2	1.0
PPENRCH2(1).....	230	23	4.3	329	31	3.1
PPENRCH2(2).....	230	29	4.5	329	32	3.2
PPENRCH2(3).....	230	10	3.0	329	8	2.0
PPSPORT2(1).....	230	35	3.8	328	29	3.7
PPSPORT2(2).....	230	37	4.0	328	30	3.9
PPSPORT2(3).....	230	11	2.7	328	10	2.0
PPCONV2(1).....	230	20	3.2	326	21	2.7
PPCONV2(2).....	230	16	3.1	326	20	3.0
PPCONV2(3).....	230	5	1.5	326	2	1.1
PPCOST2(1).....	230	22	3.4	328	19	4.0
PPCOST2(2).....	230	20	3.2	328	20	4.0
PPCOST2(3).....	230	5	1.4	328	2	0.8
PPKIDS2(1).....	230	32	4.2	328	28	3.7
PPKIDS2(2).....	230	39	4.2	328	32	3.0
PPKIDS2(3).....	230	16	3.8	328	14	2.3
PPTRANS2(1).....	229	27	3.9	329	24	4.2
PPTRANS2(2).....	229	24	3.1	329	25	4.2
PPTRANS2(3).....	229	12	3.5	329	10	1.9
Health and disability						
HDADD2.....	309	1	0.8	411	2	0.8

See notes at end of table.

Table 9-6. Gross difference rates (GDR) by LAGCAT, a categorization of the number of days between the original ASPA interview and the ASPA reinterview: ASPA-NHES:2001—Continued

Question	Length of time between interviews less than 22 days			Length of time between interviews 22 days or more		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Mother items						
MOMCHOI2.....	225	23	4.0	314	26	3.2
MOMLVEA2(1).....	223	17	3.9	313	18	3.0
MOMLVEA2(2).....	223	17	3.9	313	20	3.1
MOMLVEA2(3).....	223	5	1.5	313	7	1.8
MOMLVEA2(4) ⁺⁺	223	2	1.0	313	7	2.1
MOMACCT2(1).....	186	4	1.5	272	7	2.2
MOMACCT2(2).....	186	9	2.9	272	10	2.5
MOMACCT2(3).....	186	5	2.3	272	3	1.4
Father items						
DADLVEA2(1).....	216	16	4.6	265	19	2.9
DADLVEA2(2).....	216	22	4.8	265	27	3.4
DADLVEA2(3).....	216	11	3.2	265	13	2.5
DADLVEA2(4).....	216	7	1.8	265	6	1.8
DADACCT2(1).....	174	3	1.4	217	6	1.8
DADACCT2(2).....	174	14	5.1	217	15	3.0
DADACCT2(3).....	174	11	5.2	217	9	2.7

+ The first row of ASNOW2 results contains the information from the unreconciled variables. The second row of ASNOW2 results contains the information after reconciliation of the original and reinterview variables using ACTEND2 and ACTNEW2.

++ These variables showed statistical significance between gross difference rates.

¹ Estimates and gross difference rates cannot be computed for variables without all four cells as defined in Table 9-3.

[a] indicates that for the corresponding category of LAGCAT, the variable had sample sizes less than thirty so no data are reported.

NOTE: Gross difference rates of 20 percent or higher for variables CPBEDUC2, CPBCOMP2, CPBOUPT2, CPBINPL2, CPBEAT2, CPBTV2, PPLANG2(1), PPLANG2(2), and PPLANG2(3) are not presented due to sample sizes less than thirty. The following 8 variables have values significantly different from zero: RCAINPL2, PPTRANS2(3), PPKIDS2(2), RCAFFOR2(2), PPCONV2(2), RCTRANS2(1), DADLVEA2(2), SCAHOMO2.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001, and ASPA Reinterview Survey of the NHES, 2001.

Table 9-7. Gross difference rates (GDR) by parents' highest education level: ASPA-NHES:2001

Question	Parent's education level less than high school			Parent's education level high school diploma or higher		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Relative care						
RCAEDUC2.....	70	23	6.6	86	15	5.0
RCAOUTP2.....	70	27	7.1	86	29	8.1
RCAINPL2 ⁺⁺	70	35	6.4	86	13	3.9
RCATV2.....	70	21	6.2	86	23	6.3
RCQUAL2(1).....	71	25	5.3	90	21	5.6
RCQUAL2(2).....	71	34	6.1	90	27	6.4
RCQUAL2(3).....	71	13	4.2	90	10	3.5
RCQUAL2(4).....	71	(1)	(1)	90	(1)	(1)
RCAFFOR2(1).....	71	29	7.0	90	17	5.5
RCAFFOR2(2) ⁺⁺	71	31	6.8	90	12	5.4
RCAFFOR2(3).....	71	8	4.0	90	(1)	(1)
RCAFFOR2(4).....	71	(1)	(1)	90	(1)	(1)
RCRELIAB2(1).....	71	19	5.7	90	19	6.6
RCRELIAB2(2).....	71	21	5.5	90	22	6.6
RCRELIAB2(3).....	71	(1)	(1)	90	(1)	(1)
RCRELIAB2(4).....	71	(1)	(1)	90	(1)	(1)
RCTRANS2(1) ⁺⁺	33	31	9.8	37	9	3.3
RCTRANS2(2).....	33	29	10.0	37	9	3.3
RCTRANS2(3).....	33	(1)	(1)	37	(1)	(1)
RCTRANS2(4).....	33	(1)	(1)	37	(1)	(1)
Non-relative care						
NCAREAD2.....	[a]	[a]	[a]	53	26	9.6
NCAOUTP2.....	[a]	[a]	[a]	53	20	7.3
NCAINPL2.....	[a]	[a]	[a]	53	26	8.0
NCATV2.....	[a]	[a]	[a]	53	29	9.4
NCQUAL2(1).....	[a]	[a]	[a]	60	13	5.0
NCQUAL2(2).....	[a]	[a]	[a]	60	21	6.0
NCQUAL2(3).....	[a]	[a]	[a]	60	15	5.8
NCQUAL2(4).....	[a]	[a]	[a]	60	(1)	(1)
NCAFFOR2(1).....	[a]	[a]	[a]	59	24	7.6
NCAFFOR2(2).....	[a]	[a]	[a]	59	28	7.6
NCAFFOR2(3).....	[a]	[a]	[a]	59	13	4.8
NCAFFOR2(4).....	[a]	[a]	[a]	59	4	2.7
NCRELIA2(1).....	[a]	[a]	[a]	60	8	4.6
NCRELIA2(2).....	[a]	[a]	[a]	60	6	2.8
NCRELIA2(3).....	[a]	[a]	[a]	60	(1)	(1)
NCRELIA2(4).....	[a]	[a]	[a]	60	(1)	(1)
NCTRANS2(1).....	[a]	[a]	[a]	39	26	11.3
NCTRANS2(2).....	[a]	[a]	[a]	39	14	6.5
NCTRANS2(3).....	[a]	[a]	[a]	39	(1)	(1)
NCTRANS2(4).....	[a]	[a]	[a]	39	(1)	(1)

See notes at end of table.

Table 9-7. Gross difference rates (GDR) by parents' highest education level: ASPA-NHES:2001—Continued

Question	Parent's education level less than high school			Parent's education level high school diploma or higher		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Center-based programs						
CPSIGNU2.....	46	12	6.1	107	21	8.1
CPCHANGE2(1).....	43	17	7.7	100	18	4.1
CPCHANGE2(2).....	43	(1)	(1)	100	3	1.6
CPCHANGE2(3).....	43	3	1.9	100	10	4.5
CPCHANGE2(4).....	43	15	7.3	100	11	4.0
CPAEDUC2.....	40	29	8.5	80	22	6.8
CPAREAD2.....	40	29	20.5	80	(1)	(1)
CPAART2.....	40	18	8.2	80	25	5.9
CPAOUTP2.....	40	23	10.9	80	23	5.7
CPAOTHE2.....	40	(1)	(1)	80	24	5.5
CPPHYS2.....	42	13	5.9	101	16	4.5
CPQUAL2(1).....	44	29	9.4	100	24	6.0
CPQUAL2(2).....	44	24	8.7	100	30	6.7
CPQUAL2(3).....	44	5	3.5	100	4	1.8
CPQUAL2(4).....	44	(1)	(1)	100	(1)	(1)
CPAFFOR2(1).....	43	20	8.8	97	25	6.3
CPAFFOR2(2).....	43	26	10.0	97	32	7.0
CPAFFOR2(3).....	43	(1)	(1)	97	6	2.7
CPAFFOR2(4).....	43	(1)	(1)	97	(1)	(1)
CPRELIA2(1).....	44	25	8.6	99	18	5.5
CPRELIA2(2).....	44	30	9.5	99	20	5.0
CPRELIA2(3).....	44	5	3.0	99	(1)	(1)
CPRELIA2(4).....	44	(1)	(1)	99	(1)	(1)
CPTRANS2(1).....	44	40	13.6	93	27	6.2
CPTRANS2(2).....	44	25	8.5	93	30	6.4
CPTRANS2(3).....	44	(1)	(1)	93	(1)	(1)
CPTRANS2(4).....	44	(1)	(1)	93	(1)	(1)
CPSAFTY2(1).....	44	17	6.9	100	22	5.8
CPSAFTY2(2).....	44	23	8.8	100	24	5.9
CPSAFTY2(3).....	44	(1)	(1)	100	3	2.1
CPSAFTY2(4).....	44	(1)	(1)	100	(1)	(1)
Before and after school programs						
ASNOW2+.....	248	16	3.0	470	18	2.7
ASNOW2+.....	248	14	2.7	470	14	2.3
ASACAD2.....	97	16	7.0	294	12	2.6
ASSCART2.....	27	(1)	(1)	134	11	3.6
ASSCSPO2.....	55	15	15	213	11	2.9
ASWEEK2.....	97	18	18	295	14	2.6
ASCOVER2.....	76	6	6	257	11	2.8

See notes at end of table.

Table 9-7. Gross difference rates (GDR) by parents' highest education level: ASPA-NHES:2001—Continued

Question	Parent's education level less than high school			Parent's education level high school diploma or higher		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Self-care						
SCAHOMI2	55	17	5.8	107	5	2.1
SCAHOMO2 ⁺⁺	55	19	5.7	107	36	6.4
SCAEDUC2	55	22	6.1	107	23	6.8
SCAOUTP2	55	23	7.5	107	23	6.6
SCAPHON2	55	12	4.7	107	12	3.3
SCAEAT2	55	20	6.7	107	10	4.1
SCATV2.....	55	29	6.7	107	31	5.3
Parental care						
PAAHMIN2	249	13	6.0	472	17	4.2
PAAHMOU2	72	35	7.4	154	36	5.3
PAAFRND2	72	26	7.5	154	18	5.0
PAAEDUC2.....	72	18	5.6	154	26	5.3
PAACOMP2	72	44	9.4	154	35	5.7
PAAREAD2.....	72	36	8.5	154	38	5.4
PAAOUTP2	72	27	6.5	154	26	4.7
PAAINPL2.....	72	17	5.7	154	28	5.6
PAATV2	72	33	7.8	154	33	5.7
PACHOOS2	65	24	7.4	129	11	3.4
Perceptions of quality, etc.						
PPNOWOR2	48	30	8.8	114	25	5.3
PPWORKH2	48	(1)	(1)	114	4	1.9
PPBEST2	48	42	9.0	114	43	6.5
PPRESPO2.....	48	34	6.6	114	47	6.1
PPOTHER2	48	(1)	(1)	114	38	5.7
PPPREFE2(1).....	181	7	2.0	344	11	2.1
PPPREFE2(2).....	181	4	1.8	344	4	1.1
PPPREFE2(3).....	181	24	3.9	344	18	2.4
PPPREFE2(4).....	181	5	1.3	344	8	1.8
PPPREFE2(5).....	181	22	3.3	344	27	3.1
PPPREFE2(6).....	181	10	2.5	344	8	1.8
PPPREFE2(7).....	181	17	3.4	344	19	2.9
PPOBSTC2(1).....	44	13	5.8	73	13	4.8
PPOBSTC2(2).....	44	(1)	(1)	73	14	5.8
PPOBSTC2(3).....	44	(1)	(1)	73	7	3.5
PPOBSTC2(4).....	44	8	3.7	73	16	6.5
PPOBSTC2(5).....	44	(1)	(1)	73	(1)	(1)
PPOBSTC2(6).....	44	17	7.3	73	27	6.5
PPOBSTC2(7).....	44	18	7.1	73	22	7.0
PPDIFCL2(1).....	178	9	2.7	320	8	1.7
PPDIFCL2(2).....	178	11	2.7	320	13	2.5
PPDIFCL2(3).....	178	(1)	(1)	320	10	1.9

See notes at end of table.

Table 9-7. Gross difference rates (GDR) by parents' highest education level: ASPA-NHES:2001—Continued

Question	Parent's education level less than high school			Parent's education level high school diploma or higher		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
PPDIFCL2(4).....	178	27	4.4	320	25	3.1
PPDIFCL2(5).....	178	19	3.9	320	12	2.1
PPOPTIO2.....	174	19	3.5	328	26	3.1
PPACHOI2(1).....	189	19	3.6	348	20	2.8
PPACHOI2(2).....	189	16	3.2	348	17	2.5
PPACHOI2(3).....	189	10	2.8	348	12	2.6
PPBCHOI2(1).....	183	25	4.3	338	22	3.5
PPBCHOI2(2).....	183	25	4.5	338	21	2.6
PPBCHOI2(3).....	183	17	3.9	338	16	2.6
PPHWHL2(1).....	198	15	6.0	360	15	2.4
PPHWHL2(2).....	198	14	6.1	360	13	2.4
PPHWHL2(3).....	198	(1)	(1)	360	3	1.0
PPENRCH2(1).....	198	28	3.9	361	27	3.7
PPENRCH2(2).....	198	26	3.7	361	33	4.0
PPENRCH2(3).....	198	(1)	(1)	361	11	2.5
PPSPORT2(1).....	197	34	5.0	361	30	2.8
PPSPORT2(2).....	197	34	5.0	361	33	3.1
PPSPORT2(3).....	197	13	2.7	361	8	2.1
PPCONV2(1).....	197	18	3.2	359	22	2.6
PPCONV2(2) ⁺⁺	197	14	2.7	359	22	2.5
PPCONV2(3).....	197	4	1.6	359	2	1.0
PPCOST2(1).....	198	18	5.9	360	21	2.9
PPCOST2(2).....	198	18	5.9	360	21	2.9
PPCOST2(3).....	198	3	1.3	360	3	1.0
PPKIDS2(1).....	197	29	4.4	361	31	3.2
PPKIDS2(2) ⁺⁺	197	28	3.6	361	39	3.0
PPKIDS2(3).....	197	10	2.7	361	18	3.2
PPTRANS2(1).....	198	21	6.2	360	28	3.1
PPTRANS2(2).....	198	22	6.3	360	26	2.8
PPTRANS2(3) ⁺⁺	198	6	1.6	360	14	3.0
Health and disability						
HDADD2.....	247	2	1.0	473	2.	0.7
Mother items						
MOMCHOI2.....	164	22	3.7	375	25	3.2
MOMLVEA2(1).....	165	16	4.1	371	18	2.8
MOMLVEA2(2).....	165	15	4.0	371	20	3.1
MOMLVEA2(3).....	165	9	2.7	371	5	1.1
MOMLVEA2(4).....	165	7	2.4	371	4	1.1
MOMACCT2(1).....	140	8	3.1	318	4	1.2
MOMACCT2(2).....	140	11	3.5	318	9	2.1
MOMACCT2(3).....	140	3	1.8	318	5	1.6

See notes at end of table.

Table 9-7. Gross difference rates (GDR) by parents' highest education level: ASPA-NHES:2001—Continued

Question	Parent's education level less than high school			Parent's education level high school diploma or higher		
	Sample size	GDR estimate	GDR s.e.	Sample size	GDR estimate	GDR s.e.
Father items						
DADLVEA2(1).....	127	15	3.9	354	19	3.4
DADLVEA2(2) ⁺⁺	127	16	4.3	354	27	3.4
DADLVEA2(3).....	127	11	3.8	354	13	2.4
DADLVEA2(4).....	127	11	3.6	354	4	1.2
DADACCT2(1).....	101	3	1.4	290	5	1.5
DADACCT2(2).....	101	8	2.7	290	16	3.9
DADACCT2(3).....	101	5	2.3	290	12	3.8

+ The first row of ASNOW2 results contains the information from the unreconciled variables. The second row of ASNOW2 results contains the information after reconciliation of the original and reinterview variables using ACTEND2 and ACTNEW2.

++ These variables showed statistical significance between gross difference rates.

[a] Indicates that for the corresponding category of PARGRADE, the variable had sample sizes less than 30, so no data are reported.

¹ Estimates and gross difference rates cannot be computed for variables without all four cells as defined in Table 9-3.

NOTE: Gross difference rates of 20 percent or higher for variables CPBEDUC2, CPBCOMP2, CPBOUTP2, CPBINPL2, CPBEAT2, CPBTV2, PPLANG2(1), PPLANG2(2), and PPLANG2(3) are not presented due to sample sizes less than 30.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001, and ASPA Reinterview Survey of the NHES, 2001.

Conclusions

The ASPA reinterview for the NHES:2001 is used in this report to examine how consistently respondents responded when asked the same questions on two occasions. The important findings of the reinterview analyses and their implications are summarized below.

Overall, the reinterview analysis indicates that the impact of measurement error on the estimates is low to moderate, as measured by the gross difference rates. In addition, the net difference rates support the use of the gross difference rates as measures of response variance.

The reinterview served its major purpose of investigating to find questions with high error rates and providing feedback to help improve the design of the questions for future surveys. In this survey, there were no questions that had high response errors; thus, the results of this reinterview study did not suggest the need for any changes to question wording. Due to adequate sample sizes for most questions, the gross difference rates from the NHES:2001 reinterview generally attained adequate levels of precision. This is similar to the NHES:1996, but in contrast to the NHES:95 (Brick et al. 1996c) where some subgroups had small sample sizes and the reinterview could not provide precise measures of response variance. Finally, neither the time lag between interviews nor the parents' level of education were significant factors in this reinterview.

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APPENDIX A

Screenener, ECPP, ASPA, and AELL Questionnaires

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NHES:2001 SCREENER

S1. Hello, this is (INTERVIEWER) and I'm calling about a research study sponsored by the United States Department of Education. Are you a member of this household and at least 18 years old?

* YES1 (GO TO S4)
 NO2 (GO TO S2)
 PROBABLE BUSINESS3 (GO TO S4)
 GO TO RESULT.....GT

S2. May I please speak with a household member who is at least 18 years old?

* AVAILABLE1 (GO TO S1)
 NOT AVAILABLE2 (GO TO RESULT,
 CALLBACK APPT.)
 THERE ARE NONE.....3 (GO TO S3A)
 GO TO RESULT.....GT

S3A. May I please speak with the male or female head of this household?

* PERSON ON PHONE1 (GO TO S4)
 OTHER PERSON, AVAILABLE2 (GO TO S3B)
 OTHER PERSON, NOT AVAILABLE.....3 (GO TO RESULT,
 CALLBACK APPT.)
 GO TO RESULT.....GT

S3B. Hello, this is (INTERVIEWER) and I'm calling about a research study sponsored by the United States Department of Education. Are you a head of this household?

* YES1 (GO TO S4)
 NO2 (GO TO S3A)
 GO TO RESULT.....GT

S4. Is this phone number used for...

* Home use,.....1 (CONTINUE)
 Home and business use, or2 (CONTINUE)
 Business use only?3 (GO TO THANK1)
 GO TO RESULT.....GT

SCRN_15. The U.S. Department of Education is conducting a voluntary and confidential research study about the educational experiences of both children and adults. Are any of the people who normally live in your household age 15 or younger?

* YES1
 NO2
 GO TO RESULT.....GT

NOTE: Response categories shown in mixed upper and lower cases are read to the respondent by the interviewer. Those shown in uppercase are not read.

Variables designated by /R appear on the restricted file only. Those designated by * do not appear on either the public or the restricted data files. They were used for administrative, verification, or coding purposes only.

If SCRN_15=1 (household has children) and household is designated for adult enumeration (HHADLT=1), go to S6 and enumerate all household members.

Else, if SCRN_15=1 (household has children) and household is not designated for adult enumeration (HHADLT= -1 or 2), go to S6 and enumerate household members age 15 or younger.

Else, if SCRN_15 NE 1 (household does not have children) and household is designated for adult enumeration (HHADLT=1 or 2), go to AINTRO.

Else, if SCRN_15 NE 1 (household does not have children) and household is not designated for adult enumeration (HHADLT= -1), go to S22.

S6. I have a few questions to see if someone in your household qualifies for the study. They take about 4 minutes. Please tell me only the first names and ages of all the (people/children age 15 or younger) who normally live in your household. Let's start with (you/the oldest child).

What is [(your/his or her) first name/the name of the next (person/child)]?	How old [are you/ is (he/she)]?	Is this (person/child) male or female?	SCREENER RESPONDENT
*	AGE1-AGE(n)¹	SEX1-SEX(n)	*

S6VERF1. [VERIFY THE NUMBER OF PEOPLE LISTED ON THE MATRIX.] Have we missed anyone (age 15 or younger) who usually lives here who is temporarily away from home or living in a dorm at school, or any babies or small children?

*

MATRIX CORRECT1
 RETURN TO MATRIX.....2
 GO TO RESULT.....GT

*If the age of any household member is missing, show probe to ask if person is age 16 or older.
 If person is age 16 or older, set flag AGE16=1.
 Else, if person is age 15 or younger, set AGE16=2.*

If AGE16 = 2, show probe to ask if person is age 2 or younger, 3- to 6-years-old, 7- to 11-years-old or 12 to 15 years old. Set flag AGE15=1, 2, 3 or 4, respectively, for ages 0-2, 3-6, 7-11, or 12-15.

¹ The number of variables containing information on household members in each file was determined at the end of data collection by the largest household size.

Ask S7 for each person age 3–19 or (if AGE15=1,2, 3
or 4) or if AGE16=1.
If all children are younger than 3,
go to Child Sampling Point.

S7. [Are you/Is (CHILD)] attending (or enrolled in) (school/nursery school, kindergarten, or school)?

SENROL1- YES1
SENROL(n) NO2

If AGE=3 or 4, go to box after S8A.
If AGE=5–15, ask S8.
If age is missing and AGE15=1,2, 3, or 4
go to box after S8A.

S8. [READ FIRST TIME: Some parents decide to educate their children at home rather than send them to school.] Is (CHILD) being schooled at home?

SHOMSC1- YES1 (GO TO S8A)
SHOMSC(n) NO2 (GO TO BOX AFTER S8A)

S8A. So (he/she) is being schooled at home instead of at school for at least some classes or subjects?

* YES1 (GO TO S8B)
NO2 (AUTOCODE s8 = 2 AND GO TO BOX)

If S7=1 (child/person is enrolled in school), go to S9.
Else, go to first box after S10.

S8B. Is (CHILD) getting all of (his/her) instruction at home, or is (he/she) getting some at school and some at home?

SHOMEALL ALL AT HOME 1 (GO TO S10)
SOME AT SCHOOL & SOME AT HOME 2 (GO TO S8C)

S8C. How many hours each week does (CHILD) usually go to a school for instruction? Please do not include time spent in extracurricular activities.

SHOMSCHR HOURS (GO TO BOX)

If S8C >= 9 hours, then set HOMSCFLG = 1
(attends a school for at least 9 hours per week).
Else, HOMSCFLG= -1.
Then, go to S10.

S9. What grade or year of school [are you/is (CHILD)] attending?
 [PROBE FOR T OR P: Is that before or after kindergarten?]

SGRADE1- SGRADE(n)	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START.....	N	(GO TO 1 ST BOX AFTER S10)
	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T	(GO TO 1 ST BOX AFTER S10)
	KINDERGARTEN	K	(GO TO 1 ST BOX AFTER S10)
	PREFIRST GRADE (AFTER K)	P	(GO TO 1 ST BOX AFTER S10)
	FIRST GRADE	1	(GO TO 1 ST BOX AFTER S10)
	SECOND GRADE	2	(GO TO 1 ST BOX AFTER S10)
	THIRD GRADE	3	(GO TO 1 ST BOX AFTER S10)
	FOURTH GRADE	4	(GO TO 1 ST BOX AFTER S10)
	FIFTH GRADE	5	(GO TO 1 ST BOX AFTER S10)
	SIXTH GRADE	6	(GO TO 1 ST BOX AFTER S10)
	SEVENTH GRADE.....	7	(GO TO 1 ST BOX AFTER S10)
	EIGHTH GRADE	8	(GO TO 1 ST BOX AFTER S10)
	NINTH GRADE/FRESHMAN IN HIGH SCHOOL	9	(GO TO 1 ST BOX AFTER S10)
	TENTH GRADE/SOPHOMORE IN HIGH SCHOOL.....	10	(GO TO 1 ST BOX AFTER S10)
ELEVENTH GRADE/JUNIOR IN HIGH SCHOOL	11	(GO TO 1 ST BOX AFTER S10)	
TWELFTH GRADE/SENIOR IN HIGH SCHOOL.....	12	(GO TO 1 ST BOX AFTER S10)	
ABOVE TWELFTH GRADE.....	13	(GO TO 1 ST BOX AFTER S10)	
UNGRADED ELEMENTARY/SECONDARY	U	(GO TO S10)	
SPECIAL EDUCATION	S	(GO TO S10)	

[IF T: In this interview, we will be referring to that as “kindergarten.”
 IF P: In this interview, we will be referring to that as “prefirst grade.”]

S10. (What grade would [you/(CHILD)] be in if (you/he/she) were attending a school with
 regular grades/What grade or year is (CHILD) attending?)
 [PROBE FOR T OR P: Is that before or after kindergarten?]

SGRDEQ1- SGRDEQ(n)	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START.....	N
	TRANSITIONAL KINDERGARTEN (BEFORE K)	T
	KINDERGARTEN	K
	PREFIRST GRADE (AFTER K)	P
	FIRST GRADE	1
	SECOND GRADE	2
	THIRD GRADE	3
	FOURTH GRADE	4
	FIFTH GRADE... ..	5
	SIXTH GRADE	6
	SEVENTH GRADE.....	7
	EIGHTH GRADE	8
	NINTH GRADE/FRESHMAN IN HIGH SCHOOL	9
	TENTH GRADE/SOPHOMORE IN HIGH SCHOOL.....	10
ELEVENTH GRADE/JUNIOR IN HIGH SCHOOL	11	
TWELFTH GRADE/SENIOR IN HIGH SCHOOL.....	12	
ABOVE TWELFTH GRADE	13	
UNGRADED/NO EQUIVALENT	U	

[IF T: In this interview, we will be referring to that as “kindergarten.”
 IF P: In this interview, we will be referring to that as “prefirst grade.”]

After last child, go to next box.

Child Sampling Point:

All children age 7 and younger are eligible. Children age 8 and older who are enrolled in N,T,K,P, grades 1-8, ungraded elementary/secondary, special education, or home school are also eligible. Children age 9 and older who are not enrolled in N,T,K,P, grades 1-8, ungraded elementary/secondary, special education, or home school are ineligible.

Select child(ren) for ECPP and /or ASPA interviews.

*If any children are selected, ask S11 and S12 for each sampled child. If two children are sampled, for 2nd child, ask if the most knowledgeable parent for 1st child is also most knowledgeable for 2nd child.
(If yes, copy name, age, and sex of parent respondent to 2nd child interview.)*

If no children are selected, go to box before AINTRO.

S11. We would like to ask some questions about (CHILD)'s (care and) education. Who is the parent or guardian in this household who knows the most about (CHILD)'s (care and) education?

* What is (your/his/her) first name (and age)?

[IF CHILDREN ONLY HAVE BEEN ENUMERATED, RECORD FIRST NAME AND AGE AND VERIFY SEX OF PARENT INTERVIEW RESPONDENT.]

FIRST NAME _____ AGE _____ SEX _____ () [X IF SCRNM RESP]

[IF ALL HOUSEHOLD MEMBERS HAVE BEEN ENUMERATED, DISPLAY HOUSEHOLD MEMBERS AGE 12 AND OLDER. RECORD PERSON NUMBER OF RESPONDENT FOR PARENT INTERVIEW.]

PERSON NUMBER

S12. What is [your/(PERSON)'s] relationship to (CHILD)? [VERIFY IF KNOWN]

- RESRELN**
- MOTHER (BIRTH/ADOPTIVE/STEP/FOSTER)1
 - FATHER (BIRTH/ADOPTIVE/STEP/FOSTER)2
 - BROTHER, INCLUDING STEP, ADOPTED, AND FOSTER3
 - SISTER, INCLUDING STEP, ADOPTED, AND FOSTER4
 - GRANDMOTHER5
 - GRANDFATHER6
 - AUNT7
 - UNCLE8
 - COUSIN9
 - OTHER RELATIVE10
 - SPECIFY _____
 - NONRELATIVE11
 - SPECIFY _____

After a respondent for each ECPP and/or ASPA interview is selected, go to next box

*If household is sampled for an AELL interview, go to AINTRO.
Else, if children are selected for an ECPP and/or ASPA interview only, go to HHSELECT screen to select interview.
Else, go to S22.*

AINTRO. We are also interested in learning about the educational activities of adults.

*If SCRN_15=1 (children age 15 and younger in household; all members have been enumerated), go to box before S17.
Else if SCRN_15=2, ask S13.*

S13. I have a few questions to see if someone in your household qualifies for the study. They take about 3 minutes. Please tell me only the first names and ages of all the people who normally live in your household. Let's start with you.

What is (your first name/the first name of the next person)?	How old [are you/is (he/she)]?	Is this adult male or female?	SCREENER RESPONDENT
*	AGE1-AGE (n)	SEX1-SEX(n)	*

Ask S14 for each person age 16-19 or if AGE16=1. If all persons in household are age 20 or older, go to S17.

S14. [Are you/Is (PERSON)] attending (or enrolled in) school?

**SENROL 1-
SENROL(n)**

YES1 (GO TO S15)
NO2 (GO TO BOX AFTER S16)

S15. What grade or year of school [are you/is (PERSON)] attending?
 [PROBE FOR T OR P: Is that before or after kindergarten?]

SGRADE1- SGRADE(n)	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START.....	N	(GO TO BOX AFTER S16)
	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T	(GO TO BOX AFTER S16)
	KINDERGARTEN	K	(GO TO BOX AFTER S16)
	PREFIRST GRADE (AFTER K)	P	(GO TO BOX AFTER S16)
SGRADE	FIRST GRADE	1	(GO TO BOX AFTER S16)
	SECOND GRADE	2	(GO TO BOX AFTER S16)
	THIRD GRADE	3	(GO TO BOX AFTER S16)
	FOURTH GRADE	4	(GO TO BOX AFTER S16)
	FIFTH GRADE	5	(GO TO BOX AFTER S16)
	SIXTH GRADE.....	6	(GO TO BOX AFTER S16)
	SEVENTH GRADE.....	7	(GO TO BOX AFTER S16)
	EIGHTH GRADE	8	(GO TO BOX AFTER S16)
	NINTH GRADE/FRESHMAN IN HIGH SCHOOL	9	(GO TO BOX AFTER S16)
	TENTH GRADE/SOPHOMORE IN HIGH SCHOOL.....	10	(GO TO BOX AFTER S16)
	ELEVENTH GRADE/JUNIOR IN HIGH SCHOOL	11	(GO TO BOX AFTER S16)
	TWELFTH GRADE/SENIOR IN HIGH SCHOOL.....	12	(GO TO BOX AFTER S16)
	ABOVE TWELFTH GRADE.....	13	(GO TO BOX AFTER S16)
UNGRADED ELEMENTARY/SECONDARY	U	(GO TO S16)	
SPECIAL EDUCATION	S	(GO TO S16)	

[IF T: In this interview, we will be referring to that as “kindergarten.”
 IF P: In this interview, we will be referring to that as “prefirst grade.”]

S16. What grade would (you/PERSON) be in if (you/he/she) were attending a school with regular grades?
 [PROBE FOR T OR P: Is that before or after kindergarten?]

SGRDEQ1- SGRDEQ(n)	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START.....	N
	TRANSITIONAL KINDERGARTEN (BEFORE K)	T
	KINDERGARTEN	K
	PREFIRST GRADE (AFTER K)	P
SGRDEQ1- SGRDEQ(n)	FIRST GRADE	1
	SECOND GRADE	2
	THIRD GRADE	3
	FOURTH GRADE	4
	FIFTH GRADE	5
	SIXTH GRADE.....	6
	SEVENTH GRADE.....	7
	EIGHTH GRADE	8
	NINTH GRADE/FRESHMAN IN HIGH SCHOOL	9
	TENTH GRADE/SOPHOMORE IN HIGH SCHOOL.....	10
	ELEVENTH GRADE/JUNIOR IN HIGH SCHOOL	11
	TWELFTH GRADE/SENIOR IN HIGH SCHOOL.....	12
	ABOVE TWELFTH GRADE.....	13
UNGRADED/NO EQUIVALENT	U	

[IF T: In this interview, we will be referring to that as “kindergarten.”
 IF P: In this interview, we will be referring to that as “prefirst grade.”]

If person is <16 years old or enrolled in grade 12 or below, ungraded elementary/secondary, or special education, he or she is ineligible for an AELL interview. If person age ≥ 16 or AGE16=1, is enrolled in school (SENROL=1) and grade is above 12th grade (SGRADE=13 or SGRADEQ=13), autocode S18=1 (participant) and go to next person. Ask S17 and S18 for each person age ≥ 16.

S17. [Now I have a few questions about (you/you and the other person(s) in your household)]. [Do you/Does (ADULT)] have a high school diploma or its equivalent, such as a GED?

* YES1
NO2

S18. During the past 12 months, [did you/did (PERSON)] take classes, courses, programs, workshops, or training of any kind for any reason?

* YES1
NO2

After last adult, go to next box.

Adult Sampling Point:
Select adult for AELL interview. If an adult is selected, go to S19.

If no adult is selected, and no child was selected for an ECPP and/or ASPA interview, go to S22.

If no adult is selected and child(ren) were selected for an ECPP and/or ASPA interview, go to HHSELECT screen to select interview.

S19. Not counting the Reserves or National Guard, (are you/is PERSON) currently serving on active duty in the U.S. Armed Forces?

* YES1 (INELIGIBLE. GO TO BOX AFTER S21)
NO2 (GO TO BOX)

Ask S20 if sampled adult is not the Screener respondent and is age 16-25. Else, go to box after S21.

- S20. Is (PERSON) living at home, in student housing, or somewhere else?
- * AT HOME.....1 (GO TO BOX AFTER S21)
- STUDENT HOUSING [This includes all housing owned, sponsored, or leased by the school such as a dormitory or fraternity or sorority house.]2 (GO TO S21)
- OTHER PRIVATE HOME OR APARTMENT.....3 (INELIGIBLE. GO TO BOX AFTER S21)
- INSTITUTION OR GROUP QUARTERS [THIS INCLUDES A JAIL OR DETENTION CENTER, MEDICAL FACILITY, REHABILITATION CENTER, MENTAL HEALTH FACILITY, MILITARY BARRACKS, OR GROUP FOSTER CARE.]4 (INELIGIBLE. GO TO BOX AFTER S21)

S21. Would you please give me (his/her) last name and telephone number so that we can call (him/her) to do a brief interview about (his/her) educational activities?

* LAST NAME _____
PHONE _____

*If selected adult is ineligible,
and no child was selected for an ECPP and/or ASPA
interview, go to S22.
Else, go to HHSELECT screen to select interview.*

S22. I have just a few more questions for statistical purposes. Do you...

HOWNHOME Own your home,.....1
Rent your home, or2
Have some other arrangement?3

S23. Besides (PHONE NUMBER), do you have other telephone numbers in your household, not including cellular phones?

HOTHNUM YES1 (GO TO S25)
NO.....2 (GO TO S26)
NOT MY NUMBER3 (GO TO S24)

S24. [INTERVIEWER: ASK FOR AND RECORD THE TELEPHONE NUMBER REACHED. RECORD REASON FOR REACHING DIFFERENT TELEPHONE NUMBER.]

* TELEPHONE NUMBER REACHED _____

AREA CODE CHANGE1
OTHER NUMBER IN HOUSEHOLD2
ORIGINAL NUMBER IS THAT OF ANOTHER HOUSEHOLD AND
NUMBER IS BEING FORWARDED TO THIS HOUSEHOLD.....3
NEVER HEARD OF ORIGINAL NUMBER.....4
OTHER [RECORD EXPLANATION IN COMMENTS]5

If S24 = 3, go to THANK2. Else, for cases where S23 = 3 (not number dialed), ask S23 again with new number.

S25. How many of these additional telephone numbers are for home use, not including cellular phones?

HNUMUSE NUMBER..... (GO TO BOX)

If S25 > 0 (other telephone numbers for home use), go to S27. Else, go to S26.

S26. Besides this phone number, do you have any telephone numbers in your household that are used for computer or fax lines?

* YES1 (GO TO S27)
 NO2 (GO TO THANK2)

S27. How many of these additional telephone numbers are used for computer or fax lines?

* NUMBER..... (GO TO S28)

S28. Some households have telephone numbers that are used both for talking and for computer or fax lines. (Is the number/Are any of the numbers) used for (a) computer or fax line(s) ever answered for talking?

* YES1 (GO TO BOX)
 NO2 (GO TO THANK2)

If S27 = 1 (only 1 other telephone number for computer or fax), autocode S29 =1, and go to THANK2. Else, ask S29.

S29. How many computer or fax telephone numbers are also answered for talking?

* NUMBER..... (GO TO THANK2)

THANK1. Thank you, but we are only interviewing in private residences.

THANK2. Those are all the questions I have about your household. Thank you for your time.

NHES:2001 EARLY CHILDHOOD PROGRAM PARTICIPATION INTERVIEW

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Early Childhood Program Participation Interview

INTRO. [IF R WAS NOT SCREENER R AND THIS IS THE FIRST OR ONLY INTERVIEW FOR R: Hello, this is (INTERVIEWER). I'm calling for the U.S. Department of Education. We are conducting a voluntary and confidential national study about the educational experiences of children.]

I'd like to talk with you now about (CHILD). The interview is estimated to take (20/15) minutes or less.

Demographic Characteristics

PA1. First, I'd like to confirm (CHILD)'s age. In what month and year was (he/she) born?

MONTH

YEAR

CDOBMM
CDOBY

- | | | | |
|---|----------|----|-----------|
| 1 | JANUARY | 7 | JULY |
| 2 | FEBRUARY | 8 | AUGUST |
| 3 | MARCH | 9 | SEPTEMBER |
| 4 | APRIL | 10 | OCTOBER |
| 5 | MAY | 11 | NOVEMBER |
| 6 | JUNE | 12 | DECEMBER |

*Calculate AGE2000 = child's age on December 31, 2000.
Calculate current age for display in PA2. If current age does not match screener age or birth month is current month, ask PA2. Else, go to box after PA2.*

PA2. That would mean that (CHILD) [is (AGE)/turns (AGE) this month]. Is that right?

- * YES 1 (GO TO BOX)
NO 2 (RETURN TO PA1)

If child was born after December 31, 2000 or AGE2000 > 15, go to CLOSE1. Else, go to PA3.

PA3. Is (CHILD) ...
[IF R GIVES ETHNICITY (E.G., HISPANIC), PROBE FOR RACE.
IF NO RACE OR MORE THAN 1 RACE GIVEN, CODE 91.]

- CRACE**
- | | | |
|--|----|---------------|
| White,..... | 1 | (GO TO PA4) |
| Black, | 2 | (GO TO PA4) |
| American Indian or Alaskan Native, | 3 | (GO TO PA4) |
| Asian or Pacific Islander, or..... | 4 | (GO TO PA4) |
| Some other race? | 91 | (GO TO PA3OV) |

NOTE: Response categories shown in mixed upper and lower cases are read to the respondent by the interviewer. Those shown in uppercase are not read. Response categories in italics were added from "other, specify" responses.

Variables designated by /R appear on the restricted file only. Those designated by * do not appear on either the public or the restricted data files. They were used for administrative, verification, or coding purposes only.

PA3OV. [CODE RESPONSE IF PA3=91]

COTHRACE HISPANIC/LATINO/MEXICAN/SPANISH/
 PUERTO RICAN 1 (AUTOCODE PA4=1 AND GO TO PA5)
 MORE THAN ONE RACE/BIRACIAL/MULTIRACIAL 2 (GO TO PA4)
 OTHER..... 91 (GO TO PA4)
COTHRAOS/R SPECIFY _____

PA4. Is (he/she) of Hispanic origin?

CHISPAN YES 1
 NO 2

PA5. Was (CHILD) born in...

CBORNUS One of the 50 states or the District of Columbia, 1 (GO TO BOX AFTER PA5OV)
 One of the U.S. territories [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS], 2 (GO TO PA5OV)
CTERROS/R SPECIFY _____
 Or some other country 3 (GO TO PA5OV)
CCONTOS/R SPECIFY _____

PA5OV. How old was (CHILD) when (he/she) first moved to the (United States/50 states or the District of Columbia)? [ROUND MONTHS OR FRACTIONS UP TO NEAREST YEAR.]

CMOVEAGE AGE

<i>If AGE2000 >= 2, ask PA6. Else, go to box before PA7.</i>

PA6. What language does (CHILD) speak most at home?

CSPEAK ENGLISH 1
 SPANISH 2
 ENGLISH AND SPANISH EQUALLY 3
 ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
 CHILD DOESN'T SPEAK 5
 ANOTHER LANGUAGE 91
CSPEAKOS/R SPECIFY _____

<i>If this is interview for CHILD2, go to RELINTRO. Else, if this is interview for CHILD1, go to PA7.</i>

PA7.

[SCREENER WAS COMPLETED ON (DATE)]

Now I'd like to ask about all the people who live in your household with (CHILD). First, I need to verify the names and ages of all the people (you told me about earlier/ who are already listed on my computer screen).

[What is (your first name/the first name of the next person?)]	[How old (are you/is (he/she)?)	[Is this person male or female?]	D TO DELETE
*	AGE1-AGE11	SEX1-SEX11	*

If adult in household was sampled for adult interview, go to PA7VER2. Else if no adult was sampled, go to PA7VER1.

PA7VER1.

[AFTER VERIFICATION COMPLETE]

Now, please tell me the first names and ages of all other people who normally live in your household.

PA7VER2.

[VERIFY THE NUMBER OF HOUSEHOLD MEMBERS LISTED ON THE MATRIX.]

Have we missed anyone else who usually lives here who is temporarily away from home or living in a dorm at school, or any babies or small children?

- * MATRIX CORRECT 1
- RETURN TO MATRIX 2
- GO TO RESULT 3

RELINTRO.

Now I'd like to ask how all the people in your household are related to (CHILD).

If the respondent is the child's mother/father, copy relationship from Screener into RELATN and ask PA9/PA10, then ask PA8 for every other household member. If respondent is not the child's mother/father, copy relationship from Screener into RELATN and ask PA8 for every other household member.

PA8. [FOR EACH HOUSEHOLD MEMBER EXCEPT RESPONDENT:]
 How is (PERSON) related to (CHILD)?
 [VERIFY IF KNOWN.]

- | | | | |
|----------------------------------|--|----|------------------------|
| RELATN1-
RELATN11 | MOTHER (BIRTH/ADOPTIVE/STEP/FOSTER) | 1 | (GO TO PA9) |
| | FATHER (BIRTH/ADOPTIVE/STEP/FOSTER) | 2 | (GO TO PA10) |
| | BROTHER INCLUDING STEP,
ADOPTED, AND FOSTER | 3 | (GO TO BOX AFTER PA10) |
| | SISTER INCLUDING STEP,
ADOPTED, AND FOSTER | 4 | (GO TO BOX AFTER PA10) |
| | GRANDMOTHER..... | 5 | (GO TO BOX AFTER PA10) |
| | GRANDFATHER..... | 6 | (GO TO BOX AFTER PA10) |
| | AUNT..... | 7 | (GO TO BOX AFTER PA10) |
| | UNCLE..... | 8 | (GO TO BOX AFTER PA10) |
| | COUSIN..... | 9 | (GO TO BOX AFTER PA10) |
| | OTHER RELATIVE..... | 10 | (GO TO BOX AFTER PA10) |
| RELTOS1/R-
RELTOS11/R | SPECIFY _____ | | |
| | NONRELATIVE | 11 | (GO TO BOX AFTER PA10) |
| | SPECIFY _____ | | |
| | SAME SEX PARENT | 12 | (GO TO BOX AFTER PA10) |
| | SPECIFY _____ | | |

PA9. [Are you/Is (PERSON)] (CHILD)'s...

- | | | |
|----------------|------------------------|---|
| MOMTYPE | Birth mother, | 1 |
| | Adoptive mother, | 2 |
| | Stepmother, or..... | 3 |
| | Foster mother? | 4 |

PA10. [Are you/Is (PERSON)] (CHILD)'s...

- | | | |
|----------------|------------------------|---|
| DADTYPE | Birth father, | 1 |
| | Adoptive father, | 2 |
| | Stepfather, or..... | 3 |
| | Foster father? | 4 |

Set HHMOM:
 1 = birth/adoptive mother in household. 2 = step or foster
 mother. 3 = no mom and no dad, female R.
 4 = else.
 Set HHDAD:
 1 = birth/adoptive father in household. 2 = step or foster
 father. 3 = no mom and no dad, male R. 4 = else.

Current School Status

If ECPP/ASPA Interview respondent was also the Screener respondent, copy responses to PB1 through PB7, and then go to box after PB7.

If AGE2000 >= 3, ask PB1. Else, go to box after PB7.

PB1. Now I'd like to talk with you about (CHILD)'s school experiences. Is (CHILD) attending (or enrolled in) (school/preschool, kindergarten, or school)?

ENROLL YES 1
NO 2

If AGE2000 >= 5, ask PB2. Else, if AGE2000 = 3 or 4 and PB1 = 1 (enrolled), go to PB6. Else, if AGE2000 = 3 or 4 and PB1 = 2 (not enrolled) go to box after PB7.

PB2. Some parents decide to educate their children at home rather than send them to school. Is (CHILD) being schooled at home?

HOMESCHL YES 1 (GO TO PB3)
NO 2 (GO TO 2ND BOX AFTER PB5)

PB3. So (CHILD) is being schooled at home instead of at school for at least some classes or subjects?

* YES 1 (GO TO PB4)
NO 2 (AUTOCODE PB2= 2 AND GO TO 2ND BOX AFTER PB5)

PB4. Is (CHILD) getting all of (his/her) instruction at home, or is (he/she) getting some at school and some at home?

HOMEALL ALL AT HOME 1 (GO TO PB7)
SOME AT SCHOOL & SOME AT HOME 2 (GO TO PB5)

PB5. How many hours each week does (CHILD) usually go to a school for instruction? Please do not include time spent in extracurricular activities.

HOMSCHR HOURS (GO TO 1ST BOX BELOW)

If PB5 >= 9 hours, then set HOMSCFLG = 1 (attends a school for at least 9 hours per week). Else, HOMSCFLG= -1. Then, go to PB7.

If PB1 = 1 (enrolled) and (PB2 NE 1 or PB3 NE 1 (not in home school)), ask PB6. Else, if AGE2000 = 5 or 6 and PB1 = 2 (not enrolled) and (PB2 NE 1 or PB3 NE 1 (not in home school)), go to box after PB7. Else, if AGE2000 > 7 and PB1 = 2 (not enrolled) and (PB2 NE 1 or PB3 NE 1 (not in home school)), go to CLOSE1.

PB6. What grade or year is (CHILD) attending?
 [PROBE FOR T OR P: Is that before or after kindergarten?]

GRADE	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START	N	(GO TO FIRST BOX AFTER PB7)
	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T	(GO TO FIRST BOX AFTER PB7)
	KINDERGARTEN.....	K	(GO TO FIRST BOX AFTER PB7)
	PREFIRST GRADE (AFTER K)	P	(GO TO FIRST BOX AFTER PB7)
	FIRST GRADE	1	(GO TO FIRST BOX AFTER PB7)
	SECOND GRADE	2	(GO TO FIRST BOX AFTER PB7)
	THIRD GRADE	3	(GO TO FIRST BOX AFTER PB7)
	FOURTH GRADE.....	4	(GO TO FIRST BOX AFTER PB7)
	FIFTH GRADE.....	5	(GO TO FIRST BOX AFTER PB7)
	SIXTH GRADE	6	(GO TO FIRST BOX AFTER PB7)
	SEVENTH GRADE	7	(GO TO FIRST BOX AFTER PB7)
	EIGHTH GRADE	8	(GO TO FIRST BOX AFTER PB7)
	ABOVE EIGHTH GRADE	9	(GO TO CLOSE1)
	UNGRADED	U	(GO TO PB7)
	SPECIAL EDUCATION.....	S	(GO TO PB7)

[IF T: In this interview we will be referring to that as "kindergarten."
 IF P: In this interview, we will be referring to that as "prefirst grade."]

PB7. (What grade would (CHILD) be in if (he/she) were attending (school/a school with regular grades)/
 What grade or year is (CHILD) attending)? [PROBE FOR T OR P: Is that before or after kindergarten?]

GRADEEQ	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START	N	(GO TO BOX)
	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T	(GO TO BOX)
	KINDERGARTEN.....	K	(GO TO BOX)
	PREFIRST GRADE (AFTER K)	P	(GO TO BOX)
	FIRST GRADE	1	(GO TO BOX)
	SECOND GRADE	2	(GO TO BOX)
	THIRD GRADE	3	(GO TO BOX)
	FOURTH GRADE.....	4	(GO TO BOX)
	FIFTH GRADE.....	5	(GO TO BOX)
	SIXTH GRADE	6	(GO TO BOX)
	SEVENTH GRADE	7	(GO TO BOX)
	EIGHTH GRADE	8	(GO TO BOX)
	ABOVE EIGHTH GRADE	9	(GO TO CLOSE1)
	UNGRADED, NO EQUIVALENT	U	(GO TO BOX)

[IF T: In this interview we will be referring to that as "kindergarten."
 IF P: In this interview, we will be referring to that as "prefirst grade."]

Set PATH:

I = AGE2000 = 0, 1, 2 (**Infants/Toddlers**)

N = [(AGE2000 >= 3 and AGE2000 <= 6) and PB1 = 2 (not enrolled) and (PB2 NE 1 (not in home school) or PB3 NE1)] or [PB6/PB7 (grade/equivalent) = N] or [PB7 (grade equivalent) = U, and AGE2000 = 3 or 4] (**Preschoolers**)

S = [PB6/PB7 (grade/equivalent) = T, K, P (kindergarten) or 1, 2, 3, 4, 5, 6, 7, or 8 and (PB2 NE 1 or PB3 NE 1 (not in home school))] or [PB7 (grade equivalent) = U and AGE2000 >= 5 and <= 15 and (PB2 NE 1 or PB3 NE 1 (not in home school))] (**School-age**)

H = AGE2000 >= 5 and (PB2 = 1 and PB3 = 1 (home school)) and PB7 (grade equivalent) NE N (**Homeschoolers**)

If PATH = I or N, go to ECPP interview EDINTRO. If PATH = S, go to ASPA interview, SD1. If PATH = H, go to ASPA interview, SC1.

Early Childhood Care and Programs

EDINTRO.

[FIRST PRESCHOOL INTERVIEW OR CALLBACK.]

[I'd like to talk with you about different types of child care (CHILD) may now receive on a regular basis from someone other than (you or) (his/her) parents (or guardians). This includes regular care and early childhood programs, whether or not there is a charge or fee, but not occasional babysitting.]

[SECOND PRESCHOOL INTERVIEW]

[Now let's talk about any care (CHILD) receives from relatives.]

Relative Care

ED1. Is (CHILD) now receiving care from a relative other than a parent on a regular basis, for example, from grandparents, brothers or sisters, or any other relatives?

RCNOW YES 1 (GO TO ED3)
NO..... 2 (GO TO ED2)

ED2. Has (CHILD) ever received care from a relative on a regular basis?

RCEVER YES 1 (GO TO ED3)
NO..... 2 (GO TO EEINTRO)

ED3. How old was (CHILD) in years and months when (he/she) first received care from any relative on a regular basis?

RCAGEYR YEARS () MONTHS ()
RCAGEMO

If ED1 = 2 (no relative care), go to EEINTRO. Else, go to ED4.

ED4. Do you currently have more than one regular care arrangement with relatives for (CHILD)?

* YES 1 (GO TO ED4OV)
NO..... 2 (GO TO BOX AFTER ED4OV)

ED4OV. How many different regular care arrangements do you have with relatives?

[CODE 1 NOT USED.]
RCARRNEW² TWO 2
THREE 3
FOUR OR MORE 4

² RCARRNEW is a counter-derived variable that indicates the total number of relative care arrangements in which a sampled child participates. The arrangements reported at ED4, ED4OV, ED28, and the correction screen at EH1 (where new arrangements could be added) were counted for this variable.

<p>Ask ED5 through ED27OV for each relative who provides care for child.</p>
--

ED5. [Let's start with the relative who provides the most care./Now let's talk about the next relative who cares for (CHILD).]
 [Is the relative who cares for (CHILD) (his/her).../Is that (CHILD)'s....]

- RCTYPE1-RCYPE4**
- Grandmother 1 (GO TO ED5OV)
 - Grandfather 2 (GO TO ED5OV)
 - Aunt, 3 (GO TO ED5OV)
 - Uncle, 4 (GO TO ED5OV)
 - Brother, 5 (GO TO ED5OV)
 - Sister, or 6 (GO TO ED5OV)
 - Another relative? 7 (GO TO ED5OV)
 - NOW SAYS NO OTHER RELATIVE ARRANGEMENT
 [DISPLAY ONLY FOR 2ND OR HIGHER ARRANGEMENT] 9 (GO TO EE1)

ED5OV. How old is (he/she/that person)?

RCAGE1-RCAGE4 YEARS □□

ED6. Is that care provided in your home or another home?

- RCPLACE1-RCPLACE4**
- OWN HOME 1 (GO TO ED7)
 - OTHER HOME 2 (GO TO ED8)
 - BOTH/VARIES 3 (GO TO ED8)

ED7. Does (CHILD)'s (RELATIVE) who provides this care live in your household?

- RCINHH1-RCINHH4**
- YES 1 (GO TO ED9)
 - NO 2 (GO TO ED9)

ED8. How long does it usually take to go from your home to (his/her) (RELATIVE)'s home?

RCHOMM1-RCHOMM4 MINUTES □□

ED9. Is the care that (CHILD) receives from (his/her) (RELATIVE) regularly scheduled at least once each week?

- RCWEEK1-RCWEEK4**
- YES 1 (GO TO ED11)
 - NO 2 (GO TO ED10)

ED10. Does (CHILD)'s (RELATIVE) care for (him/her) on some other regularly scheduled basis, at least once each month?

- RCMONTH1-RCMONTH4**
- YES 1 (GO TO ED13)
 - NO 2 (GO TO BOX BEFORE ED28)

ED11. How many days each week does (CHILD) receive care from (his/her) (RELATIVE)?

RCDAYS1-RCDAYS4 DAYS □

ED12. How many hours each week does (CHILD) receive care from (his/her) (RELATIVE)?

**RCHRS1-
RCHRS4** HOURS.....□□

*If ED11 = 1 (relative care one day per week), go to ED17.
Else, ask ED16.*

ED13. For how many weeks each month does (CHILD) receive care from (his/her) (RELATIVE)?

**RCWKMO1-
RCWKMO4** WEEKS.....□

ED14. During (that week/those weeks) for how many days each week does (CHILD) receive care from (his/her) (RELATIVE)?

**RCDAYWK1-
RCDAYWK4** DAYS□

ED15. And during (that week/those weeks), how many hours each week does (CHILD) receive care from (his/her) (RELATIVE)?

**RCHRWK1-
RCHRWK4** HOURS.....□□ (GO TO ED17)

ED16. On the days that (CHILD) receives care, that would be about (HOURS) per day, on average. Is that right?

* YES 1 (GO TO ED17)
NO..... 2 (CORRECTION SCREEN)

ED17. How many children are usually cared for together, in the same group at the same time, by (CHILD)'s (RELATIVE), counting (CHILD)? [PROBE: IF R ANSWERS "IT VARIES", ASK ABOUT THE MAJORITY OF TIME THE CHILD IS IN CARE.]

**RCKIDS1-
RCKIDS4** NUMBER OF CHILDREN□□

ED18. Counting (CHILD)'s (RELATIVE), how many adults usually care for (him/her) at the same time during that care arrangement? [PROBE: IF R ANSWERS "IT VARIES", ASK ABOUT THE MAJORITY OF TIME CHILD IS IN CARE.]

**RCADLTS1-
RCADLTS4** NUMBER.....□

ED19. How old was (CHILD) in years and months when this particular regular care arrangement with (his/her) (RELATIVE) began?

**RCSTRTY1-
RCSTRTY4
RCSTRTM1-
RCSTRTM4**

[(CHILD) WAS ___ YEARS AND ___ MONTHS OLD WHEN FIRST RECEIVED CARE FROM ANY RELATIVE.]
YEARS () MONTHS ()

ED20. What language does (CHILD)'s (RELATIVE) speak most when caring for (him/her)?

**RCSPEAK1-
RCSPEAK4
RCSPKOS1/R-
RCSPKOS4/R**

ENGLISH 1
SPANISH 2
ANOTHER LANGUAGE 91
SPECIFY _____

ED21. How similar are (CHILD)'s (RELATIVE)'s beliefs about how to raise children to your own? Would you say...

**RCBELIE1-
RCBELIE4**

Very similar, 1
Mostly similar, 2
Somewhat similar, or 3
Not too similar? 4

ED22. Some care providers have rules about when they will care for a sick child, or whether they will take a sick child at all. Does (CHILD)'s (RELATIVE) have rules about caring for (CHILD) when (he/she) is sick?

**RCSICK1-
RCSICK4**

YES 1
NO..... 2

ED23. In an average month, how many days would you say that (CHILD)'s (RELATIVE) cancels this care arrangement because (CHILD)'s (RELATIVE) is sick, has an appointment, or for another similar reason?

**RCCANCE1-
RCCANCE4**

DAYS □□

CATI to calculate number of days per month. Number given in ED23 must be less than number of days per month in care.

ED24. Is there any charge or fee for the care (CHILD) receives from (his/her) (RELATIVE), paid either by you or some other person or agency?

**RCFEE1-
RCFEE4**

YES 1 (GO TO ED25)
NO..... 2 (GO TO BOX AFTER ED27OV)

ED25. Do any of the following people or organizations help to pay for (CHILD)'s (RELATIVE) to care for (him/her)? How about ...

		YES	NO
RCREL1- RCREL4	a. A relative of (CHILD)'s outside your household who provides money <u>specifically</u> for that care, not including general child support?	1	2
RCWELF1- RCWELF4	b. A social service, welfare, or child care agency?	1	2
RCEMPL1- RCEMPL4	c. An employer, not including a tax-free spending account for child care?	1	2
RCOTHER1- RCOTHER4	d. Someone else?	1	2
RCOTHEO1/R- RCOTHEO4/R	Who is that? _____		

ED26. How much does your household pay for (CHILD'S) (RELATIVE) to care for (him/her)?
[IF NOTHING, ENTER ZERO.]

RCCOST1- RCCOST4	AMOUNT \$□□□□.□□
RCUNIT1- RCUNIT4	UNIT:
	PER HOUR 1
	PER DAY 2
	PER WEEK 3
	PER MONTH 4
	PER YEAR 5
	<i>BIWEEKLY</i> ³ 6
	OTHER 91
RCCSTOS1/R- RCCSTOS4/R	SPECIFY _____

If ED26 = zero or number of children in the household age 15 or younger = 1, go to box after ED27OV. Else, ask ED27.

ED27. Is this amount for (CHILD) only or does it include other children in your household?

RCCSTHH1- RCCSTHH4	CHILD ONLY	1	(GO TO BOX AFTER ED27OV)
	CHILD AND OTHER(S)	2	(GO TO ED27OV)

ED27OV. How many children is this amount for, including (CHILD)?

RCCSTHN1- RCCSTHN4	NUMBER OF CHILDREN	□
-------------------------------	--------------------------	---

*If ED4 = 2 (one relative arrangement), ask ED28.
Else, if ED4OV => 2 (more than one relative arrangement),
return to ED5 until the number of arrangements in ED4OV are
completed, then ask ED28.*

ED28. Does (CHILD) have another care arrangement with a relative on a regular basis?

*	YES	1	(GO TO ED5)
	NO	2	(GO TO EEINTRO)

³ Response categories in italics were added from "other, specify" responses.

Nonrelative Care

EEINTRO.

[FIRST PRESCHOOL INTERVIEW OR CALLBACK.]

[Now let's talk about any care (CHILD) receives from someone not related to (him/her), either in your home or someone else's. This includes home child care providers or neighbors, but not day care centers or preschools.]

[SECOND PRESCHOOL INTERVIEW.]

[Now let's talk about any care (CHILD) receives from people who are not related to (him/her), not including daycare centers or preschools.]

EE1. Is (CHILD) now receiving care in your home or another home on a regular basis from someone who is not related to (him/her)?

NCNOW YES 1 (GO TO EE3)
NO..... 2 (GO TO EE2)

EE2. Has (CHILD) ever received care in a private home from a nonrelative on a regular basis?

NCEVER YES 1 (GO TO EE3)
NO..... 2 (GO TO EGINTRO)

EE3. How old was (CHILD) in years and months when (he/she) first received regular care in a private home from any nonrelative?

NCAGEYR YEARS () MONTHS ()
NCAGEMO

<p><i>If EE1 = 2 (no relative care), go to EGINTRO. Else, go to EE4.</i></p>
--

EE4. Do you currently have more than one regular care arrangement with a nonrelative for (CHILD)?

* YES 1 (GO TO EE4OV)
NO..... 2 (GO TO BOX AFTER EE4OV)

EE4OV. How many different regular care arrangements do you have with nonrelatives?

NCARRNEW⁴ [CODE 1 NOT USED]
TWO 2
THREE 3
FOUR OR MORE 4

⁴ NCARRNEW is the counter-derived variable that indicates the total number of nonrelative care arrangements in which a sampled child participates. The arrangements reported at EE4, EE4OV, EE32, and the correction screen at EH1 (where new arrangements could be added) were counted for this variable.

Ask EE5 through EE31OV for each nonrelative who cares for child.

EE5. [Let's start with the nonrelative who provides the most care./Now let's talk about the next care provider.] Is that care provided in your own home or in another home?

- NCPLACE1-
NCPLACE3**
- OWN HOME..... 1 (GO TO EE6)
 OTHER HOME 2 (GO TO EE7)
 BOTH/VARIES 3 (GO TO EE7)
 NOW SAYS NO OTHER NONRELATIVE ARRANGEMENT
 [DISPLAY ONLY FOR 2ND OR HIGHER ARRANGEMENT]..... 9 (GO TO EGINTRO)

EE6. Does this person who cares for (CHILD) live in your household?

- NCINHH1-
NCINHH3**
- YES 1 (GO TO EE8)
 NO..... 2 (GO TO EE8)

EE7. How long does it usually take to go from your home to that person's home?

- NCHOMM1-
NCHOMM3**
- MINUTES □□

EE8. Is the care that (CHILD) receives from that person regularly scheduled at least once each week?

- NCWEEK1-
NCWEEK3**
- YES 1 (GO TO EE10)
 NO..... 2 (GO TO EE9)

EE9. Does that person care for (CHILD) on some other regularly scheduled basis, at least once each month?

- NCMONTH1-
NCMONTH3**
- YES 1 (GO TO EE12)
 NO..... 2 (GO TO BOX BEFORE EE32)

EE10. How many days each week does (CHILD) receive care from that person?

- NCDAYS1-
NCDAYS3**
- DAYS □

EE11. How many hours each week does (CHILD) receive care from that person?

- NCHRS1-
NCHRS3**
- HOURS..... □□

If EE10 = 1 (nonrelative care only 1 day per week) ask EE16. Else, go to EE15.

EE12. For how many weeks each month does (CHILD) receive care from that person?

- NCWKMO1-
NCWKMO3**
- WEEKS..... □

EE13. During (that week/those weeks) for how many days each week does (CHILD) receive care from that person?

NCDAYWK1- DAYS
NCDAYWK3

EE14. And during (that week/those weeks), how many hours each week does (CHILD) receive care from that person?

NCHRWK1- HOURS..... (GO TO EE16)
NCHRWK3

EE15. On the days that (CHILD) receives care, that would be about (HOURS) per day, on average. Is that right?

* YES 1 (GO TO EE16)
NO..... 2 (CORRECTION SCREEN)

EE16. How many children are usually cared for together, in the same group at the same time, by that person, counting (CHILD)? [PROBE: IF R ANSWERS "IT VARIES", ASK FOR THE MAJORITY OF TIME THE CHILD IS IN CARE.]

NCKIDS1- NUMBER OF CHILDREN
NCKIDS3

EE17. Counting that person, how many adults usually care for (CHILD) at the same time during that care arrangement? [PROBE: IF R ANSWERS "IT VARIES", ASK FOR THE MAJORITY OF TIME THE CHILD IS IN CARE.]

NCADLTS1- NUMBER.....
NCADLTS3

EE18. How old was (CHILD) in years and months when this particular regular care arrangement with that person began?

NCSTRTY1- [(CHILD) WAS ___ YEARS AND ___ MONTHS OLD WHEN FIRST RECEIVED CARE FROM ANY NONRELATIVE.]
NCSTRTY3
NCSTRTM1- YEARS () MONTHS ()
NCSTRTM3

EE19. Was this care provider someone you already knew?

NCALKNE1- YES 1
NCALKNE3 NO..... 2

EE20. How did you learn about this person as a care provider for (CHILD)?
 [CODE ALL THAT APPLY.]

NCFRIEN1-		
NCFRIEN3	FRIENDS/NEIGHBORS/RELATIVES/COWORKERS.....	1
NCPLEMP1-		
NCPLEMP3	PLACE OF EMPLOYMENT.....	2
NCSCHO01-		
NCSCHO03	PUBLIC OR PRIVATE SCHOOL	3
NCCHURC1-		
NCCHURC3	CHURCH, SYNAGOGUE, OR OTHER PLACE OF WORSHIP	4
NCSOCWK1-		
NCSOCWK3	WELFARE OR SOCIAL SERVICE CASEWORKERS	5
NCADS1-		
NCADS3	NEWSPAPERS/ADVERTISEMENTS/YELLOW PAGES	6
NCAGENC1-		
NCAGENC3	RESOURCE AND REFERRAL (R&R) AGENCY.....	7
NCCARE1-		
NCCARE3	CHILD CARE PROVIDER OR AGENCY	8
NCKNEW1-		
NCKNEW3	R ALREADY KNEW PROVIDER	9
NCCHILD1-		
NCCHILD3	PROVIDER CARED FOR ANOTHER CHILD OF R'S	10
NCREFER1-		
NCREFER3	REFERENCE MATERIALS	11
NCBULLE1-		
NCBULLE3	PUBLIC BULLETIN BOARDS/FLYERS/DROVE/WALKED BY	12
NCINTR1-		
NCINTR3	INTERNET.....	13
NCSOURC1-		
NCSOURC3	OTHER	91
NCSOURO1/R-	SPECIFY _____	
NCSOURO3/R		

EE21. Is (CHILD)'s care provider of the same or a different race or ethnic background as (CHILD)?

NCRACE1-	SAME	1
NCRACE3	DIFFERENT	2

EE22. Is (CHILD)'s care provider age 18 or older?

NCAGE1-	YES	1	(GO TO EE24)
NCAGE3	NO.....	2	(GO TO EE23)

EE23. About how old is that person?

NCAGEYY1-	YEARS	□□□
NCAGEYY3		

EE24. What language does (CHILD)'s care provider speak most when caring for (CHILD)?

**NCSPEAK1-
NCSPEAK3** ENGLISH 1
SPANISH 2
ANOTHER LANGUAGE 91
**NCSPKOS1/R-
NCSPKOS3/R** SPECIFY _____

EE25. How similar are that person's beliefs about raising children to your own? Would you say...

**NCBELIE1-
NCBELIE3** Very similar, 1
Mostly similar, 2
Somewhat similar, or 3
Not too similar? 4

EE26. Some care providers have rules about when they will care for a sick child, or whether they will take a sick child at all. Does (CHILD)'s care provider have rules about caring for (CHILD) when (he/she) is sick?

**NCSICK1-
NCSICK3** YES 1
NO 2

EE27. In an average month, how many days would you say that person cancels this care arrangement because that person is sick, has an appointment, or for another similar reason?

**NCCANCE1-
NCCANCE3** DAYS □□

CATI to calculate number of days per month. Number given in EE27 must be less than number of days per month in care.

EE28. Is there any charge or fee for the care (CHILD) receives from that person, paid either by you or another person or agency?

**NCFEE1-
NCFEE3** YES 1 (GO TO EE29)
NO 2 (GO TO BOX AFTER EE310V)

EE29. Do any of the following people or organizations help to pay for this care provider to care for (CHILD)? How about...

		YES	NO
NCREL1- NCREL3	a. A relative of (CHILD) outside your household who provides money <u>specifically</u> for that care, not including general child support?	1	2
NCWELF1- NCWELF3	b. A social service, welfare, or child care agency?	1	2
NCEMPL1- NCEMPL3	c. An employer, not including a tax-free spending account for child care?	1	2
NCOTHER1- NCOTHER3	d. Someone else?	1	2
NCOTHEO1/R- NCOTHEO3/R	Who is that? _____		

EE30. How much does your household pay this person to care for (CHILD)?
 [IF NOTHING, ENTER ZERO.]

**NCCOST1-
NCCOST3**

AMOUNT \$□□□□.□□

**NCUNIT1-
NCUNIT3**

UNIT:
 PER HOUR 1
 PER DAY 2
 PER WEEK 3
 PER MONTH 4
 PER YEAR 5
 BIWEEKLY 6
 OTHER 91
 SPECIFY _____

**NCCSTOS1/R-
NCCSTOS3/R**

If EE30 = zero or number of children in the household age 15 or younger = 1, go to box after EE31OV. Else, ask EE31.

EE31. Is this amount for (CHILD) only or does it include other children in your household?

**NCCSTHH1-
NCCSTHH3**

CHILD ONLY 1 (GO TO BOX AFTER EE31OV)
 CHILD AND OTHER(S) 2 (GO TO EE31OV)

EE31OV. How many children is this amount for, including (CHILD)?

**NCCSTHN1-
NCCSTHN3**

NUMBER..... □

If EE4 = 2 (one nonrelative arrangement), ask EE32. Else, if EE4OV => 2 (more than one nonrelative arrangement), return to EE5 until the number of arrangements in EE4OV are completed, then ask EE32.

EE32. Does (CHILD) have another care arrangement in a private home with a nonrelative on a regular basis?

* YES 1 (GO TO EE5)
 NO 2 (GO TO EGINTRO)

Center-Based Programs

EGINTRO.

Now let's talk about any day care centers and early childhood programs (CHILD) attends.

EG1. Is (CHILD) now attending a day care center, preschool, prekindergarten, or (Early) Head Start program?

CPNNOW YES 1 (GO TO EG3)
NO..... 2 (GO TO EG2)

EG2. Has (CHILD) ever gone to a day care center, preschool, prekindergarten or (Early) Head Start program?

CPNEVER YES 1 (GO TO EG3)
NO..... 2 (GO TO BOX AFTER EG32)

EG3. How old was (CHILD) in years and months when (he/she) first went to any day care center, preschool, prekindergarten, or (Early) Head Start program?

CPNAGEYR YEARS () MONTHS ()
CPNAGEMO

If EG1 = 2 (no center-based care), go to box after EG32. Else, ask EG4.

EG4. How many different day care centers, preschools, prekindergartens, or (Early) Head Start programs does (CHILD) currently go to?

CPARRNEW⁵ NUMBER..... (GO TO BOX)

Ask EG5 through EG31OV for each program.

⁵ CPARRNEW is the counter-derived variable that indicates the total number of center-based program arrangements in which a sampled child participates. The arrangements reported at EG4, EG32, and the correction screen at EH1 (where new arrangements could be added) were counted for this variable.

EG5. (Let's start with the program where (CHILD) spends the most time./Let's talk about the next program).
Where is the program located? For example, is it in a church or synagogue, a school, a community center, its own building, or some other place?

- CPPLACE1-CPPLACE3**
- OWN HOME..... 1 (GO TO EG9)
 - ANOTHER HOME 2 (GO TO EG8)
 - A CHURCH, SYNAGOGUE OR OTHER PLACE OF WORSHIP 3 (GO TO EG6)
 - A PUBLIC PRESCHOOL OR SCHOOL (K-12) 4 (GO TO EG7)
 - A PRIVATE PRESCHOOL OR SCHOOL (K-12) 5 (GO TO EG6)
 - A COLLEGE OR UNIVERSITY 6 (GO TO EG6)
 - A COMMUNITY CENTER..... 7 (GO TO EG6)
 - A PUBLIC LIBRARY..... 8 (GO TO EG7)
 - ITS OWN BUILDING 9 (GO TO EG6)
 - A PLACE OF EMPLOYMENT OR BUSINESS 10 (GO TO EG6)
 - MORE THAN ONE PLACE 11 (GO TO EG5OV)
 - SOME OTHER PLACE 91 (GO TO EG5OV)
 - NOW SAYS NO OTHER CENTER-BASED ARRANGEMENT
[DISPLAY ONLY FOR 2ND OR HIGHER ARRANGEMENT]..... 13 (GO TO BOX BEFORE EH1)

EG5OV. (Where is that?/What are those places?)
CPPLCOS1/R-CPPLCOS3/R [LIST ALL PLACES.] _____

EG6. Is the program affiliated with your family's religion?

- CPRELG1-CPRELG3**
- YES 1
 - NO..... 2

EG7. (Is that/Are any of those places) also the location of your job [or (his/her) (OTHER PARENT)'s job]?

- CPWORK1-CPWORK3**
- YES 1
 - NO..... 2

EG8. How long does it usually take to go from your home to that program?

- CPHOMM1-CPHOMM3**
- MINUTES

EG9. Does (CHILD) go to that program on a regularly scheduled basis at least once each week?

- CPWEEK1-CPWEEK3**
- YES 1 (GO TO EG11)
 - NO..... 2 (GO TO EG10)

EG10. Does (CHILD) go to that program on some other regularly scheduled basis at least once each month?

- CPMONTH1-CPMONTH3**
- YES 1 (GO TO EG13)
 - NO..... 2 (GO TO BOX BEFORE EG32)

EG11. How many days each week does (CHILD) go to that program?

- CPDAYS1-CPDAYS3**
- DAYS

EG12. How many hours each week does (CHILD) go to that program?

- CPHRS1-CPHRS3**
- HOURS.....

If EG11 = 1 (center-based care 1 day per week), go to EG17.
Else, ask EG16.

EG13. For how many weeks each month does (CHILD) go that that program?

CPWKMO1- WEEKS.....
CPWKMO3

EG14. During (that week/those weeks), for how many days each week does (CHILD) go to that program?

CPDAYWK1- DAYS
CPDAYWK3

EG15. And during (that week/those weeks), for how many hours each week does (CHILD) go to that program?

CPHRWK1- HOURS..... (GO TO EG17)
CPHRWK3

EG16. On the days that (CHILD) goes to the program, that would be about (HOURS) per day, on average. Is that right?

* YES 1 (GO TO EG17)
NO..... 2 (CORRECTION SCREEN)

EG17. How many children are usually in (CHILD)'s room or group, at the same time, at that program, counting (CHILD)? [PROBE: IF R ANSWERS "IT VARIES", ASK ABOUT THE MAJORITY OF TIME CHILD IS IN CARE.]

CPKIDS1- NUMBER.....
CPKIDS3

EG18. How many adults are usually in (CHILD)'s room or group, at the same time, at that program? [PROBE: IF R ANSWERS "IT VARIES", ASK ABOUT THE MAJORITY OF TIME CHILD IS IN CARE.]

CPADLTS1- NUMBER.....
CPADLTS3

EG19. How old was (CHILD) in years and months when (he/she) started going to this particular program?

CPSTRTY1- [(CHILD) WAS ___ YEARS AND ___ MONTHS OLD WHEN FIRST ATTENDED ANY CENTER OR PROGRAM.]
CPSTRTY3
CPSTRTM1- YEARS () MONTHS ()
CPSTRTM3

EG20. How did you learn about that program for (CHILD)?
[CODE ALL THAT APPLY.]

CPFRIEN1- CPFRIEN3	FRIENDS/NEIGHBORS/RELATIVES/COWORKERS.....	1
CPPLEMP1- CPPLEMP3	PLACE OF EMPLOYMENT.....	2
CPSCHOO1- CPSCHOO3	PUBLIC OR PRIVATE SCHOOL	3
CPCHURC1- CPCHURC3	CHURCH, SYNAGOGUE, OR OTHER PLACE OF WORSHIP	4
CPSOCWK1- CPSOCWK3	WELFARE OR SOCIAL SERVICE CASEWORKERS	5
CPADS1- CPADS3	NEWSPAPERS/ADVERTISEMENTS/YELLOW PAGES	6
CPAGENC1- CPAGENC3	RESOURCE AND REFERRAL (R&R) AGENCY.....	7
CPCARE1- CPCARE3	CHILD CARE AGENCY.....	8
CPKNEW1- CPKNEW3	R ALREADY KNEW PROVIDER	9
CPCHILD1- CPCHILD3	ATTENDED BY ANOTHER CHILD OF R'S.....	10
CPREFER1- CPREFER3	REFERENCE MATERIALS	11
CPBULLE1- CPBULLE3	PUBLIC BULLETIN BOARDS/FLYERS/DROVE/WALKED BY	12
CPINTER1- CPINTER3	INTERNET.....	13
CPSOURC1- CPSOURC3	OTHER	91
CPSOURO1/R- CPSOURO3/R	SPECIFY _____	

EG21. Is (CHILD)'s main care provider or teacher at that program of the same or a different race or ethnic background as (CHILD)?

CPRACE1- CPRACE3	SAME	1
	DIFFERENT	2

EG22. What language does (CHILD)'s main care provider or teacher at that program speak most with (him/her)?

CPSPEAK1- CPSPEAK3	ENGLISH	1
	SPANISH	2
	ANOTHER LANGUAGE	91
CPSPKOS1/R CPSPKOS3/R	SPECIFY _____	

EG23. How similar are (CHILD)'s main care provider or teacher's beliefs about raising children to your own? Would you say...

CPBELIE1- CPBELIE3	Very similar,	1
	Mostly similar,	2
	Somewhat similar, or	3
	Not too similar?	4

EG24. Does that program encourage parents to volunteer a certain number of hours each week or month?

CPPARHR1- YES 1
CPPARHR3 NO..... 2

EG25. Have you (or another adult in your household) volunteered at (CHILD)'s program in the last month, that is, since (MONTH) (DAY)?

CPPARWR1- YES 1
CPPARWR3 NO..... 2

EG26. Does that program provide any of the following services to (CHILD) or your family?

		YES	NO
CPTTEST1-			
CPTTEST3	a. Hearing, speech, or vision testing?.....	1	2
CPPHYSE1-			
CPPHYSE3	b. Physical examinations?	1	2
CPDENTA1-			
CPDENTA3	c. Dental examinations?	1	2
CPDISAB1-			
CPDISAB3	d. Formal testing for developmental or learning problems?	1	2
CPSICK1-			
CPSICK3	e. Sick child care?.....	1	2

EG27. Since September, how many times has (CHILD)'s main care provider or teacher at that program changed?

CPTEACH1- NO CHANGE..... 1
CPTEACH3 1-2 TIMES 2
 3 OR MORE TIMES..... 3

EG28. Is there any charge or fee for this program, paid either by you or some other person or agency?

CPFEE1- YES 1 (GO TO EG29)
CPFEE3 NO..... 2 (GO TO BOX AFTER EG31OV)

EG29. Do any of the following people or organizations help to pay for (CHILD) to go to that program? How about...

		YES	NO
CPREL1-			
CPREL3	a. A relative of (CHILD) outside your household who provides money <u>specifically</u> for that program, not including general child support?	1	2
CPWELF1-			
CPWELF3	b. A social service, welfare, or child care agency?.....	1	2
CPEMPL1-			
CPEMPL3	c. An employer, not including a tax-free spending account for child care?	1	2
CPOTHER1-			
CPOTHER3	d. Someone else?	1	2
CPOTHEO1/R-	Who is that? _____		
CPOTHEO3/R			

EG30. How much does your household pay for (CHILD) to go to that program?
 [IF NOTHING, ENTER ZERO.]

**CPCOST1-
CPCOST3**

AMOUNT \$□□□□.□□

**CPUNIT1-
CPUNIT3**

UNIT:
 PER HOUR 1
 PER DAY 2
 PER WEEK 3
 PER MONTH 4
 PER YEAR 5
 BIWEEKLY 6
 OTHER 91
 SPECIFY _____

**CPCSTOS1/R-
CPCSTOS3/R**

If EG30 = zero or number of children in household age 15 or younger= 1, go to box after EG31OV. Else, ask EG31.

EG31. Is this amount for (CHILD) only or does it include other children in your household?

**CPCSTHH1-
CPCSTHH3**

CHILD ONLY 1 (GO TO BOX AFTER EG31OV)
 CHILD AND OTHER(S) 2 (GO TO EG31OV)

EG31OV. How many children is this amount for, including (CHILD)?

**CPCSTHN1-
CPCSTHN3**

NUMBER.....□□

*If EG4 = 1 (one center-based arrangement), ask EG32.
 Else, if EG4 >= 2 (two or more center-based arrangements),
 return to EG5 until the number of arrangements in EG4 are
 completed, then ask EG32.*

EG32. Does (CHILD) go to another day care center, preschool, prekindergarten, or (Early) Head Start program?

* YES 1 (GO TO EG5)
 NO 2 (GO TO BOX BEFORE EH1)

Program Confirmation/Continuity and (Early) Head Start

If ED1, EE1, and EG1 all = 2 (child has no current care arrangements), or arrangements do not occur at least once each week (ED9, EE8, EG9 = 2), go to EH4. Else, ask EH1 for all arrangements which occur at least once each week.

EH1. Now I'd like to confirm the child care [or early childhood program] arrangement(s) that (CHILD) has at least once each week.

I've recorded the following arrangement(s).

- (ARRANGEMENT 1)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 2)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 3)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 4)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 5)..... (LOCATION; DAYS & HOURS/WEEK)

[That's a total of (HOURS) hours each week. Is that right?]

- * YES, CORRECT 1 (GO TO EH2)
- NO, ADD ARRANGEMENT 2 (CORRECTION SCREENS)⁶
- NO, DELETE ARRANGEMENT 3 (CORRECTION SCREENS)
- NO, CHANGE INFORMATION 4 (CORRECTION SCREENS)

EH2. (Early) Head Start is a federally sponsored preschool program primarily for children from low-income families. (Is this/Are any of these) care arrangement(s) (Early) Head Start?

- PCANYHD** YES 1 (GO TO EH3)
- NO..... 2 (GO TO EH4)

EH3. [Which arrangement(s) (is/are) (Early) Head Start?]

- PCHDTYP1-** (ARRANGEMENT 1).....(LOCATION; DAYS & HOURS/WEEK; COST)
- PCHDTYP4** (ARRANGEMENT 2).....(LOCATION; DAYS & HOURS/WEEK; COST)
- (ARRANGEMENT 3).....(LOCATION; DAYS & HOURS/WEEK; COST)
- (ARRANGEMENT 4).....(LOCATION; DAYS & HOURS/WEEK; COST)
- (ARRANGEMENT 5).....(LOCATION; DAYS & HOURS/WEEK; COST)

ARRANGEMENT NUMBERS (GO TO BOX)

*If cost for arrangement identified at EH3 > 0, ask EH5.
Else, go to EH6.*

⁶The correction screens permitted the interviewer to: 1) correct the location and the number of days and hours for all arrangements, as well as correct the type of relative caregiver; 2) identify any duplicate arrangements so that one could be deleted; and 3) add an arrangement that was omitted. If another arrangement was added, the CATI system cycled through the appropriate set of questions (i.e., relative, nonrelative, center) to collect relevant items.

EH4. Just to check, has (CHILD) ever attended (Early) Head Start?

PCEVRHD YES 1 (GO TO EH6)
NO..... 2 (GO TO EH6)

EH5. (Early) Head Start is a federally funded program that usually has no cost for eligible participants. However, you mentioned that your household pays (COST/UNIT) for (ARRANGEMENT) What is this fee for?

PCHDCOS1- CHILD IS NOT HEAD START ELIGIBLE BUT IS ENROLLED
PCHDCOS4 IN A HEAD START PROGRAM 1
FEE IS FOR DAYCARE BEFORE OR AFTER HEAD START 2
NOW SAYS IT IS NOT A HEAD START PROGRAM 3
NOW SAYS THERE IS NO FEE 4
OTHER 91
SPECIFY _____

PCHOS1/R-
PCHOS4/R

Ask EH5 for every Head Start Program for which there is a cost. Else, go to EH6.

EH6. (Other than the programs and care arrangements (he/she) has now,) since this past September, have you used any (other) child care arrangements or early childhood programs for (CHILD) on a regular basis?

PCOTHER YES 1 (GO TO EH7)
NO..... 2 (GO TO FIRST BOX BEFORE E11)

EH7. How many child care arrangements or programs have you used for (CHILD) on a regular basis since this past September [, not counting the ones (he/she) has now]?

PCNUM NUMBER..... □□

EH8. (We will be talking about the 2 most recent of those arrangements or programs.) [Let's start with the most recent of those other arrangements or programs./Let's talk about the second most recent arrangement.] Who provided that care or program? Was it ...

PCWHO1- A relative such as a grandparent
PCWHO2 or a brother or sister; 1 (GO TO EH9)
A nonrelative such as a home child
care provider or neighbor;..... 2 (GO TO EH9)
A day care center, nursery school, preschool,
or prekindergarten program; 3 (GO TO EH10)
[NOT PATH I] A community recreation program, pool,
or supervised playground; 4 (GO TO EH10)
Or did you have some other arrangement? 91 (GO TO EH10)
SPECIFY _____

PCWHOOS1/R-
PCWHOOS2/R

EH9. Did that (relative/nonrelative) care for (CHILD) in your own home or in another home?

- PCPLACE1- OWN HOME..... 1
- PCPLACE2 OTHER HOME 2
- BOTH/VARIES 3

EH10. When did that arrangement start and end? That is, in what month and year?
 [MUST HAVE ENDED SINCE THIS PAST SEPTEMBER.]

- PCSTRM1- START MONTH |_|_| START YEAR |_|_|_|_|
- PCSTRM2
- PCSTRTY1-
- PCSTRTY2

- PCENDMM1- END MONTH |_|_| END YEAR |_|_|_|_|
- PCENDMM2
- PCENDYY1-
- PCENDYY2

EH11. What is the main reason that arrangement ended?
 [PROBE: IF MORE THAN ONE REASON: Which would you say was the main reason?]

- PCREASN1- PROVIDER CLOSED/STOPPED PROVIDING CARE 1
- PCREASN2 CHILD EXCEEDED AGE OF OLD ARRANGEMENT 2
- CHILD REACHED AGE FOR NEW ARRANGEMENT 3
- PARENT UNHAPPY WITH ARRANGEMENT 4
- CHILD UNHAPPY WITH ARRANGEMENT 5
- CAREPROVIDER WAS UNABLE TO CARE FOR CHILD'S
 SPECIAL NEEDS 6
- WANTED EDUCATIONAL ARRANGEMENT 7
- PREFERRED ARRANGEMENT BECAME AVAILABLE 8
- COULD NO LONGER AFFORD CARE/ARRANGEMENT 9
- PARENT CHANGED JOB OR SCHEDULE 10
- RESPONDENT/CHILD MOVED 11
- PARENT STOPPED WORKING/FINISHED SCHOOL 12
- ARRANGEMENT WAS TEMPORARY/SEASONAL 13
- TRANSPORTATION DIFFICULTIES 14
- OTHER 91
- SPECIFY _____

PCREASO1/R-
 PCREASO2/R

If EH7 = 1 (one other arrangement since September), go to box before E11. Else, if EH7 > = 2 (two or more arrangements since September), return to EH8 until the two most recent arrangements have been completed, then go to first box before E11.

Perceptions of Quality/Factors in Parental Choice

If ED1, EE1, or EG1 = 1 (child currently participates in at least one arrangement), ask E11. Else, go to E13.

Primary child care arrangement = arrangement with greatest number of hours per week.

E11. Now I'm going to read a list of characteristics of care arrangements and early childhood programs. Thinking about the quality of (CHILD)'s care [by (his/her)/or] (PRIMARY CHILD CARE ARRANGEMENT), please tell me how you would rate the following characteristics using the scale perfect, excellent, good, fair, or poor.

[RANDOM START FOR RESPONSE CATEGORIES]

			Perfect	Ex- cellent	Good	Fair	Poor
PPSECUR	a.	(CHILD) feels safe and secure in care....	1	2	3	4	5
PPWARM	b.	The caregiver is warm and affectionate toward (him/her).	1	2	3	4	5
PPHEALTH	c.	It's a healthy place for (him/her)	1	2	3	4	5
PPRESPCT	d.	(CHILD) is treated with respect.....	1	2	3	4	5
PPSAFE	e.	(He/She) is safe with this caregiver	1	2	3	4	5
PPATIENT	f.	(He/She) gets a lot of individual attention	1	2	3	4	5
PPSHARE	g.	My caregiver and I share information ...	1	2	3	4	5
PPNEW	h.	My caregiver is open to new information and learning	1	2	3	4	5
PPKNOW	i.	My caregiver shows she or he knows a lot about children and their needs	1	2	3	4	5
PPDISCIP	j.	My caregiver handles discipline matters without being harsh.....	1	2	3	4	5
PPLIKE	k.	(CHILD) likes the caregiver.....	1	2	3	4	5
PPSUPP	l.	My caregiver is supportive of me as a parent.....	1	2	3	4	5
PPCREAT	m.	There are a lot of creative activities going on	1	2	3	4	5
PPINTRST	n.	It is an interesting place for (CHILD).....	1	2	3	4	5
PPHAPSEE	o.	My caregiver is happy to see (CHILD)....	1	2	3	4	5

E12. How much difficulty did you have finding the type of child care or early childhood program you wanted for (CHILD)? Would you say....

PPDIFCLT	A lot,	1	(GO TO E15)
	Some,.....	2	(GO TO E15)
	A little,	3	(GO TO E15)
	No difficulty, or	4	(GO TO E15)
	Have you not found the child care or program you wanted?	5	(GO TO E15)

EI3. Some parents prefer to stay home to care for their children. Others choose to have care arrangements with someone other than a parent. If you could find high-quality, affordable child care by a relative, nonrelative, or in a daycare or preschool program, would you choose to place (CHILD) in one of these kinds of arrangements?

PACHOOSE YES 1 (GO TO EI5)
 NO..... 2 (GO TO EI4)

EI4. What were your main reasons for choosing to have a parent care for (CHILD)?
 [CODE ALL THAT APPLY.]

PPNOWORK PARENT DOES NOT WORK/*FLEXIBLE SCHEDULE*/
 NO NEED FOR CARE 1
PPDAYCAR PARENT IS DAY CARE PROVIDER IN THE HOME 2
PPWORKHO PARENT WORKS OR STUDIES AT HOME 3
PPSPECL CHILD HAS SPECIAL NEEDS..... 4
PPDEPEND PARENTS NEED TO CARE FOR OTHER
 DEPENDENTS AS WELL 5
PPBARR COST/AVAILABILITY/TRANSPORTATION 6
PPHMWRK TO HELP WITH CHILD'S EDUCATION/HOMEWORK..... 7
PPSTHM PARENT PREFERS TO STAY AT HOME..... 8
PPBEST PARENTAL CARE IS BEST FOR CHILD/DEVELOPMENT..... 9
PPRESPON PARENTS ARE RESPONSIBLE FOR CARE..... 10
PPRELIG RELIGIOUS REASONS 11
PPSAFETY CHILD'S SAFETY/SECURITY/PARENT DOESN'T
 TRUST OTHERS..... 12
PPWANT PARENT WANTS TO BE WITH CHILD..... 13
PPOTHER OTHER 91
PPOTHEOS/R SPECIFY _____

*If only EI4-6=1 (cost/avail/trans)
 go to EI5. Else, go to EJINTRO.*

EI5. I'm going to read some things that people look for in selecting child care arrangements or early childhood programs for their children. For each one, please tell me if you think it is very important, somewhat important, or not too important in selecting a care arrangement for (CHILD). How about...
 [PROBE: Is that very important, somewhat important, or not too important?]

[RANDOM START FOR RESPONSE CATEGORIES]

		VI	SI	NI
PPSICK	a. A place where children will be cared for when they are sick.	1	2	3
PPCLHM	b. A place close to your home.....	1	2	3
PPCOST	c. A reasonable cost.	1	2	3
PPKIDS	d. A small number of children in the same class or group.....	1	2	3
PPENGL	e. A caregiver or teacher who speaks English with your child.....	1	2	3
PPFLEX	f. A caregiver who provides flexible hours to fit your schedule.....	1	2	3
PPBELIEF	g. A caregiver who shares your beliefs about raising children.....	1	2	3
PPRACE	h. A caregiver of the same racial or ethnic background as (CHILD)....	1	2	3

*If PA6 =2 or 91 (does not speak English mostly or equally
 with another language at home), ask EI5j.
 Else go to box after EI5j.*

PPLANG j. A caregiver who speaks (CHILD)'s native language..... 1 2 3

If EE1 = 1 (has nonrelative care arrangement), ask EI5k. Else go to box after EI5k.

PPKNEW k. A caregiver you already knew? 1 2 3

If EG1 = 1 (has center-based care arrangement), ask EI5l. Else, go to box before EI6.

PPRELG l. An arrangement that is affiliated with your family's religion? 1 2 3

Ask EI6 once per household.

EI6. Do you feel there are good choices for child care where you live?

PPCHOIC YES 1
NO 2

Training and Support for Families of Preschoolers

Ask EJ1 only once for each household.

EJINTRO. Now I'd like to talk with you about classes and support services for parents.

EJ1. Since last September, have you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)) gone to...

		YES	NO
SFATTGRP	a. Any support groups to help with parenting?	1	2
SFATTCLS	b. A parenting class?	1	2

Home Activities

EKINTRO. Now I'd like to talk with you about (CHILD)'s activities with family members in the past week.

EK1. How many times have you or someone in your family read to (CHILD) in the past week? Would you say...

FOREADTO Not at all,..... 1 (GO TO BOX AFTER EK2)
 Once or twice,..... 2 (GO TO EK2)
 3 or more times, or..... 3 (GO TO EK2)
 Every day? 4 (GO TO EK2)

EK2. About how many minutes (on each of those days/each day) do you or someone in your family read to (him/her)?
 [IF TIME PER DAY VARIES, ASK FOR AVERAGE TIME PER DAY.]

FORDDAY MINUTES

If PATH = 1 and AGE2000 = 2, go to ELINTRO. Else, if PATH = N, ask EK 3. Else, go to PTINTRO

EK3. In the past week, has anyone in your family done the following things with (CHILD)?
 [IF YES: Would you say one or two times, or three or more?]

		YES	NO	1-2	3+	
				TIMES	TIMES	
FOSTORY	a. Told (him/her) a story?.....	1	2	1	2	FOSTORYN
FOWORDS	b. Taught (him/her) letters, words, or numbers?.....	1	2	1	2	FOWORDSN
FOMUSIC	c. Taught (CHILD) songs or music?.....	1	2	1	2	FOMUSICN
FOCRAFTS	d. Worked on arts and crafts with (him/her)?.....	1	2	1	2	FOCRAFTN

EK4. In the past month, have you or someone in your family visited a library with (CHILD)?

FOLIBRAY YES 1
 NO..... 2

Emerging Literacy and Numeracy

ELINTRO. These next questions are about things that different children do at different ages. These things may or may not be true for (CHILD).

EL1. Can (CHILD) identify the colors red, yellow, blue, and green by name? Would you say...

DPCOLOR All of them, 1
 Some of them, or 2
 None of them? 3

EL2. Can (he/she) recognize...

DPLETTER All of the letters of the alphabet, 1
 Most of them, 2
 Some of them, or 3
 None of them? 4

EL3. How high can (CHILD) count? Would you say...

DPCOUNT Not at all, 1
 Up to five, 2
 Up to ten, 3
 Up to twenty, 4
 Up to fifty, or 5
 Up to 100 or more? 6

EL4. Can (CHILD) write (his/her) first name, even if some of the letters are backwards?

DPNAME YES 1
 NO 2

EL5. Is (CHILD) able to read story books on (his/her) own now?

HASTORY YES 1 (GO TO EL6)
 NO 2 (GO TO EL7)

EL6. Does (CHILD) actually read the words written in the book, or does (he/she) look at the book and pretend to read?

HAWORDS READS THE WRITTEN WORDS 1 (GO TO PTINTRO)
 PRETENDS TO READ 2 (GO TO EL8)
 DOES BOTH 3 (GO TO PTINTRO)

EL7. Although (CHILD) doesn't yet read story books on (his/her) own, does (he/she) ever look at a book with pictures and pretend to read?

HAPRETND YES 1 (GO TO EL8)
 NO 2 (GO TO PTINTRO)

EL8. When (he/she) pretends to read a book, does it sound like a connected story, or does (he/she) tell what's in each picture without much connection between them?

HACONECT SOUNDS LIKE CONNECTED STORY 1
 TELLS WHAT'S IN EACH PICTURE 2
 DOES BOTH 3

Health and Disability

PTINTRO. Now I have a few questions about (CHILD)'s health.

If PATH = I, N ask PT1. Else, go to box after PT2.

PT1. Has a doctor or other health professional ever told you that (CHILD) was developmentally delayed?

HDDELAY YES 1
 NO..... 2

PT2. About how long has it been since (CHILD) last saw a medical doctor or other health professional for a checkup, shots, or other routine care? Would you say...

HNDOCWHN Less than 1 year 1
 1 year, but less than 2 years, or 2
 2 years or more?..... 3
 CHILD HAS NEVER BEEN SEEN BY A MEDICAL DOCTOR 4

If PATH = N ask PT3. Else, go to box after PT4.

PT3. Has (CHILD) ever been to a dentist or dental hygienist for dental care?

HNDNTIST YES 1 (GO TO PT4)
 NO..... 2 (GO TO BOX AFTER PT4)

PT4. About how long has it been since (CHILD) last saw a dentist or dental hygienist for dental care? [PROBE USING CATEGORIES.]

HNDNTWHN LESS THAN 1 YEAR, 1
 1 YEAR, BUT LESS THAN 2 YEARS 2
 2 YEARS OR MORE 3

If PATH = I, go to PT7. Else, ask PT5.

PT5. Does (CHILD) have any of the following disabilities?
 [RANDOM START; KEEP h LAST.]

		YES	NO
HDLEARN	a. A specific learning disability?	1	2
HDRETARD	b. Mental retardation?	1	2
HDSPEECH	c. A speech impairment?	1	2
HDDISTRB	d. A serious emotional disturbance?	1	2
HDDEAFIM	e. Deafness or another hearing impairment?	1	2
HDBLNDIM	f. Blindness or another visual impairment?	1	2
HDORTHO	g. An orthopedic impairment?	1	2
HDOTHER	h. Another health impairment lasting 6 months or more?	1	2

PT6. Does (CHILD) have...

- HDAUTISM** a. Autism? 1 2
- HDADD** b. Attention deficit disorder, ADD, or ADHD? 1 2

If any PT5a-h = 1, or PT6, a or b = 1, go to PT8. Else, go to box before PUINTRO.

PT7. Does (CHILD) have any of the following disabilities?
[RANDOM START; KEEP e LAST.]

- | | | | YES | NO |
|-----------------|----|--|-----|----|
| HDDEAFIM | a. | Deafness or another hearing impairment? | 1 | 2 |
| HDBLNDIM | b. | Blindness or another visual impairment? | 1 | 2 |
| HDORTHO | c. | An orthopedic impairment? | 1 | 2 |
| HDDEVEL | d. | Severe developmental delay? | 1 | 2 |
| HDOTHER | e. | Another health impairment lasting 6
months or more? | 1 | 2 |

If any PT7a-e=1, go to PT8. Else, go to box before PUINTRO.

PT8. Is (CHILD) receiving services for (his/her) (disability/disabilities) ...

- | | | | YES | NO |
|-------------------|----|--|-----|----|
| HDSCHL | a. | From your local school district? | 1 | 2 |
| HDGOVT | b. | From a state or local health or social
service agency? | 1 | 2 |
| HDDOCTOR | c. | From a doctor or clinic? [INCLUDES OTHER HEALTH CARE
PROVIDERS IF VOLUNTEERED]..... | 1 | 2 |
| HDSOURCE | d. | From some other source? | 1 | 2 |
| HDSOUROS/R | | What is that? _____ | | |

*If any PT8 a, b, c, or d = 1, ask PT9.
Else, go to box before PT10.*

PT9. Are any of these services provided through an Individualized (Family Service Plan, or IFSP/ Educational Program, or IEP)?

- HNIFSP** YES..... 1
- NO 2

If path = N, S, or H, ask PT10. Else, if path = I, go to box before PUINTRO.

PT10. (Does/Do) (CHILD)'s (disability/disabilities) affect (his/her) ability to learn?

- HDAFFECT** YES..... 1
- NO 2

Parent/Guardian Characteristics

Mother Items⁷

Ask questions PU18, PU22, PU23, PU26-PU38, and PV17, PV21, PV22, PV25 and PV26 for each sampled child. But, ask all other parent/guardian characteristics (PUINTRO through PV24) only once per mother/father in the household.

If HHMOM = 1, 2, or 3 (mother or female guardian), go to PUINTRO Else, if HHMOM = 4 (no mother/female guardian), go to box before PVINTRO.

PUINTRO. These next questions are about (you/(and) (CHILD)'s (mother/stepmother/foster mother) (father/stepfather/foster father)). (Let's start with (you/(CHILD)'s mother)).

PU1. [Are you/Is (CHILD'S) (mother/stepmother/foster mother)] currently...

MOMSTAT Married, 1 (GO TO PU3)
 Separated, 2 (GO TO BOX)
 Divorced, 3 (GO TO BOX)
 Widowed, or 4 (GO TO BOX)
 Never married? 5 (GO TO BOX)

If any HH member other than mother is age 16 or older ask PU10V. Else go to PU3.

PU10V. (Are you/Is she) currently living with a partner?

MOMLIVW YES 1 (GO TO BOX)
 NO..... 2 (GO TO PU3)

If HHMOM = 1 or 2 and HHDAD = 1 or 2 (child's mother and father live in the household), autocode PU2 =1, and go to PU3. Else ask PU2.

PU2. Is (your/(CHILD)'s (mother's/stepmother's/foster mother's) partner's relationship to (CHILD) like that of a parent?

MOMPART YES 1
 NO..... 2

⁷ These items were asked about the child's mother if she resided in the household. If the father but no mother resided in the household, these items were not asked. If no mother or father was in the household, items were asked about the female respondent. If there was no mother or father in the household and the respondent was male, these items were not asked.

PU3. How old (were you/was (CHILD)'s (mother/stepmother/foster mother) when (you/she) first became a mother, stepmother, or guardian to any child?

MOMNEW YEARS OF AGE..... □□

PU4. What was the first language (you/(CHILD)'s (mother/stepmother/foster mother)) learned to speak?

MOMLANG ENGLISH 1 (AUTOCODE PU5=1 AND GO TO PU6)
SPANISH 2 (GO TO PU5)
ENGLISH AND SPANISH EQUALLY 3 (GO TO PU5)
ENGLISH AND ANOTHER LANGUAGE EQUALLY 4 (GO TO PU5)
SPECIFY _____
MOMLANOS/R ANOTHER LANGUAGE 91 (GO TO PU5)
SPECIFY _____

PU5. What language (do you/does (CHILD)'s (mother/stepmother/foster mother)) speak most at home now?

MOMSPEAK ENGLISH 1
SPANISH 2
ENGLISH AND SPANISH EQUALLY 3
ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
SPECIFY _____
((ENGLISH AND) OTHER LANGUAGE SPECIFIED IN PU4 (EQUALLY)) 5
MOMSPEOS/R ANOTHER LANGUAGE 91
SPECIFY _____

PU6. [Were you/Was (CHILD)'s (mother/stepmother/foster mother)] born in...

MOMBORN One of the 50 states or the District of Columbia, 1 (GO TO PU7)
One of the U.S. territories, [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS] 2 (GO TO PU6OV)
MOMTEROS/R SPECIFY _____
Or some other country? 3 (GO TO PU6OV)
MOMCONOS/R SPECIFY _____

PU6OV. How old (were you/was she) when (you/she) first moved to the (United States/50 states or the District of Columbia)?

MOMUSAGE AGE □□

PU7. What is the highest grade or year of school that (you/(CHILD)'s (mother/stepmother/foster mother)) completed?

- MOMGRADE** UP TO 8TH GRADE 1 (ENTER GRADE, GO TO PU8)
- 9TH TO 11TH GRADE..... 2 (ENTER GRADE, GO TO PU8)
- MOMGRAD1** 12TH GRADE BUT NO DIPLOMA..... 3 (GO TO PU8)
- MOMGRAD2** HIGH SCHOOL DIPLOMA/EQUIVALENT..... 4 (GO TO PU9)
- VOC/TECH PROGRAM AFTER HIGH SCHOOL
- BUT NO VOC/TECH DIPLOMA..... 5 (GO TO PU8)
- VOC/TECH DIPLOMA AFTER HIGH SCHOOL..... 6 (GO TO PU8)
- SOME COLLEGE BUT NO DEGREE 7 (GO TO PU7OV)
- ASSOCIATE'S DEGREE (AA, AS) 8 (GO TO PU8)
- BACHELOR'S DEGREE (BA, BS)..... 9 (GO TO PU9)
- GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE.... 10 (GO TO PU9)
- MASTER'S DEGREE (MA, MS)..... 11 (GO TO PU9)
- DOCTORATE DEGREE (PHD, EDD)..... 12 (GO TO PU9)
- PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE
(MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.)..... 13 (GO TO PU9)

PU7OV. Did (you/she) earn a vocational or technical diploma after leaving high school?

- MOMVOTEC** YES 1
- NO..... 2

PU8. (Do you/Does she) have a high school diploma or its equivalent, such as a GED?

- MOMDIPL** YES 1
- NO..... 2

PU9. During the past week, did (you/(CHILD)'s (mother/stepmother/foster mother)) work at a job for pay or income?

- MOMWORK** YES 1 (GO TO PU11)
- NO..... 2 (GO TO PU10)
- RETIRED 3 (GO TO PU12)
- DISABLED/UNABLE TO WORK..... 4 (GO TO PU12)

PU10. (Were you/Was she) on leave or vacation from a job during the past week?

- MOMLEAVE** YES 1 (GO TO PU11)
- NO..... 2 (GO TO PU12)

PU11. About how many total hours per week (do you/does she) usually work for pay or income, counting all jobs?
[IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

MOMHOURS WEEKLY HOURS.....

PU12. In the past 12 months, how many months (,if any,) (have you/has she) worked for pay or income?

MOMMTHS MONTHS.....

If PU9 or PU10 = 1 (working or on leave/vacation), go to PU16. If PU9 =3, then autocode PU15 = 3, and go to PU16. If PU9 = 4, then autocode PU15 = 4, and go to PU16. Else, ask PU13.

PU13. (Have you/Has she) been actively looking for work in the past 4 weeks?

MOMLOOK YES 1 (GO TO PU14)
 NO..... 2 (GO TO PU15)

PU14. What (have you/has she) been doing in the past 4 weeks to find work?
 [CODE ALL THAT APPLY.]

MOMPUBL CHECKED WITH PUBLIC EMPLOYMENT AGENCY 1
MOMPRIV CHECKED WITH PRIVATE EMPLOYMENT AGENCY 2
MOMEMPL CHECKED WITH EMPLOYER DIRECTLY/
 SENT RESUME/FILLED OUT APPLICATIONS..... 3
MOMREL CHECKED WITH FRIENDS OR RELATIVES 4
MOMANSAD PLACED OR ANSWERED ADS/SENT RESUME 5
MOMREAD READ WANT ADS..... 6
MOMOTHER SOMETHING ELSE 91
MOMOTHOS/R SPECIFY _____

If PU14 = 1 through 5 (looking for work), go to PU16. Else, ask PU15.

PU15. What (were you/was she) doing most of last week? Would you say...

MOMACTY Keeping house or caring for children or
 other dependents,..... 1
 Going to school,..... 2
 Retired, 3
 Unable to work, or..... 4
 Something else? 91
MOMACTOS/R What was that? _____

If PU15 = 2, autocode PU16 = 1 and go to PU17. Else, ask PU16.

PU16. (Are you/is (CHILD)'s mother) attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training [other than at (your/her) regular job]?

MOMENROL YES 1 (GO TO PU17)
 NO..... 2 (GO TO BOX BEFORE PU18)

PU17. How many hours each week (do you/does she) attend school or training? [REFERS TO ACTUAL TIME, NOT CREDIT HOURS.]

MOMENHRS WEEKLY HOURS.....

If PU9 = 1 or PU10 = 1 (working or on leave/vacation), ask
 PU18.
 Else, go to box before PU22.

PU18. Have (CHILD)'s (child/before- and after-school) care needs influenced [your/(his/her) mother's/stepmother's/foster mother's] choice of a job or work schedule in any way?

MOMCHOIC YES 1
 NO..... 2

Ask PU19, PU20, and PU21 only once per mother per
 household.

PU19. How easy is it for (you/(CHILD)'s mother/stepmother/foster mother) to leave work if (CHILD/one of your children/one of her children) gets sick or needs (you/her) unexpectedly? Would you say...

MOMLVEAS [VERY] Easy, 1
 Somewhat easy, 2
 Not very easy, or..... 3
 Difficult? 4

PU20. Does (your/(CHILD)'s mother's/stepmother's/foster mother's) employer have a program that allows employees to put part of their pay -- before taxes -- into an account that can be used to pay for child care costs?

MOMACCT YES 1 (GO TO PU21)
 NO..... 2 (GO TO BOX BEFORE PU24)
 SELF-EMPLOYED..... 3 (GO TO BOX BEFORE PU24)

PU21. (Do you/Does she) participate in this program to cover any child care costs?

MOMACUSE YES 1 (GO TO BOX BEFORE PU24)
 NO..... 2 (GO TO BOX BEFORE PU24)

If ED1, EE1, or EG1 = 1 (participation in nonparental
 care/programs), go to box before PU24.
 Else, ask PU22.

PU22. Would (you/(CHILD)'s mother/stepmother/foster mother) be working outside of the home if (you/she) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

MOMWLDWK YES 1
 NO..... 2

If PU16 NE 1, ask PU23. Else, go to box before PU24.

PU23. Would (you/(CHILD)'s mother/stepmother/foster mother) enter job training or school if (you/she) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

MOMWLDSC YES 1
 NO..... 2

Ask PU24 and PU25 only once per household.

PU24. There is a federal income tax credit specifically for child care expenses called the Child and Dependent Care Tax Credit. Have you ever heard of it?

FAMTCREM YES 1 (GO TO PU25)
 NO..... 2 (GO TO BOX BEFORE PU26)

PU25. Did or will anyone in your household claim this credit for child care costs on your tax return for 2000?

FAMTCUSM YES 1
 NO..... 2

If PU9 = 1 or PU10 = 1 or PU16 = 1 (mother/female guardian is employed for pay or attending school or training), ask PU26 for each sampled child. Else, go to box before PVINTRO.

PU26. [DISPLAY CARE ARRANGEMENTS/PROGRAMS, IF ANY]
 When mothers are at work or school, children may be in school, in a care arrangement, with their other parent, or somewhere else. What is (CHILD) usually doing or how is (he/she) usually cared for during most of the hours when [you/(CHILD)'s mother/stepmother/foster mother] (are/is) at (work) (or) (school or training)?

MOMCARE ARRANGEMENT NUMBER (GO TO PU32)
 MOTHER WORKS OR STUDIES AT HOME/CARES FOR CHILD
 AT WORK OR SCHOOL..... 22 (GO TO PU32)
 CARED FOR BY CHILD'S OTHER PARENT/
 STEPPARENT/FOSTER PARENT (EXCEPT SAME SEX) 23 (GO TO PU27)
 MATERNITY LEAVE 24 (GO TO PU32)
 OTHER RELATIVE ARRANGEMENT NOT PREVIOUSLY
 MENTIONED 25 (GO TO PU28)
 OTHER NONRELATIVE ARRANGEMENT NOT PREVIOUSLY
 MENTIONED 26 (GO TO PU29)
 OTHER CENTER-BASED OR SCHOOL-BASED ARRANGEMENT
 NOT PREVIOUSLY MENTIONED 27 (GO TO PU29)
 SELF-CARE ARRANGEMENT NOT PREVIOUSLY
 MENTIONED 28 (GO TO PU29)
 SAME-SEX PARENT CARES FOR CHILD 29 (GO TO PU32)
 SOMETHING ELSE 91 (GO TO PU32)
MOMCAROS/R SPECIFY _____

PU27. Does that parent live in (CHILD)'s household?

MOMAHOUS YES 1 (GO TO BOX BEFORE PU28)
 NO..... 2 (GO TO PU32)

If PU27 = 1 and HHDAD not = 1 or 2 (no father enumerated but father is said to live in HH), code interview a problem. Else, go to PU32.

PU28. Is that relative (CHILD)'s...

- MOMARELA** Grandmother, 1
- Grandfather, 2
- Aunt, 3
- Uncle, 4
- Brother, 5
- Sister, or 6
- Another relative? 7

PU29. Is that arrangement regularly scheduled at least once each week (before or after school)?

- MOMAWEEK** YES 1 (GO TO PU30)
- NO 2 (GO TO PU32)

PU30. How many days each week does (CHILD) participate in that arrangement (before or after school)?

MOMADAYS DAYS

PU31. How many hours each week does (CHILD) participate in that arrangement (before or after school)?

MOMAHRS HOURS

PU32. Does (that arrangement/the time (CHILD) is in school) cover all of the hours that [you/(CHILD)'s mother/stepmother/foster mother] (are/is) at (work) (or) (school or training)?

- MOMCAROT** YES 1 (GO TO BOX BEFORE PVINTRO)
- NO 2 (GO TO PU33)

PU33. [DISPLAY CARE ARRANGEMENTS/PROGRAMS, IF ANY]
What is (CHILD) usually doing or how is (he/she) usually cared for during most of the other hours that [you/(CHILD)'s mother/stepmother/foster mother] (are/is) at (work) (or) (school or training)?

- MOMCARWH** ARRANGEMENT NUMBER (GO TO BOX BEFORE PVINTRO)
- MOTHER WORKS OR STUDIES AT HOME/CARES FOR CHILD
- AT WORK OR SCHOOL 22 (GO TO BOX BEFORE PVINTRO)
- CARED FOR BY CHILD'S OTHER PARENT/
STEPPARENT/FOSTER PARENT (EXCEPT SAME SEX) 23 (GO TO PU34)
- MATERNITY LEAVE 24 (GO TO BOX BEFORE PVINTRO)
- OTHER RELATIVE ARRANGEMENT NOT PREVIOUSLY
MENTIONED 25 (GO TO PU35)
- OTHER NONRELATIVE ARRANGEMENT NOT PREVIOUSLY
MENTIONED 26 (GO TO PU36)
- OTHER CENTER-BASED OR SCHOOL-BASED ARRANGEMENT
NOT PREVIOUSLY MENTIONED 27 (GO TO PU36)
- SELF-CARE ARRANGEMENT NOT PREVIOUSLY
MENTIONED 28 (GO TO PU36)
- SAME-SEX PARENT CARES FOR CHILD 29 (GO TO BOX BEFORE PVINTRO)
- SOMETHING ELSE 91 (GO TO BOX BEFORE PVINTRO)
- MOMCWHOS/R** SPECIFY _____

PU34. Does that parent live in (CHILD)'s household?

MOMBHOUS YES 1 (GO TO BOX BEFORE PU35)
NO..... 2 (GO TO BOX BEFORE PVINTRO)

If PU34 = 1 and HHDAD not = 1 or 2 (no father enumerated but father is said to live in HH), code interview a problem. Else, go to PVINTRO.

PU35. Is that relative (CHILD)'s...

MOMBRELA Grandmother, 1
Grandfather, 2
Aunt, 3
Uncle, 4
Brother, 5
Sister, or 6
Another relative? 7

PU36. Is that arrangement regularly scheduled at least once each week (before or after school)?

MOMBWEEK YES 1 (GO TO PU37)
NO..... 2 (GO TO BOX BEFORE PVINTRO)

PU37. How many days each week does (CHILD) participate in that arrangement (before or after school)?

MOMBDAYS DAYS

PU38. How many hours each week does (CHILD) participate in that arrangement (before or after school)?

MOMBHRS HOURS.....

Father Items.⁸

*If HHDAD = 1, 2, or 3 (father or male guardian), go to PVINTRO.
Else, if HHDAD = 4 (no father or male guardian), go to box before PV25*

PVINTRO. Now I have some questions about (you/(CHILD)'s (father/stepfather/foster father)).

PV1. [Are you/Is (CHILD'S) (father/stepfather/foster father)] currently...

DADSTAT Married, 1 (GO TO PV3)
Separated, 2 (GO TO BOX)
Divorced, 3 (GO TO BOX)
Widowed, or 4 (GO TO BOX)
Never married? 5 (GO TO BOX)

⁸ These items were asked about the child's father if he resided in the household. If the mother but no father resided in the household, these items were not asked. If no father or mother was in the household, items were asked about the male respondent. If there was no father or mother in the household and the respondent was female, these items were not asked.

If any HH member other than father is age 16 or older ask PV10V.
Else go to PV3.

PV10V. (Are you/Is he) currently living with a partner?

DADLIVW YES 1 (GO TO BOX)
NO..... 2 (GO TO PV3)

If HHMOM = 1 or 2 and HHDAD = 1 or 2 (child's mother and father live in the household), autocode PV2 =1, and go to PV3.
Else ask PV2.

PV2. Is (that/(CHILD)'s (father's/stepfather's/foster father's) partner's relationship to (CHILD) like that of a parent?

DADPART YES 1
NO..... 2

PV3. What was the first language (you/(CHILD)'s (father/stepfather/foster father)) learned to speak?

DADLANG ENGLISH 1 (AUTOCODE PV4=1 AND GO TO PV5)
SPANISH 2 (GO TO PV4)
ENGLISH AND SPANISH EQUALLY 3 (GO TO PV4)
ENGLISH AND ANOTHER LANGUAGE EQUALLY 4 (GO TO PV4)
SPECIFY _____
DADLANOS/R ANOTHER LANGUAGE 91 (GO TO PV4)
SPECIFY _____

PV4. What language (do you/does (CHILD)'s (father/stepfather/foster father)) speak most at home now?

DADSPEAK ENGLISH 1
SPANISH 2
ENGLISH AND SPANISH EQUALLY 3
ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
SPECIFY _____
((ENGLISH AND) OTHER LANGUAGE SPECIFIED IN PV1 (EQUALLY)) 5
ANOTHER LANGUAGE 91
DADSPEOS/R SPECIFY _____

PV5. [Were you/Was (CHILD)'s (father/stepfather/foster father)] born in...

DADBORN One of the 50 states or the District of Columbia, 1 (GO TO PV6)
One of the U.S. territories, [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS] 2 (GO TO PV50V)
DADTEROS/R SPECIFY _____
Or some other country? 3 (GO TO PV50V)
DADCONOS/R SPECIFY _____

PV5OV. How old (were you/was he) when (you/he) first moved to the (United States/50 states or the District of Columbia)?

DADUSAGE AGE □□

PV6. What is the highest grade or year of school that (you/(CHILD)'s (father/stepfather/foster father)) completed?

- DADGRADE** UP TO 8TH GRADE 1 (ENTER GRADE, GO TO PV7)
- 9TH TO 11TH GRADE..... 2 (ENTER GRADE, GO TO PV7)
- DADGRAD1** 12TH GRADE BUT NO DIPLOMA..... 3 (GO TO PV7)
- DADGRAD2** HIGH SCHOOL DIPLOMA/EQUIVALENT..... 4 (GO TO PV8)
- VOC/TECH PROGRAM AFTER HIGH SCHOOL
- BUT NO VOC/TECH DIPLOMA 5 (GO TO PV7)
- VOC/TECH DIPLOMA AFTER HIGH SCHOOL..... 6 (GO TO PV7)
- SOME COLLEGE BUT NO DEGREE 7 (GO TO PV6OV)
- ASSOCIATE'S DEGREE (AA, AS) 8 (GO TO PV7)
- BACHELOR'S DEGREE (BA, BS)..... 9 (GO TO PV8)
- GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE 10 (GO TO PV8)
- MASTER'S DEGREE (MA, MS)..... 11 (GO TO PV8)
- DOCTORATE DEGREE (PHD, EDD)..... 12 (GO TO PV8)
- PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE
(MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.)..... 13 (GO TO PV8)

PV6OV. Did (you/he) earn a vocational or technical diploma after leaving high school?

DADVOTEC YES 1
NO..... 2

PV7. (Do you/Does he) have a high school diploma or its equivalent, such as a GED?

DADDIPL YES 1
NO..... 2

PV8. During the past week, did (you/(CHILD)'s (father/stepfather/foster father)) work at a job for pay or income?

DADWORK YES 1 (GO TO PV10)
NO..... 2 (GO TO PV9)
RETIRED 3 (GO TO PV11)
DISABLED/UNABLE TO WORK..... 4 (GO TO PV11)

PV9. (Were you/Was he) on leave or vacation from a job during the past week?

DADLEAVE YES 1 (GO TO PV10)
NO..... 2 (GO TO PV11)

PV10. About how many total hours per week (do you/does he) usually work for pay or income, counting all jobs?
[IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

DADHOURS WEEKLY HOURS..... □□

PV11. In the past 12 months, how many months (,if any,) (have you/has he) worked for pay or income?

DADMTHS MONTHS.....

If PV8 or PV9 = 1 (working or on leave/vacation), go to PV15. If PV8 = 3, then autocode PV14 = 3, and go to PV15. If PV8 = 4, then autocode PV14 =4, and go to PV15. Else, ask PV12.

PV12. (Have you/Has he) been actively looking for work in the past 4 weeks?

DADLOOK YES 1 (GO TO PV13)
NO..... 2 (GO TO PV14)

PV13. What (have you/has he) been doing in the past 4 weeks to find work?
[CODE ALL THAT APPLY.]

DADPUBL CHECKED WITH PUBLIC EMPLOYMENT AGENCY 1
DADPRIV CHECKED WITH PRIVATE EMPLOYMENT AGENCY 2
DADEMP CHECKED WITH EMPLOYER DIRECTLY/
SENT RESUME/*FILLED OUT APPLICATIONS*..... 3
DADREL CHECKED WITH FRIENDS OR RELATIVES 4
DADANSAD PLACED OR ANSWERED ADS/SENT RESUME 5
DADREAD READ WANT ADS 6
DADOTHER SOMETHING ELSE 91
DADOTHOS/R SPECIFY _____

*If PV13 = 1 through 5 (looking for work), go to PV15.
Else, ask PV14.*

PV14. What (were you/was he) doing most of last week? Would you say...

DADACTY Keeping house or caring for children or other dependents,1
Going to school,2
Retired,3
Unable to work, or4
Something else?91
DADACTOS/R What was that? _____

*If PV14 = 2, then autocode PV15 = 1, and go to PV16.
Else, ask PV15.*

PV15. (Are you/is (CHILD)'s father) attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training [other than at (your/his) regular job]?

DADENROL YES 1 (GO TO PV16)
NO..... 2 (GO TO BOX BEFORE PV17)

PV16. How many hours each week (do you/does he) attend school or training? [REFERS TO ACTUAL TIME, NOT CREDIT HOURS]

DADENHRS WEEKLY HOURS..... □□

*If PV8 = 1 or PV9 = 1 (working or on leave/vacation), ask PV17.
Else, go to box before PV21.*

PV17. Have (CHILD)'s (child/before- and after-school) care needs influenced [your/(his/her) father's/stepfather's/foster father's] choice of a job or work schedule in any way?

DADCHOIC YES 1
NO..... 2

Ask PV18, PV19, and PV20 once per father per household.

PV18. How easy is it for (you/(CHILD)'s father/stepfather/foster father) to leave work if (CHILD/one of your children/one of his children) gets sick or needs (you/him) unexpectedly? Would you say...

DADLVEAS [VERY] Easy, 1
Somewhat easy, 2
Not very easy, or..... 3
Difficult? 4

PV19. Does (your/(CHILD)'s father's/stepfather's/foster father's) employer have a program that allows employees to put part of their pay -- before taxes -- into an account that can be used to pay for child care costs?

DADACCT YES 1 (GO TO PV20)
NO..... 2 (GO TO BOX BEFORE PV23)
SELF-EMPLOYED..... 3 (GO TO BOX BEFORE PV23)

PV20. (Do you/Does he) participate in this program to cover any child care costs?

DADACUSE YES 1 (GO TO BOX BEFORE PV23)
NO..... 2 (GO TO BOX BEFORE PV23)

If ED1, EE1, or EG1 = 1 (participation in nonparental care/programs), go to box before PV23. Else, ask PV21.

PV21. Would (you/(CHILD)'s father/stepfather/foster father) be working outside of the home if (you/he) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

DADWLDWK YES 1
NO..... 2

If PV15 NE 1, ask PV22. Else, go to box before PV23.

PV22. Would (you/(CHILD)'s father/stepfather/foster father) enter job training or school if (you/he) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

DADWLDSC YES 1
NO..... 2

Ask PV23 and PV24 only once per household.

PV23. There is a federal income tax credit specifically for child care expenses called the Child and Dependent Care Tax Credit. Have you ever heard of it?

FAMTCRED YES 1 (GO TO PV24)
NO..... 2 (GO TO BOX BEFORE PV25)

PV24. Did or will anyone in your household claim this credit for child care costs on your tax return for 2000?

FAMTCUSD YES 1
NO..... 2

If HHMOM = 2, 3, or 4, ask PV25. Else, go to box before PV26.

PV25. Does (CHILD)'s biological mother sometimes provide care for (him/her)?

DADBIMOM YES 1
NO..... 2

If HHDAD = 2, 3, or 4, ask PV26. Else, go to 1st box before PV27.

PV26. Does (CHILD)'s biological father sometimes provide care for (him/her)?

DADBIDAD YES 1
NO..... 2

Ask PV27 once per household.

If (PU9 or PU10 =1) (mother worked or was on vacation last week) and/or if (PV8 or PV9 =1) (father worked or was on vacation last week), then ask PV27. Else go to PWINTRO.

PV27. Some parents work because they have to for financial reasons, some work because it's interesting and rewarding for them, and some work for both these reasons. Would (you/one parent/(CHILD)'s mother/(CHILD)'s father⁹) stop working or work fewer hours to stay home with ((CHILD)/the children) if your family could afford it?

PWRKHOME YES 1
 NO..... 2

Household Characteristics

The following questions are asked only once per household.

PWINTRO. Now, a few questions about your household.

PW1. Do you...

HOWNHOME Own your home,..... 1
 Rent your home, or 2
 Have some other arrangement? 3

PW2. Besides (PHONE NUMBER), do you have other telephone numbers in your household, not including cellular phones?

HOTHNUM YES 1 (GO TO PW4)
 NO..... 2 (GO TO PW5)
 NOT MY NUMBER 3 (GO TO PW3)

PW3. [INTERVIEWER: ASK FOR AND RECORD THE TELEPHONE NUMBER REACHED. RECORD REASON FOR REACHING DIFFERENT TELEPHONE NUMBER.]

* TELEPHONE NUMBER REACHED _____
 AREA CODE CHANGE1
 OTHER NUMBER IN HOUSEHOLD.....2
 ORIGINAL NUMBER IS THAT OF ANOTHER HOUSEHOLD AND
 NUMBER IS BEING FORWARDED TO THIS HOUSEHOLD3
 NEVER HEARD OF ORIGINAL NUMBER4
 OTHER [RECORD EXPLANATION IN COMMENTS]5

If PW3 = 3, go to Close2. Else, for cases where PW2 = 3 (not number dialed), ask PW2 again with new number.

⁹ In households with one working parent who was the respondent, "you" was displayed. In households with two working parents, "one parent" was displayed. In households with a working mother who was not the respondent, "(CHILD)'s mother" was displayed. In households with a working father who was not the respondent, "(CHILD)'s father" was displayed. In households with no mother and no father and the respondent worked, "you" was displayed.

PW4. How many of these additional telephone numbers are for home use, not including cellular phones?

HNUMUSE NUMBER..... (GO TO BOX)

*If PW4 > 0 (other telephone numbers for home use), go to PW6.
Else, go to PW5.*

PW5. Besides this phone number, do you have any telephone numbers in your household that are used for computer or fax lines?

* YES 1 (GO TO PW6)
NO 2 (GO TO PW9)

PW6. How many of these additional telephone numbers are used for computer or fax lines?

* NUMBER..... (GO TO PW7)

PW7. Some households have telephone numbers that are used both for talking and for computer or fax lines. (Is the number/Are any of the numbers) used for (a) computer or fax line(s) ever answered for talking?

* YES 1 (GO TO BOX)
NO 2 (GO TO PW9)

*If PW6 = 1 (only 1 other telephone number for computer or fax),
autocode PW8= 1, and go to PW9. Else, ask PW8*

PW8. How many computer or fax telephone numbers are also answered for talking?

* NUMBER.....

PW9. So that we can group households geographically, may I have your ZIP code?

HZIPCODE/R ZIP CODE

PW10. In the past 3 years, that is, since (DATE), has your family received benefits from Temporary Assistance to Needy Families or TANF, AFDC, or your state welfare program?

HAFDC3YR YES 1 (GO TO PW11)
NO 2 (GO TO BOX BEFORE PW15)

PW11. Are you currently receiving benefits from TANF, AFDC, or your state welfare program?

HAFDCCUR YES 1 (GO TO BOX BEFORE PW15)
NO 2 (GO TO PW12)

PW12. What month and year did you stop receiving benefits from your state welfare program or Temporary Assistance to Needy Families (TANF)?

HSTOPMM |__| |__| MONTH
HSTOPYY |__| |__| |__| |__| YEAR

PW13. While you were receiving welfare benefits, did you receive money from the state government or welfare agency to help you pay for (child/before- or after-school) care costs (for any child)?

HGOVEVR YES 1
 NO..... 2

PW14. At any time since (MONTH, YEAR) have you received funds from the state government or welfare agency to help you pay for (child/before- or after-school) care costs (for any child)?

HGOVSINC YES 1 (GO TO BOX BEFORE PW15)
 NO..... 2 (GO TO PW16)

If number of children in household age 15 or younger = 1, and if all of ED24, EE28, and EG28 are not = 1, then skip PW15 and go to PW16. Else, ask PW15.

PW15. Is a state government or welfare agency currently helping you pay for any (child/before- or after-school) care costs (for any child)?

HGOVCUR YES 1
 NO..... 2

PW16. In the past 12 months, has your family received benefits from any of the following programs? How about...

		YES	NO
HWIC	a. Women, Infants, and Children, or WIC?	1	2
HFOODST	b. Food Stamps?	1	2
HMEDIC	c. Medicaid?	1	2
HCHIP	d. Child Health Insurance Program or CHIP?	1	2

PW17. In studies like this, households are sometimes grouped according to income. What was the total income of all persons in your household over the past year, including salaries or other earnings, interest, retirement, and so on for all household members?

Was it...
HINCMRNG \$25,000 or less, or 1 (READ SET 1)
 More than \$25,000? 2 (GO TO PW18)

PW18. Was it...
HINCM50K \$50,000 or less, or 1 (READ SET 2)
 More than \$50,000? 2 (READ SET 3)

Was it...
 [SET 1]
HINCOME \$5,000 or less 1
 \$5,001 to \$10,000 2
 \$10,001 to \$15,000 3
 \$15,001 to \$20,000, or 4
 \$20,001 to \$25,000? 5

[SET 2]
 \$25,001 to \$30,000 6
 \$30,001 to \$35,000 7
 \$35,001 to \$40,000 8
 \$40,001 to \$45,000, or 9
 \$45,001 to \$50,000 10

[SET 3]
 \$50,001 to \$60,000, 11
 \$60,001 to \$75,000, 12
 \$75,001 to \$100,000, or 13
 Over \$100,000? 14

*Ask PW18OV if
 (Number in HH = 2 and HINCOME <= 3) or
 (Number in HH = 3 and HINCOME <= 3) or
 (Number in HH = 4 and HINCOME <= 4) or
 (Number in HH = 5 and HINCOME <= 5) or
 (Number in HH = 6 and HINCOME <= 5) or
 (Number in HH = 7 and HINCOME <= 6) or
 (Number in HH = 8 and HINCOME <= 7) or
 (Number in HH >= 9 and HINCOME <= 8).
 Else, go to CLOSE2.*

PW18OV. What was your total household income last year, to the nearest thousand?

HINCMEXT AMOUNT \$□□,□□□

CLOSE1. Thank you, but we are only asking about children in a specific age or grade range. Please hold on for a moment while I check to see if there is anyone else I need to ask you about or anyone else I need to speak with.

CLOSE2. Those are all the questions I have about (CHILD). Please hold on for a moment while I check to see if there is anyone else I need to ask about. [THANK RESPONDENT]

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NHES:2001 BEFORE- AND AFTER-SCHOOL PROGRAMS AND ACTIVITIES INTERVIEW

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Before- and After-School Programs and Activities Interview

INTRO. [IF R WAS NOT SCREENER R AND THIS IS THE FIRST OR ONLY INTERVIEW FOR R: Hello, this is (INTERVIEWER). I'm calling for the U.S. Department of Education. We are conducting a voluntary and confidential national study about the educational experiences of children.]

I'd like to talk with you now about (CHILD). The interview is estimated to take (20/15) minutes or less.

Demographic Characteristics

PA1. First, I'd like to confirm (CHILD)'s age. In what month and year was (he/she) born?

MONTH YEAR

<i>CDOBMM</i>	1	JANUARY	7	JULY
<i>CDOBY</i>	2	FEBRUARY	8	AUGUST
	3	MARCH	9	SEPTEMBER
	4	APRIL	10	OCTOBER
	5	MAY	11	NOVEMBER
	6	JUNE	12	DECEMBER

*Calculate AGE2000 = child's age on December 31, 2000.
Calculate current age for display in PA2. If current age does not match screener age or birth month is current month, ask PA2. Else, go to box after PA2.*

PA2. That would mean that (CHILD) [is (AGE)/turns (AGE) this month]. Is that right?

- * YES 1 (GO TO BOX)
NO 2 (RETURN TO PA1)

If child was born after December 31, 2000, or AGE2000 > 15, go to CLOSE1. Else, go to PA3.

PA3. Is (CHILD)..
[IF R GIVES ETHNICITY (E.G., HISPANIC), PROBE FOR RACE.
IF NO RACE OR MORE THAN 1 RACE GIVEN, CODE 91.]

<i>CRACE</i>		White,	1	(GO TO PA4)
		Black,	2	(GO TO PA4)
		American Indian or Alaskan Native,	3	(GO TO PA4)
		Asian or Pacific Islander, or	4	(GO TO PA4)
		Some other race?	91	(GO TO PA3OV)

NOTE: Response categories shown in mixed upper and lower cases are read to the respondent by the interviewer. Those shown in uppercase are not read. Response categories in italics were added from "other, specify" responses.
Variables designated by /R appear on the restricted file only. Those designated by * do not appear on either the public or the restricted data files. They were used for administrative, verification, or coding purposes only.

PA3OV. [CODE RESPONSE IF PA3=91]

COTHRACE HISPANIC/LATINO/MEXICAN/SPANISH/

PUERTO RICAN 1 (AUTOCODE PA4=1 AND GO TO PA5)

MORE THAN ONE RACE/BIRACIAL/MULTIRACIAL 2 (GO TO PA4)

OTHER 91 (GO TO PA4)

COTHRAOS/R SPECIFY _____

PA4. Is (he/she) of Hispanic origin?

CHISPAN YES 1

NO 2

PA5. Was (CHILD) born in...

CBORNUS One of the 50 states or the District of Columbia 1 (GO TO BOX AFTER PA5OV)

One of the U.S. territories, [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS] 2 (GO TO PA5OV)

CTERROS/R SPECIFY _____

Or some other country? 3 (GO TO PA5OV)

CCONTOS/R SPECIFY _____

PA5OV. How old was (CHILD) when (he/she) first moved to the (United States/50 states or the District of Columbia)? [ROUND MONTHS OR FRACTIONS UP TO NEAREST YEAR.]

CMOVEAGE AGE

If AGE2000 >= 2, ask PA6. Else, go to box before PA7.

PA6. What language does (CHILD) speak most at home?

CSPEAK ENGLISH 1

SPANISH 2

ENGLISH AND SPANISH EQUALLY 3

ENGLISH AND ANOTHER LANGUAGE EQUALLY 4

CHILD DOESN'T SPEAK 5

ANOTHER LANGUAGE 91

CSPEAKOS/R SPECIFY _____

If this is interview for CHILD2, go to RELINTRO. Else, if this is interview for CHILD1, go to PA7.

PA7.

[SCREENER WAS COMPLETED ON (DATE)]

Now I'd like to ask about all the people who live in your household with (CHILD). First, I need to verify the names and ages of all the people (you told me about earlier/ who are already listed on my computer screen).

[What is (your first name/the first name of the next person?)]	[How old (are you/is (he/ she))?)	[Is this person male or female?]	D TO DELETE
*	AGE1-AGE11	SEX1-SEX11	*

If adult in household was sampled for adult interview, go to PA7VER2. Else if no adult sampled, go to PA7VER1.

PA7VER1.

[AFTER VERIFICATION COMPLETE]

Now, please tell me the first names and ages of all other people who normally live in your household.

PA7VER2.

[VERIFY THE NUMBER OF HOUSEHOLD MEMBERS LISTED ON THE MATRIX.]

Have we missed anyone who usually lives here who is temporarily away from home or living in a dorm at school, or any babies or small children?

*

MATRIX CORRECT 1
 RETURN TO MATRIX 2
 GO TO RESULT 3

RELINTRO.

Now I'd like to ask how all the people in your household are related to (CHILD).

If the respondent is the child's mother/father, copy relationship from Screener into RELATION and ask PA9/PA10, then ask PA8 for every other household member. If respondent is not the child's mother/father, copy relationship from Screener into RELATION and ask PA8 for every other household member.

PA8. [FOR EACH HOUSEHOLD MEMBER EXCEPT RESPONDENT:]
How is (PERSON) related to (CHILD)? [VERIFY IF KNOWN.]

- | | | | |
|---------------------------------|--|----|------------------------|
| RELATN1-
RELATN11 | MOTHER (BIRTH/ADOPTIVE/STEP/FOSTER)..... | 1 | (GO TO PA9) |
| | FATHER (BIRTH/ADOPTIVE/STEP/FOSTER)..... | 2 | (GO TO PA10) |
| | BROTHER, INCLUDING STEP,
ADOPTED, AND FOSTER..... | 3 | (GO TO BOX AFTER PA10) |
| | SISTER, INCLUDING STEP,
ADOPTED, AND FOSTER..... | 4 | (GO TO BOX AFTER PA10) |
| | GRANDMOTHER | 5 | (GO TO BOX AFTER PA10) |
| | GRANDFATHER | 6 | (GO TO BOX AFTER PA10) |
| | AUNT | 7 | (GO TO BOX AFTER PA10) |
| | UNCLE | 8 | (GO TO BOX AFTER PA10) |
| | COUSIN | 9 | (GO TO BOX AFTER PA10) |
| | OTHER RELATIVE | 10 | (GO TO BOX AFTER PA10) |
| RELTOS1/R
RELTOS11/R | SPECIFY _____ | | |
| | NONRELATIVE | 11 | (GO TO BOX AFTER PA10) |
| | SPECIFY _____ | | |
| | SAME SEX PARENT..... | 12 | (GO TO BOX AFTER PA10) |
| | SPECIFY _____ | | |

PA9. [Are you/Is (PERSON)] (CHILD)'s...

- | | | |
|----------------|-----------------------|---|
| MOMTYPE | Birth mother, | 1 |
| | Adoptive mother,..... | 2 |
| | Stepmother, or | 3 |
| | Foster mother?..... | 4 |

PA10. [Are you/Is (PERSON)] (CHILD)'s...

- | | | |
|----------------|-----------------------|---|
| DADTYPE | Birth father, | 1 |
| | Adoptive father,..... | 2 |
| | Stepfather, or | 3 |
| | Foster father?..... | 4 |

Set HHMOM:
*1 = birth/adoptive mother in household. 2 = step or foster mother. 3 = no mom and no dad, female R.
 4 = else.*

Set HHDAD:
1 = birth/adoptive father in household. 2 = step or foster father. 3 = no mom and no dad, male R. 4 = else.

Current School Status

If ECPP/ASPA Interview respondent was also the Screener respondent, copy responses to PB1 through PB7, and then go to box after PB7.

If AGE2000 >= 3, ask PB1. Else, go to box after PB7.

PB1. Now I'd like to talk with you about (CHILD)'s school experiences. Is (CHILD) attending (or enrolled in) (school/preschool, kindergarten, or school)?

ENROLL YES 1 (GO TO BOX)
 NO..... 2 (GO TO BOX)

If AGE2000 >= 5, ask PB2. Else, if AGE2000 = 3 or 4 and PB1 = 1 (enrolled), go to PB6. Else, if AGE2000 = 3 or 4 and PB1 = 2 (not enrolled) go to box after PB7.

PB2. Some parents decide to educate their children at home rather than send them to school. Is (CHILD) being schooled at home?

HOMESCHL YES 1 (GO TO PB3)
 NO..... 2 (GO TO 2ND BOX AFTER PB5)

PB3. So (CHILD) is being schooled at home instead of at school for at least some classes or subjects?

* YES 1 (GO TO PB4)
 NO 2 (AUTOCODE PB2=2 AND GO TO 2ND BOX AFTER PB5)

PB4. Is (CHILD) getting all of (his/her) instruction at home, or is (he/she) getting some at school and some at home?

HOMEALL ALL AT HOME 1 (GO TO PB7)
 SOME AT SCHOOL & SOME AT HOME 2 (GO TO PB5)

PB5. How many hours each week does (CHILD) usually go to a school for instruction? Please do not include time spent in extracurricular activities.

HOMSCHR HOURS..... (GO TO 1ST BOX BELOW)

If PB5 >= 9 hours, then set HOMSCFLG = 1 (attends a school for at least 9 hours per week). Else, HOMSCFLG= -1. Then, go to PB7.

If PB1 = 1 (enrolled) and (PB2 NE 1 or PB3 NE 1 (not in home school)), ask PB6. Else, if AGE2000 = 5 or 6 and PB1 = 2 (not enrolled) and (PB2 NE 1 or PB3 NE 1 (not in home school)), go to box after PB7. Else, if AGE2000 > 7 and PB1 = 2 (not enrolled) and (PB2 NE 1 or PB3 NE 1 (not in home school)), go to CLOSE1.

PB6. What grade or year is (CHILD) attending?
 [PROBE FOR T OR P: Is that before or after kindergarten?]

GRADE	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START	N	(GO TO FIRST BOX AFTER PB7)
	TRANSITIONAL KINDERGARTEN (BEFORE K)	T	(GO TO FIRST BOX AFTER PB7)
	KINDERGARTEN	K	(GO TO FIRST BOX AFTER PB7)
	PREFIRST GRADE (AFTER K)	P	(GO TO FIRST BOX AFTER PB7)
	FIRST GRADE	1	(GO TO FIRST BOX AFTER PB7)
	SECOND GRADE	2	(GO TO FIRST BOX AFTER PB7)
	THIRD GRADE	3	(GO TO FIRST BOX AFTER PB7)
	FOURTH GRADE	4	(GO TO FIRST BOX AFTER PB7)
	FIFTH GRADE	5	(GO TO FIRST BOX AFTER PB7)
	SIXTH GRADE	6	(GO TO FIRST BOX AFTER PB7)
	SEVENTH GRADE	7	(GO TO FIRST BOX AFTER PB7)
	EIGHTH GRADE	8	(GO TO FIRST BOX AFTER PB7)
	NINTH GRADE/FRESHMAN	9	(GO TO CLOSE 1)
	TENTH GRADE/SOPHOMORE	10	(GO TO CLOSE 1)
	ELEVENTH GRADE/JUNIOR	11	(GO TO CLOSE 1)
	TWELFTH GRADE/SENIOR	12	(GO TO CLOSE 1)
	ABOVE TWELFTH GRADE	13	(GO TO CLOSE 1)
	UNGRADED	U	(GO TO PB7)
	SPECIAL EDUCATION	S	(GO TO PB7)

[IF T: In this interview we will be referring to that as “kindergarten.”
 IF P: In this interview, we will be referring to that as “prefirst grade.”]

PB7. (What grade would (CHILD) be in if (he/she) were attending (school/a school with regular grades/
 What grade or year is (CHILD) attending)?
 [PROBE FOR T OR P: Is that before or after kindergarten?]

GRADEEQ	NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD START	N	(GO TO BOX)
	TRANSITIONAL KINDERGARTEN (BEFORE K)	T	(GO TO BOX)
	KINDERGARTEN	K	(GO TO BOX)
	PREFIRST GRADE (AFTER K)	P	(GO TO BOX)
	FIRST GRADE	1	(GO TO BOX)
	SECOND GRADE	2	(GO TO BOX)
	THIRD GRADE	3	(GO TO BOX)
	FOURTH GRADE	4	(GO TO BOX)
	FIFTH GRADE	5	(GO TO BOX)
	SIXTH GRADE	6	(GO TO BOX)
	SEVENTH GRADE	7	(GO TO BOX)
	EIGHTH GRADE	8	(GO TO BOX)
	NINTH GRADE/FRESHMAN	9	(GO TO CLOSE 1)
	TENTH GRADE/SOPHOMORE	10	(GO TO CLOSE 1)
	ELEVENTH GRADE/JUNIOR	11	(GO TO CLOSE 1)
	TWELFTH GRADE/SENIOR	12	(GO TO CLOSE 1)
	ABOVE TWELFTH GRADE	13	(GO TO CLOSE 1)
	UNGRADED, NO EQUIVALENT	U	(GO TO BOX)

[IF T: In this interview we will be referring to that as “kindergarten.”
 IF P: In this interview, we will be referring to that as “prefirst grade.”]

Set PATH:

I = AGE2000 = 0, 1, 2 (**Infants/Toddlers**)

N = [(AGE2000 >= 3 and AGE2000 <= 6) and PB1 = 2 (not enrolled) and (PB2 NE 1 (not in home school) or PB3 NE1)] or [PB6/PB7 (grade/equivalent) = N] or [PB7 (grade equivalent) = U and AGE2000 = 3 or 4] (**Preschoolers**)

S = [PB6/PB7 (grade/equivalent) = T, K, P (kindergarten) or 1, 2, 3, 4, 5, 6, 7, or 8 and (PB2 NE 1 or PB3 NE 1 (not in home school))] or [PB7 (grade equivalent) = U and AGE2000 >= 5 and <= 15 and (PB2 NE 1 or PB3 NE 1 (not in home school))] (**School-age**)

H = AGE2000 >= 5 and (PB2 = 1 and PB3 = 1 (home school)) and PB7 (grade equivalent) NE N (**Homeschoolers**)

If PATH = I or N, go to ECPP interview EDINTRO. If PATH = S, go to ASPA interview, SD1. If PATH = H, go to ASPA interview, SC1.

Homeschooling [Path = H]

SC1. Next, I have a few questions about homeschooling. What are the main reasons you decided to school (CHILD) at home? [CODE ALL THAT APPLY.]

HSRELIGN	RELIGIOUS REASONS	1
HSBETTER	CAN GIVE CHILD A BETTER EDUCATION AT HOME	2
HSOBJECT	OBJECT TO WHAT SCHOOL TEACHES	3
HSENVIRN	POOR LEARNING ENVIRONMENT AT SCHOOL	4
HSCHALNG	SCHOOL DOES NOT CHALLENGE CHILD	5
HSPRIVAT	WANT PRIVATE SCHOOL BUT CANNOT AFFORD IT	6
HSDESIRE	COULD NOT GET INTO A DESIRED SCHOOL	7
HSILL	CHILD HAS TEMPORARY ILLNESS	8
HSDISABL	CHILD HAS SPECIAL NEEDS/DISABILITY	9
HSCAREER	PARENT'S CAREER PREVENTS REGULAR SCHOOLING	10
HSAGE	CHILD NOT OLD ENOUGH FOR GRADE/TO ENTER SCHOOL	11
HSBEHAV	STUDENT BEHAVIORAL PROBLEMS	12
HSCHAR	TO DEVELOP CHARACTER/MORALITY	13
HSSCPROB	OTHER PROBLEMS WITH AVAILABLE PUBLIC/PRIVATE SCHOOLS	14
HSFAMLY	FAMILY REASONS	15
HSTRAN	TRANSPORTATION/DISTANCE/CONVENIENCE	16
HSOTHER	OTHER	91
HSOTHEOS/R	SPECIFY _____	

For each "yes" response to SC2a – g, ask corresponding SC2OV a–g question.

SC2. Sometimes local public schools or districts provide support or services to families who home school their children. Please tell me whether your local public school or district offers you the following kinds of support or services, whether you use them or not. How about...

		YES	NO
HSCURR	a. A detailed curriculum for one or more subjects?	1	2
HSMATLS	b. Do they offer books or materials for teaching any subject?	1	2
HSPAPLC	c. Do they offer a place where homeschooling <u>parents</u> can go for help or information, or meet with other homeschooling parents?	1	2
HSPAWEB	d. A Web site for <u>parents</u> who are homeschooling?	1	2
HSSTPLC	e. A place where homeschooled <u>students</u> can go to meet with other homeschooled students?	1	2
HSSTWEB	f. A Web site for homeschooled <u>students</u> ?	1	2
HSACTVS	g. The chance for (CHILD) to participate in sports or any other extracurricular activities?	1	2

SC2OV. [Sometimes local public schools or districts provide support or services to families who home school their children. Please tell me whether your local public school or district offers you the following kinds of support or services, whether you use them or not. How about...]

		YES	NO
HSCURRU	a. Have you used one of their curricula this school year?.....	1	2
HSMATLSU	b. Have you used any of those books or materials this school year?	1	2
HSPAPLCU	c. Have you used that place this school year?	1	2
HSPAWEBU	d. Have you used that Web site this school year?.....	1	2
HSSTPLCU	e. Has (CHILD) used that place this school year?	1	2
HSSTWEBU	f. Has (CHILD) used that Web site this school year?	1	2
HSACTVSU	g. Has (CHILD) participated in any extracurricular activities at a public school this school year?	1	2

If PB4 = 1 (child receives all of instruction at home), then ask SC3. Else, go to SC4.

SC3. Even though all of (CHILD)'s schooling is at home, does your local public school or district offer the chance for (him/her) to attend certain classes or subjects that you may not want to teach at home?

HSATTND	YES	1
	NO.....	2

SC4. Is any of (CHILD)'s home instruction taught by a teacher who is paid by your public school district to teach (him/her)?

HSTECHR	YES	1
	NO.....	2

School Characteristics [Path= S, H (HOMSCFLG=1)]

If PATH = S or (PATH=H and HOMSCFLG=1), go to next box. Else, go to box before SEINTRO.

If this is the interview for CHILD2 and SD12 = 1 in CHILD1's interview (both children attend same school) and respondent is the same for both interviews, copy responses to SD1 through SD11 from CHILD1's interview to CHILD2's interview and go to box before SEINTRO. Else, go to SD1.

SD1. Next let's talk about the school (CHILD) (goes to now/attends for some of (his/her) classes.) Does (he/she) go to a public or private school?

SPUBLIC PUBLIC..... 1 (GO TO SD2)
PRIVATE..... 2 (GO TO SD4)

SD2. Is it (his/her) regularly assigned school or a school that you chose?

SCHOICE ASSIGNED 1 (GO TO SD6)
CHOSEN..... 2 (GO TO SD3)
ASSIGNED SCHOOL IS SCHOOL OF CHOICE..... 3 (GO TO SD6)

SD3. Is (his/her) school in your assigned school district?

SDISRCT YES 1 (GO TO SD6)
NO..... 2 (GO TO SD6)

SD4. Is the school church-related or not church-related?

SRELGON CHURCH-RELATED 1 (GO TO SD5)
NOT CHURCH-RELATED 2 (GO TO SD6)

SD5. Is it a Catholic school?

SCATHLIC YES 1
NO..... 2

SD6. What is the lowest grade taught at (CHILD)'s school?

SLOW NURSERY/PRESCHOOL/PREKINDERGARTEN/HEAD STARTN
TRANSITIONAL KINDERGARTEN (BEFORE K)..... T
KINDERGARTEN K
PREFIRST GRADE (AFTER K)..... P
FIRST GRADE..... 1
SECOND GRADE..... 2
THIRD GRADE 3
FOURTH GRADE 4
FIFTH GRADE 5
SIXTH GRADE 6
SEVENTH GRADE 7
EIGHTH GRADE 8
NINTH GRADE/FRESHMAN 9
TENTH GRADE/SOPHOMORE 10
ELEVENTH GRADE/JUNIOR 11
TWELFTH GRADE/SENIOR 12

SD7. What is the highest grade taught at (his/her) school?

SHIGH	TRANSITIONAL KINDERGARTEN (BEFORE K).....	T
	KINDERGARTEN	K
	PREFIRST GRADE (AFTER K).....	P
	FIRST GRADE.....	1
	SECOND GRADE.....	2
	THIRD GRADE	3
	FOURTH GRADE	4
	FIFTH GRADE	5
	SIXTH GRADE	6
	SEVENTH GRADE	7
	EIGHTH GRADE	8
	NINTH GRADE/FRESHMAN	9
	TENTH GRADE/SOPHOMORE	10
	ELEVENTH GRADE/JUNIOR	11
	TWELFTH GRADE/SENIOR	12

SD8. Approximately how many students are enrolled in (CHILD)'s school? Would you say...
[IF RESPONDENT SAYS "DON'T KNOW," ASK: Do you know the number in (his/her) grade?]

SNUMSTUD	Under 300,	1	(GO TO SD9)
	300-599,.....	2	(GO TO SD9)
	600-999, or.....	3	(GO TO SD9)
	1,000 or more?.....	4	(GO TO SD9)
	NUMBER OF STUDENTS IN GRADE GIVEN.....	91	(GO TO SD8OV)

SD8OV. NUMBER OF STUDENTS IN GRADE □□□□
SNUMGRAD

SD9. At what time does (CHILD)'s school usually start?

SSTRTHR	HOUR.....	□□
SSTRTMN	MINUTE	□□
SSTRAMPM	AM.....	1
	PM.....	2

SD10. At what time does (his/her) school usually let out?

SENDHR	HOUR.....	□□
SENDMN	MINUTE	□□
SENDAMPM	AM.....	1
	PM.....	2

SD11. How long does it usually take for (CHILD) to get from home to school?

SSCHOMM MINUTES □□

If this is the interview for CHILD1 and two children in grades T, K, P, or 1-8 have been sampled in the same household, and for both children either PB1 = 1 or PB4 = 2, check highest and lowest grade at CHILD1's school (SD6 and SD7) against grade of CHILD2 (reported in Screener). If it is possible that CHILD1 and CHILD2 attend the same school and the respondent for both interviews is the same, ask SD12. If not possible, autocode SD12 = -1 and go to box before SEINTRO. Else, go to box before SEINTRO.

SD12. Does (CHILD1) go to the same school as (CHILD2)?

SSAME YES 1
 NO..... 2

Student Academic Performance and Behavior [Path = S, H (HOMSCFLG=1)]

If Path = S or (Path = H and HOMSCHFLG = 1), ask SE1. Else, go to PTINTRO.

SE1. Now I would like to ask you about (CHILD)'s grades during this school year. Overall, across all subjects (he/she) takes at school, does (he/she) get mostly...

SEGRADES A's, 1 (GO TO SE3)
 B's, 2 (GO TO SE3)
 C's, 3 (GO TO SE3)
 D's, 4 (GO TO SE3)
 F's, or 5 (GO TO SE3)
 Does (CHILD)'s school not give these grades? 6 (GO TO SE2)

SE2. Would you describe (his/her) work at school as...

SEGRADEQ Excellent, 1
 Above average, 2
 Average, 3
 Below average, or 4
 Failing? 5

SE3. Have any of (CHILD)'s teachers or (his/her) school contacted you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)) about any behavior problems (he/she) is having in school this year?

SEBEHAVR YES 1
NO..... 2

SE4. Have any of (his/her) teachers or (his/her) school contacted you (or (CHILD)'s (mother/stepmother/foster mother/father/stepfather/foster father/grandmother/grandfather/aunt/uncle/cousin) (or (the) other adult(s) in your household)) about any problems (he/she) is having with school work this year?

SESCHLWR YES 1
NO..... 2

SE5. During this school year, has (CHILD) had an out-of-school suspension or been expelled from school?

SESUEXP YES 1
NO..... 2

SE6. (Since starting kindergarten), has (CHILD) repeated (any grades/kindergarten)?

SEREPEAT YES 1 (GO TO BOX BEFORE SE7)
NO..... 2 (GO TO BOX AFTER SE7)

If PB6 or PB7 = T, K or P, go to box after SE7. Else, ask SE7.

SE7. What grade or grades did (he/she) repeat? [CODE ALL THAT APPLY.]
[DISPLAY RESPONSE OPTIONS ONLY UP TO CURRENT GRADE OR GRADE EQUIVALENT]

SEREPTK KINDERGARTEN K
SEREPT1 FIRST GRADE 1
SEREPT2 SECOND GRADE 2
SEREPT3 THIRD GRADE 3
SEREPT4 FOURTH GRADE 4
SEREPT5 FIFTH GRADE 5
SEREPT6 SIXTH GRADE 6
SEREPT7 SEVENTH GRADE 7
SEREPT8 EIGHTH GRADE 8

If Path = S go to SFINTRO. Else, go to PTINTRO.

Before/After School Arrangements [Path=S]

Relative Care

SFINTRO.

[FIRST SCHOOL-AGE INTERVIEW OR CALLBACK]

[The Department of Education is interested in learning about the kinds of arrangements parents might have for their children on school days during the hours when their children are not in school. I would like to ask you about different types of arrangements you may have for (CHILD) before or after school on a regular basis, whether or not there is a charge or fee, but not including occasional babysitting.]

[SECOND SCHOOL-AGE INTERVIEW]

[Now let's talk about any care (CHILD) receives from relatives before or after school.]

SF1. Is (CHILD) now receiving care from a relative other than a parent on a regular basis, for example, from grandparents, brothers or sisters, or any other relatives?

RCNOW YES 1 (GO TO SF2)
NO..... 2 (GO TO SGINTRO)

SF2. How many different regular care arrangements do you have with relatives for (CHILD) before or after school?

RCARRNEW¹⁰ ONE 1
TWO 2
THREE 3
FOUR OR MORE 4

Ask SF3 through SF280V for each relative care arrangement.

¹⁰ RCARRNEW is the counter-derived variable that indicates the total number of relative care arrangements in which a sampled child participates. The arrangements reported at SF2, SF29, and the correction screen at SK1 (where new arrangements could be added) were counted for this variable.

SF3. (Let's talk about the relative who provides the most care before or after school/Now let's talk about the next relative who provides care for (CHILD) before or after school.) Is the relative who cares for (CHILD) before or after school (his/her)/ Is that (CHILD)'s...

- RCTYPE1-RCYPE4** Grandmother, 1 (GO TO SF3OV)
- Grandfather, 2 (GO TO SF3OV)
- Aunt, 3 (GO TO SF3OV)
- Uncle, 4 (GO TO SF3OV)
- Brother, 5 (GO TO SF3OV)
- Sister, or 6 (GO TO SF3OV)
- Another relative? 7 (GO TO SF3OV)
- NOW SAYS NO OTHER RELATIVE ARRANGEMENT
[DISPLAY ONLY FOR 2ND OR HIGHER ARRANGEMENT] 9 (GO TO SGINTRO)

SF3OV. How old is (he/she/that person)?

RCAGE1-RCAGE4 YEARS □□

SF4. Is that care provided in your home or another home?

- RCPLACE1-RCPLACE4** OWN HOME 1 (GO TO SF5)
- OTHER HOME 2 (GO TO SF6)
- BOTH/VARIES 3 (GO TO SF6)

SF5 Does (CHILD)'s (RELATIVE) who provides this care live in your household?

- RCINHH1-RCINHH4** YES 1 (GO TO SF8)
- NO 2 (GO TO SF8)

SF6. How long does it usually take to go from your home to (his/her) (RELATIVE)'s home?

RCHOMM1-RCHOMM4 MINUTES □□

SF7. How long does it usually take to go from (CHILD)'s school to (his/her) (RELATIVE)'s home?

RCSCMM1-RCSCMM4 MINUTES □□

SF8. Does (CHILD) receive care from [his/her (RELATIVE)] before school, after school, or both?

- RCBFAFT1-RCBFAFT4** BEFORE SCHOOL 1
- AFTER SCHOOL 2
- BOTH 3

SF9. Is the care that (CHILD) receives from (his/her) (RELATIVE) regularly scheduled at least once each week?

- RCWEEK1-RCWEEK4** YES 1 (GO TO SF11)
- NO 2 (GO TO SF10)

SF10. Does (CHILD)'s (RELATIVE) care for (him/her) on some other regularly scheduled basis, at least once each month?

RCMONTH1- YES 1 (GO TO SF16)
RCMONTH4 NO..... 2 (GO TO BOX AFTER SF28OV)

SF11. How many days each week does (CHILD) receive care from (his/her) (RELATIVE) (before) (or) (after) school?

RCDAYS1- DAYS
RCDAYS4

If SF8= 1 or 3, (before-school care), ask SF12. Else, go to box before SF13.

SF12. How many hours each week does (CHILD) receive care from (his/her) (RELATIVE) before school?

RCHRSBF1- HOURS.....
RCHRSBF4

If SF8= 2 or 3, (after-school care), ask SF13. Else, go to box before SF14.

SF13. How many hours each week does (CHILD) receive care from (his/her) (RELATIVE) after school?

RCHRSAF1- HOURS.....
RCHRSAF4

If SF11 = 1, then go to box before SF15. Else, ask SF14.

SF14. On the days that (CHILD) receives care, that would be about (HOURS) per day, on average. Is that right?

* YES 1 (GO TO BOX BEFORE SF15)
NO..... 2 (CORRECTION SCREEN)

If SF8 = 2 or 3, ask SF15. Else, go to SF19.

SF15. How many of those hours, if any, occur after 6:00 pm. each week? [DISPLAY TOTAL HOURS]

RCAFT61- HOURS..... (GO TO SF19)
RCAFT64-

SF16. For how many weeks each month does (CHILD) receive care from (his/her) (RELATIVE)?

RCWKMO1- WEEKS.....
RCWKMO4

SF17. During (that week/those weeks), how many days each week does (CHILD) receive care from (his/her) (RELATIVE)?

RCDAYWK1- DAYS
RCDAYWK4

SF18. And during (that week/those weeks), how many hours each week does (CHILD) receive care from (his/her) (RELATIVE)?

RCHRWK1- HOURS.....
RCHRWK4

SF19. How many children are usually cared for together, in the same group at the same time, by (CHILD)'s (RELATIVE), counting (CHILD)? [PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT THE MAJORITY OF TIME THE CHILD IS IN CARE.]

RCKIDS1- NUMBER OF CHILDREN
RCKIDS4

SF20. Counting (CHILD)'s (RELATIVE), how many adults usually care for (him/her) at the same time during those out-of-school hours? [PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT THE MAJORITY OF TIME THE CHILD IS IN CARE]

RCADLTS1- NUMBER OF ADULTS
RCADLTS4

SF21. What language does (CHILD)'s (RELATIVE) speak most when caring for (him/her)?

RCSPEAK1- ENGLISH 1
RCSPEAK4 SPANISH 2
ANOTHER LANGUAGE 91
RCSPKOS1/R- SPECIFY _____
RCSPKOS4/R

If SF8 = 2 or 3, (after-school care), ask SF22. Else, go to SF23.

SF22. Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends with (his/her) (RELATIVE). During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

RCAEDUC1-RCAEDUC4	HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL.....	1
RCACOMP1-RCACOMP4	COMPUTERS	2
RCAREAD1-RCAREAD4	READING/WRITING (NON-SCHOOL-RELATED)	3
RCAART1-RCAART4	ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.)..	4
RCACHOR1-RCACHOR4	CHORES/WORK	5
RCAOUTP1-RCAOUTP4	OUTDOOR PLAY/ACTIVITIES/SPORTS.....	6
RCAINPL1-RCAINPL4	INDOOR PLAY	7
RCAPHON1-RCAPHON4	TELEPHONE	8
RCAEAT1-RCAEAT4	EATING/SNACKS.....	9
RCATV1-RCATV4	TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC ...	10
RCATALK1-RCATALK4	TALKING TO PARENT/CARE PROVIDER.....	11
RCAFRIE1-RCAFRIE4	TALKING WITH FRIENDS/SOCIALIZING ¹¹	12
RCAOTHE1-RCAOTHE4	OTHER	91
RCAOTHO1/R- RCAOTHO4/R	SPECIFY _____	

SF23. Does (CHILD) like this arrangement...

RCLIKE1-	Always,.....	1
RCLIKE4	Usually,	2
	Sometimes, or.....	3
	Hardly ever?.....	4

If SF4 = 1 (arrangement is in child's home), ask SF24 a, b, c, and e. Else, ask SF24 a-e.

SF24. How would you rate the following aspects of this arrangement on a scale from excellent to poor? How about...

		Excellent	Good	Fair	Poor
RCQUAL1-RCQUAL4	a. The quality of (CHILD)'s activities? Would you say excellent, good, fair, or poor?	1	2	3	4
RCAFFOR1-RCAFFOR4	b. The affordability of the arrangement?.....	1	2	3	4
RCRELIA1-RCRELIA4	c. The reliability of the arrangement?	1	2	3	4
RCTRANS1-RCTRANS4	d. Transportation of (CHILD) to and from the arrangement?....	1	2	3	4
RCSAFTY1-RCSAFTY4	e. (CHILD)'s safety and well-being in this arrangement?	1	2	3	4

SF25. Is there any charge or fee for the care (CHILD) receives from (his/her) (RELATIVE) (before) (or) (after) school, paid either by you or another person or agency?

RCFEE1-	YES	1	(GO TO SF26)
RCFEE4	NO.....	2	(GO TO BOX AFTER SF28OV)

¹¹ Response categories in italics were added from "other, specify" responses.

SF26. Do any of the following people or organizations help to pay for (CHILD)'s (RELATIVE) to care for (him/her)? How about...

		YES	NO
RCREL1-RCREL4	a. A relative of (CHILD) outside your household who provides money <u>specifically</u> for that care, not including general child support?	1	2
RCWELF1-RCWELF4	b. A social service, welfare, or child care agency?	1	2
RCEMPL1-RCEMPL4	c. An employer, not including a tax-free spending account for child care?	1	2
RCOTHER1-RCOTHER4	d. Someone else?	1	2
RCOTHEO1/R-RCOTHEO4/R	Who is that? _____		

SF27. How much does your household pay for (CHILD)'s (RELATIVE) to care for (him/her)? [IF NOTHING, ENTER ZERO.]

RCCOST1-RCCOST4 AMOUNT: \$.

RCUNIT1-RCUNIT4 UNIT:
 PER HOUR 1
 PER DAY 2
 PER WEEK 3
 PER MONTH 4
 PER YEAR 5
 BIWEEKLY 6
 OTHER 91
RCCSTOS1/R-RCCSTOS4/R SPECIFY _____

If SF27 = zero or number of children in the household age 15 or younger = 1, go to box after SF28OV. Else, ask SF28.

SF28. Is this amount for (CHILD) only or does it include other children in your household?

RCCSTHH1-RCCSTHH4 CHILD ONLY 1 (GO TO BOX AFTER SF28OV)
 CHILD AND OTHER(S) 2 (GO TO SF28OV)

SF28OV. How many children is this amount for, including (CHILD)?

RCCSTHN1-RCCSTHN4 NUMBER OF CHILDREN

If SF2 >= 2 (more than one relative care arrangement), return to SF3 until the number of arrangements in SF2 are completed. Else, go to SF29.

SF29. Does (CHILD) have another care arrangement with a relative on a regular basis?

* YES 1 (GO TO SF3)
 NO 2 (GO TO SGINTRO)

Nonrelative Care

SGINTRO. [FIRST SCHOOL-AGE INTERVIEW OR CALLBACK]

[Now let's talk about any care (CHILD) receives from someone not related to (him/her), either in your home or someone else's. This includes home child care providers or neighbors, but not day care centers or before- or after- school programs.]

[SECOND SCHOOL-AGE INTERVIEW]

[Now let's talk about any care (CHILD) receives from people that are not related to (him/her), not including day care centers or before- or after- school programs.]

SG1. Is (CHILD) now receiving care in your home or another home on a regular basis from someone who is not related to (him/her)?

NCNOW YES 1 (GO TO SG2)
 NO..... 2 (GO TO SH1)

SG2. How many different regular care arrangements do you have with nonrelatives for (CHILD) before or after school?

NCARRNEW¹² ONE 1
 TWO 2
 THREE 3
 FOUR OR MORE 4

Ask SG3 through SG28OV for each nonrelative care arrangement.

SG3. (Let's talk about the nonrelative who provides the most care before or after school/Now let's talk about the next nonrelative who provides care for (CHILD) before or after school.) Is that care provided in your own home or in another home?

**NCPLACE1-
 NCPLACE4** OWN HOME..... 1 (GO TO SG4)
 OTHER HOME 2 (GO TO SG5)
 BOTH/VARIES 3 (GO TO SG5)
 NOW SAYS NO OTHER NONRELATIVE ARRANGEMENT
 [DISPLAY ONLY FOR 2ND OR HIGHER ARRANGEMENT]..... 9 (GO TO SH1)

SG4 Does this person who cares for (CHILD) live in your household?

**NCINHH1-
 NCINHH4** YES 1 (GO TO SG7)
 NO..... 2 (GO TO SG7)

¹² NCARRNEW is the counter-derived variable that indicates the total number of nonrelative care arrangements in which a sampled child participates. The arrangements reported at SG2, SG29, and the correction screen at SK1 (where new arrangements could be added) were counted for this variable.

SG5. How long does it usually take to go from your home to that person's home?

NCHOMM1- MINUTES □□
NCHOMM4

SG6. How long does it usually take to go from (CHILD)'s school to that person's home?

NCSCMM1- MINUTES □□
NCSCMM4

SG7. Does (CHILD) receive that care before school, after school, or both?

NCBFAFT1- BEFORE SCHOOL 1
NCBFAFT4 AFTER SCHOOL..... 2
BOTH 3

SG8. Is the care that (CHILD) receives from that person regularly scheduled at least once each week?

NCWEEK1- YES 1 (GO TO SG10)
NCWEEK4 NO..... 2 (GO TO SG9)

SG9. Does (CHILD) receive care from that person on some other regularly scheduled basis, at least once each month?

NCMONTH1- YES 1 (GO TO SG15)
NCMONTH4 NO..... 2 (GO TO BOX AFTER SG28OV)

SG10. How many days each week does (CHILD) receive care from that person (before) (or) (after) school?

NCDAYS1- DAYS □
NCDAYS4

If SG7 = 1 or 3, (before-school care), ask SG11. Else, go to box before SG12.

SG11. How many hours each week does (CHILD) receive care from that person before school?

NCHRSBF1- HOURS..... □□
NCHRSBF4

If SG7 = 2 or 3, (after-school care), ask SG12. Else, go to box before SG13.

SG12. How many hours each week does (CHILD) receive care from that person after school?

NCHRSAF1- HOURS..... □□
NCHRSAF4

If SG10 = 1, then go to box before SG14. Else, ask SG13.

SG13. On the days that (CHILD) receives care, that would be about (HOURS) per day, on average. Is that right?

* YES 1 (GO TO BOX BEFORE SG14)
NO..... 2 (CORRECTION SCREEN)

If SG7 = 2 or 3, ask SG14. Else, go to SG18.

SG14. How many of those hours, if any, occur after 6:00 p.m. each week? [DISPLAY TOTAL HOURS]

**NCAFT61-
NCAFT64** HOURS.....□□ (GO TO SG18)

SG15. For how many weeks each month does (CHILD) receive care from that person?

**NCWKMO1-
NCWKMO4** WEEKS..... □

SG16. During (that week/those weeks), how many days each week does (CHILD) receive care from that person?

**NCDAYWK1-
NCDAYWK4** DAYS □

SG17. And during (that week/those weeks), how many hours each week does (CHILD) receive care from that person?

**NCHRWK1-
NCHRWK4** HOURS.....□□

SG18. Is that person age 18 or older?

**NCAGE1 -
NCAGE4** YES 1 (GO TO SG19)
NO..... 2 (GO TO SG18OV)

SG18OV. How old is that person?

**NCAGEYY1-
NCAGEYY4** YEARS□□

SG19. How many children are usually cared for together, in the same group at the same time, by that person, counting (CHILD)? [PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT THE MAJORITY OF TIME THE CHILD IS IN CARE.]

**NCKIDS1-
NCKIDS4** NUMBER OF CHILDREN□□

SG20. Counting that person, how many adults usually care for (CHILD) at the same time during those out-of-school hours? [PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT THE MAJORITY OF TIME THE CHILD IS IN CARE.]

**NCADLTS1-
NCADLTS4** NUMBER OF ADULTS □

SG21. What language does (CHILD)'s main care provider speak most when caring for (him/her)?

NCSPEAK1-	ENGLISH	1
NCSPEAK4	SPANISH	2
	ANOTHER LANGUAGE	91
NCSPKOS1/R-	SPECIFY _____	
NCSPKOS4/R		

*If SG7 = 2 or 3, (after-school care), ask SG22.
Else, go to SG23.*

SG22. Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends with your care provider. During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

NCAEDUC1-NCAEDUC4	HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL.....	1
NCACOMP1-NCACOMP4	COMPUTERS	2
NCAREAD1-NCAREAD4	READING/WRITING (NON-SCHOOL-RELATED)	3
NCAART1 NCAART4	ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.)..	4
NCACHOR1-NCACHOR4	CHORES/WORK	5
NCAOUTP1-NCAOUTP4	OUTDOOR PLAY/ACTIVITIES/SPORTS.....	6
NCAINPL1-NCAINPL4	INDOOR PLAY	7
NCAPHON1-NCAPHON4	TELEPHONE	8
NCAEAT1- NCAEAT4	EATING/SNACKS.....	9
NCATV1-NCATV4	TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC ...	10
NCATALK1-NCATALK4	TALKING TO PARENT/CARE PROVIDER.....	11
NCAFRIE1-NCAFRIE4	TALKING WITH FRIENDS/SOCIALIZING	12
NCAOTHE1-NCAOTHE4	OTHER	91
NCAOTHO1/R-	SPECIFY _____	
NCAOTHO4/R		

SG23. Does (CHILD) like this arrangement...

NCLIKE1-	Always,.....	1
NCLIKE4	Usually,	2
	Sometimes, or.....	3
	Hardly ever?.....	4

If SG3 = 1 (arrangement is in child's home), ask SG24 a, b, c, and e. Else, ask SG24 a-e.

SG24. How would you rate the following aspects of this arrangement that you have for (CHILD) with this care provider? How about...

	Excellent	Good	Fair	Poor
NCQUAL1-NCQUAL4 a. The quality of (CHILD)'s activities? Would you say excellent, good, fair, or poor?	1	2	3	4
NCAFFOR1-NCAFFOR4 b. The affordability of the arrangement?.....	1	2	3	4
NCRELIA1-NCRELIA4 c. The reliability of the arrangement?	1	2	3	4
NCTRANS1-NCTRANS4 d. Transportation of (CHILD) to and from the arrangement?....	1	2	3	4
NCSAFTY1-NCSAFTY4 e. (CHILD)'s safety and well-being in this arrangement?	1	2	3	4

SG25. Is there any charge or fee for the care (CHILD) receives from this person (before) (or) (after) school, paid either by you or another person or agency?

NCFEE1- YES 1 (GO TO SG26)
NCFEE4 NO..... 2 (GO TO BOX AFTER SG28OV)

SG26. Do any of the following people or organizations help to pay for (CHILD) to be cared for by that person? How about...

		YES	NO
NCREL1-NCREL4	a. A relative of (CHILD) outside your household who provides money <u>specifically</u> for that care, not including general child support?.....	1	2
NCWELF1-NCWELF4	b. A social service, welfare, or child care agency?	1	2
NCEMPL1-NCEMPL4	c. An employer, not including a tax-free spending account for child care?	1	2
NCOTHER1-NCOTHER4	d. Someone else?	1	2
NCOTHEO1/R	Who is that? _____		
NCOTHEO4/R			

SG27. How much does your household pay this person to care for (CHILD)?
 [IF NONE, ENTER ZERO.]

NCCOST1- AMOUNT: \$
NCCOST4

UNIT:

NCUNIT1- PER HOUR 1
NCUNIT4 PER DAY 2
 PER WEEK 3
 PER MONTH..... 4
 PER YEAR 5
 BIWEEKLY..... 6
 OTHER 91
NCCSTOS1/R- SPECIFY _____
NCCSTOS4/R

If SG27 = zero or number of children in the household age 15 or younger = 1, go to box after SG28OV. Else, ask SG28.

SG28. Is this amount for (CHILD) only or does it include other children in your household?

NCCSTHH1- CHILD ONLY 1 (GO TO BOX AFTER SG28OV)
NCCSTHH4 CHILD AND OTHER(S) 2 (GO TO SG28OV)

SG28OV. How many children is this amount for, including (CHILD)?

NCCSTHN1- NUMBER OF CHILDREN
NCCSTHN4

If SG2 >= 2 (more than one relative care arrangement), return to SG3 until the number of arrangements in SG2 are completed. Else, go to SG29.

SG29. Does (CHILD) have another care arrangement in a private home with a nonrelative on a regular basis?

* YES 1 (GO TO SG3)
 NO..... 2 (GO TO SH1)

Center-Based Programs

[FIRST SCHOOL-AGE INTERVIEW OR CALLBACK]

[Some children participate in before- or after-school programs that provide supervision and organized activities. These programs are usually held in a school or a center, and are different from individual activities like sports, scouts, or special lessons.]

SH1. Is (CHILD) now attending a before- or after- school program at a school or in a center, either on a scheduled or a drop-in basis?

CPSNOW YES 1 (GO TO SH2)
 NO..... 2 (GO TO SIINTRO)

SH2. How many different before or after school programs does (he/she) currently go to? Please count different programs, not different types of activities (he/she) may do at the same program.

CPARRNEW¹³ ONE 1
 TWO 2
 THREE 3
 FOUR OR MORE 4

Ask SH3 through SH36OV for each program.

SH3. (Let's talk about the program where (CHILD) spends the most time/Now let's talk about the next program in which (CHILD) participates.) Is (CHILD) signed up to attend the program on particular days and times?

**CPSIGNU1-
 CPSIGNU4** YES 1
 NO..... 2
 NOW SAYS NO OTHER CENTER-BASED ARRANGEMENT
 [DISPLAY ONLY FOR 2ND OR HIGHER ARRANGEMENT]..... 3 (GO TO SIINTRO)

¹³ CPARRNEW is the counter-derived variable that indicates the total number of center-based programs in which a sampled child participates. The arrangements reported at SH2, SH37, and the correction screen at SK1 (where new arrangements could be added) were counted for this variable.

SH4. Where is this program located? For example, is it in a church or synagogue, a school, a community center, its own building, or some other place?

- CPPLACE1-CPPLACE4**
- OWN HOME..... 1 (GO TO SH8)
 - ANOTHER HOME 2 (GO TO SH6)
 - A CHURCH, SYNAGOGUE OR OTHER PLACE OF WORSHIP 3 (GO TO SH6)
 - A PUBLIC SCHOOL (K-12) 4 (GO TO BOX BEFORE SH5)
 - A PRIVATE SCHOOL (K-12)..... 5 (GO TO BOX BEFORE SH5)
 - A COLLEGE OR UNIVERSITY 6 (GO TO SH6)
 - A COMMUNITY CENTER..... 7 (GO TO SH6)
 - A PUBLIC LIBRARY..... 8 (GO TO SH6)
 - ITS OWN BUILDING 9 (GO TO SH6)
 - A PLACE OF EMPLOYMENT OR BUSINESS 10 (GO TO SH6)
 - MORE THAN ONE PLACE 11 (GO TO SH4OV)
 - YOUTH ORGANIZATION 12 (GO TO SH6)
 - SOME OTHER PLACE 91 (GO TO SH4V)

SH4OV. (Where is that?/What are those places?)
CPPLCOS1/R-CPPLCOS4/R [LIST ALL PLACES.] _____ (GO TO SH6)

If (SD1 = 1 and SH4 = 5) or (SD1 = 2 and SH4 = 4), autocode SH5 = 2 and go to box before SH6.

SH5. Is that the school where (CHILD) attends (kindergarten/ (GRADE) grade)?

- CPPLACK1-CPPLACK4**
- YES 1
 - NO..... 2

*If SH5 = 1, (program is at child's school), autocode SH6 with response from SD11 (time from home to school).
Else, ask SH6.*

SH6. How long does it usually take to go from your home to that program?

- CPHOMM1-CPHOMM4**
- MINUTES □□

SH7. How long does it usually take to go from (CHILD)'s school to that program?

- CPSCMM1-CPSCMM4**
- MINUTES □□

SH8. Does (CHILD) go to that program before school, after school, or both?

- CPBFAFT1-CPBFAFT4**
- BEFORE SCHOOL 1
 - AFTER SCHOOL..... 2
 - BOTH 3

SH9. Does (he/she) go to the program on a regularly scheduled basis at least once each week?

- CPWEEK1-CPWEEK4**
- YES 1 (GO TO SH11)
 - NO..... 2 (GO TO SH10)

SH10. Does (CHILD) go to the program on some other regularly scheduled basis, at least once each month?

CPMONTH1- YES 1 (GO TO SH16)
CPMONTH4 NO..... 2 (GO TO BOX AFTER SH36OV)

SH11. How many days each week does (CHILD) go to the program?

CPDAYS1- DAYS
CPDAYS4

If SH8 = 1 or 3, (before-school care), ask SH12. Else, go to box before SH13.

SH12. Other than regular school hours, how many hours each week does (CHILD) go to the program before school?

CPHRBF1- HOURS.....
CPHRBF4

If SH8 = 2 or 3, (after-school care), ask SH13. Else, go to box before SH14.

SH13. Other than regular school hours, how many hours each week does (CHILD) go to the program after school?

CPHRSAF1- HOURS.....
CPHRSAF4

If SH11 = 1, go to box before SH15. Else, ask SH14.

SH14. On the days that (CHILD) goes to the program, that would be about (HOURS) per day, on average. Is that right?

* YES 1 (GO TO BOX BEFORE SH15)
NO..... 2 (CORRECTION SCREEN)

If SH8 = 2 or 3, ask SH15. Else, go to SH19.

SH15. How many of those hours, if any, occur after 6:00 pm. each week? [DISPLAY HOURS]

CPAFT61- HOURS..... (GO TO SH19)
CPAFT64

SH16. For how many weeks each month does (CHILD) go to that program?

CPWKMO1- WEEKS.....
CPWKMO4

SH17. During (that week/those weeks), how many days each week does (CHILD) go to that program?

CPDAYWK1- DAYS
CPDAYWK4

SH18. And during (that week/those weeks), how many hours each week does (CHILD) go to that program?

CPHRWK1- HOURS.....
CPHRWK4

SH19. How many children are usually in (CHILD)'s group, at the same time, at that program, counting (CHILD)? [PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT MAJORITY OF TIME CHILD IS AT PROGRAM.]

CPKIDS1- NUMBER OF CHILDREN
CPKIDS4

SH20. How many adults usually are in (CHILD)'s group, at the same time, at that program? [PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT MAJORITY OF TIME CHILD IS AT PROGRAM.]

CPADLTS1- NUMBER OF ADULTS
CPADLTS4

SH21. Are the children in (CHILD)'s group within the program about the same age as (him/her), mostly older, or mostly younger?

CPCHAGE1- ABOUT THE SAME AGE..... 1
CPCHAGE4 MOSTLY OLDER 2
MOSTLY YOUNGER..... 3
SOME OLDER, SOME YOUNGER 4

SH22. What language does (CHILD)'s care provider or teacher at that program speak most when with (him/her)?

CPSPEAK1- ENGLISH 1
CPSPEAK4 SPANISH 2
ANOTHER LANGUAGE 91
CPSPKOS1/R- SPECIFY _____
CPSPKOS4/R

If SH8 = 1 or 3, (before-school program), ask SH23. Else, go to box before SH24.

SH23. Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends at this program. During those before-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

CPBEDUC1-CPBEDUC4	HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL.....	1
CPBCOMP1- CPBCOMP4	COMPUTERS	2
CPBREAD1-CPBREAD4	READING/WRITING (NON-SCHOOL-RELATED)	3
CPBART1-CPBART4	ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.)..	4
CPBCHOR1-CPBCHOR4	CHORES/WORK	5
CPBOUTP1-CPBOUTP4	OUTDOOR PLAY/ACTIVITIES/SPORTS.....	6
CPBINPL1-CPBINPL4	INDOOR PLAY	7
CPBPHON1-CPBPHON4	TELEPHONE	8
CPBEAT1-CPBEAT4	EATING/SNACKS.....	9
CPBTV1-CPBTV4	TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC ...	10
CPBTALK1-CPBTALK4	TALKING TO PARENT/CARE PROVIDER.....	11
CPBFRIE1-CPBFRIE4	TALKING WITH FRIENDS/SOCIALIZING	12
CPBOTHE1-CPBOTHE4	OTHER	91
CPBOTH01/R-	SPECIFY _____	
CPBOTH04/R		

If SH8 = 2 or 3, (after-school program), ask SH24. Else, go to SH25.

SH24. (Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends at this program.) During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

CPAEDUC1-CPAEDUC4	HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL.....	1
CPACOMP1-CPACOMP4	COMPUTERS	2
CPAREAD1-CPAREAD4	READING/WRITING (NON-SCHOOL-RELATED)	3
CPAART1-CPAART4	ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.)..	4
CPACHOR1-CPACHOR4	CHORES/WORK	5
CPAOUTP1-CPAOUTP4	OUTDOOR PLAY/ACTIVITIES/SPORTS.....	6
CPAINPL1-CPAINPL4	INDOOR PLAY	7
CPAPHON1-CPAPHON4	TELEPHONE	8
CPAEAT1-CPAEAT4	EATING/SNACKS.....	9
CPATV1-CPATV4	TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC ...	10
CPATALK1-CPATALK4	TALKING TO PARENT/CARE PROVIDER.....	11
CPAFRIE1-CPAFRIE4	TALKING WITH FRIENDS/SOCIALIZING	12
CPAOTHE1-CPAOTHE4	OTHER	91
CPAOTH01/R-	SPECIFY _____	
CPAOTH04/R		

SH25. Does the program set aside time for physical activities like sports or active games?

CPPHYS1-	YES	1
CPPHYS4	NO.....	2

SH26. Does the program set aside time for (CHILD) to do homework?

CPHOMWK1-	YES	1
CPHOMWK4	NO.....	2

If SH23 or SH24 = 2, autocode SH27 to 1 and go to SH28. Else, ask SH27.

SH27. Does (CHILD) have the opportunity to use a computer at the program?

CPCMPOP1- YES 1
CPCMPOP4 NO..... 2

SH28. Does the program inform you about (his/her) daily activities?

CPINFOR1- YES 1
CPINFOR4 NO..... 2

SH29. Does (CHILD) have any close friends at that program?

CPFRND1- YES 1
CPFRND4 NO..... 2

If program-eligible sibling in household (sibling in K-8), go to SH30. Else, go to SH31.

SH30. Does (CHILD) have a sibling at that program?

CPSIB1- YES 1
CPSIB4 NO..... 2

SH31. Does (CHILD) like this program...

CPLIKE1- Always,..... 1
CPLIKE4 Usually, 2
 Sometimes, or..... 3
 Hardly ever?..... 4

If SH4 = 1, (program is in child's home), ask SH32 a, b, c, and e. Else, ask SH32 a-e.

SH32. How would you rate the following aspects of (CHILD)'s program? How about...

		Excellent	Good	Fair	Poor
CPQUAL1-CPQUAL4	a. The quality of (CHILD)'s activities? Would you say excellent, good, fair, or poor?	1	2	3	4
CPAFFOR1-CPAFFOR4	b. The affordability of the arrangement?	1	2	3	4
CPRELIA1-CPRELIA4	c. The reliability of the arrangement?	1	2	3	4
CPTRANS1-CPTRANS4	d. Transportation of (CHILD) to and from the arrangement? ..	1	2	3	4
CPSAFETY1-CPSAFETY4	e. (CHILD)'s safety and well-being in this arrangement?.....	1	2	3	4

SH33. Is there any charge or fee for the program, paid either by you or another person or agency?

CPFEE1- YES 1 (GO TO SH34)
 CPFEE4 NO..... 2 (GO TO BOX AFTER SH360V)

SH34. Do any of the following people or organizations help to pay for (CHILD) to go to that program? How about...

		YES	NO
CPREL1-CPREL4	a. A relative of (CHILD) outside your household who provides money <u>specifically</u> for that program, not including general child support?.....	1	2
CPWELF1-CPWELF4	b. A social service, welfare, or child care agency?.....	1	2
CPEMPL1-CPEMPL4	c. An employer, not including a tax-free spending account for child care?	1	2
CPOTHER1-CPOTHER4	d. Someone else?	1	2
CPOTHEO1/R-CPOTHEO4/R	Who is that? _____		

SH35. How much does your household pay for (CHILD) to go to the program?
 [IF NOTHING, ENTER ZERO.]

CPCOST1- AMOUNT: \$
 CPCOST4

UNIT:
 CPUNIT1- PER HOUR 1
 CPUNIT4 PER DAY 2
 PER WEEK..... 3
 PER MONTH..... 4
 PER YEAR 5
 BIWEEKLY 6
 OTHER 91
 SPECIFY _____

If SH35 = zero or number of children in household age 15 or younger = 1, go to box after SH360V. Else, ask SH36.

SH36. Is this amount for (CHILD) only or does it include other children in your household?

CPCSTHH1- CHILD ONLY 1 (GO TO BOX AFTER SH360V)
 CPCSTHH4 CHILD AND OTHER(S) 2 (GO TO SH360V)

SH360V. How many children is this amount for, including (CHILD)?

CPCSTHN1- NUMBER OF CHILDREN
 CPCSTHN4

If SH2 >= 2 (more than one program), return to SH3 until the number of programs in SH2 are completed. Else, go to SH37.

SH37. Does (CHILD) go to another before- or after-school program at a school or in a center?

* YES 1 (GO TO SH3)
 NO..... 2 (GO TO SIINTRO)

Before- and After-School Activities

SIINTRO.

[FIRST SCHOOL-AGE INTERVIEW OR CALLBACK]

[Now let's talk about any activities that (CHILD) might do on weekdays outside of school hours that are not part of a before- or after-school program. These might include activities such as organized sports, music lessons, scouts, or religious education.]

[SECOND SCHOOL-AGE INTERVIEW]

[Now let's talk about any activities (CHILD) might do outside of school hours.]

SI1. (Not counting the program(s) we have already talked about,) Is (CHILD) participating in any activities on weekdays before or after school on a regular basis?

ASNOW YES 1 (GO TO SI2)
 NO..... 2 (GO TO SJ1)

SI2. Since the beginning of the school year, has (CHILD) participated in any of the following kinds of before- or after-school activities? How about... [IF YES: Were any of those activities provided by (CHILD)'s school?]

		YES	NO		YES	NO	
ASARTS	a. Arts, like music, dance, or painting?	1	2		1	2	ASSCARTS
ASSPORT	b. Sports?.....	1	2		1	2	ASSCSPOR
ASCLUB	c. Clubs, like yearbook, debate, or a book club?.....	1	2		1	2	ASSCCLUB
ASACAD	d. Other academic activities, like tutoring, or math lab? ...	1	2		1	2	ASSCACAD
ASVOLUN	e. Volunteer work or community service?.....	1	2		1	2	ASSCVOLU

If SI2f = 1 and SD1 = 2 (child is in a private school), ask SI2f_followup (on whether child's school provided the activity). Else, go to SI2g.

ASRELI	f. Religious activities or instruction?.....	1	2		1	2	ASSCRELI
ASSCOUT	g. Scouts?	1	2				
ASOTHER	i. Any other activities?	1	2		1	2	ASSCOTHR
ASOTHEOS/R	SPECIFY _____						

SI3. Does (CHILD) currently participate in activities or lessons before or after school on a regularly scheduled basis at least once each week?

ASWEEK YES 1 (GO TO SI5)
 NO..... 2 (GO TO SI4)

SI4. Does (he/she) currently participate in activities or lessons before or after school on a regularly scheduled basis at least once each month?

ASMONTH YES 1 (GO TO SI5)
NO..... 2 (GO TO SJ1)

SI5. Does (CHILD) participate in those activities or lessons before school, after school, or both?

ASBFAFT BEFORE SCHOOL 1
AFTER SCHOOL..... 2
BOTH 3

If SI3 = 1, go to SI9. Else, ask SI6.

SI6. For how many weeks each month does (CHILD) participate in activities or lessons (before) (or) (after) school?

ASWKMO WEEKS.....

SI7. During (that week/those weeks), how many days each week does (CHILD) do activities or lessons?

ASDAYWK DAYS

SI8. And during (that week/those weeks), how many hours each week does (CHILD) do activities or lessons?

ASHRWK HOURS..... (GO TO SJ1)

SI9. Does (CHILD)'s participation in these activities help to cover the hours when you need adult supervision for (him/her)?

ASCOVER YES 1
NO..... 2

SI10. How many days each week does (CHILD) currently participate in activities or lessons (before) (or) (after) school?

ASDAYS DAYS

If SI5 = 1 or 3, (before-school activities), ask SI11. Else, go to box before SI12.

SI11. How many hours each week does (CHILD) currently participate in activities or lessons before school?

ABSHRS HOURS.....

If SI5 = 2 or 3, (after-school activities), ask SI12. Else, go to box before SI13.

SI12. How many hours each week does (CHILD) currently participate in activities or lessons after school?

ASHRS HOURS.....□□

If SI10 = 1, go to box before SI14. Else, ask SI13.

SI13. On the days that (CHILD) takes part in activities or lessons, that would be about (HOURS) per day on average. Is that correct?

* YES 1 (GO TO BOX BEFORE SI14)
NO..... 2 (CORRECTION SCREEN)

If SI5 = 2 or 3, (after-school activities), ask SI14. Else, go to SJ1.

SI14. How many of those hours, if any, occur after 6:00 pm. each week? [DISPLAY TOTAL HOURS]

ASAFT6 HOURS.....□□

Self-Care

SJ1. Sometimes children are able to spend time responsible for themselves, either at home or somewhere else, without anyone around to supervise. Not counting times when an adult is at home and (CHILD) is outside playing, is (CHILD) responsible for (himself/herself) before or after school on a regular basis?

SCSELF YES 1 (GO TO BOX BEFORE SJ1OV)
NO..... 2 (GO TO BOX BEFORE SK1)

If any RELATION = 3 or 4 (brother or sister) and AGE < AGE2000 (younger sibling in the household), ask SJ1OV. Else, go to SJ2.

SJ1OV. Is (he/she) also responsible for (his/her) [(brother)(s) (and) (sister)(s)] during these hours?

SCRESIB YES 1
NO..... 2

SJ2. Is (CHILD) responsible for (himself/herself) before school, after school, or both?

SCBFAFT BEFORE SCHOOL 1
AFTER SCHOOL..... 2
BOTH 3

SJ3. Is (he/she) responsible for (himself/herself) (before) (or) (after) school on a regular basis, at least once each week?

SCWEEK YES 1 (GO TO SJ5)

NO..... 2 (GO TO SJ4)

SJ4. Is (he/she) responsible for (himself/herself) (before) (or) (after) school on a regular basis, at least once each month?

SCMONTH YES 1 (GO TO SJ9)

NO..... 2 (GO TO BOX BEFORE SK1)

SJ5. How many days each week is (CHILD) responsible for (himself/herself) (before) (or) (after) school?

SCDAYS DAYS

If SJ2 = 1 or 3, (self-care before-school), ask SJ6. Else, go to box before SJ7.

SJ6. How many hours each week is (CHILD) responsible for (himself/herself) before school?

SCHRSBF HOURS.....

If SJ2 = 2 or 3, (self-care after-school), ask SJ7. Else, go to box before SJ12.

SJ7. How many hours each week is (CHILD) responsible for (himself/herself) after school?

SCHRSAF HOURS.....

SJ8. How many of those hours, if any, occur after 6:00 pm. each week? [DISPLAY HOURS]

SCAFT6 HOURS..... (GO TO BOX BEFORE SJ12)

SJ9. For how many weeks each month is (CHILD) responsible for (himself/herself) (before) (or) (after) school?

SCWKMO WEEKS.....

SJ10. During (that week/those weeks), how many days each week is (CHILD) responsible for (himself/herself) (before) (or) (after) school?

SCDAYWK DAYS

SJ11. And during (that week/those weeks), how many hours each week is (CHILD) responsible for (himself/herself) (before) (or) (after) school?

SCHRWK HOURS.....

*If SJ2 = 2 or 3, (self-care after-school), ask SJ12.
Else, go to box before SJ14.*

SJ12. Where does (CHILD) usually spend that time after school?
[CODE ALL THAT APPLY.]

- SCAHOMI** OWN HOME/INSIDE 1
- SCAHOMO** OWN HOME/OUTSIDE 2
- SCARELA** A RELATIVE'S HOME 3
- SCAFRND** A FRIEND'S HOME 4
- SCANEIG** A NEIGHBOR'S HOME 5
- SCAPUBL** A PUBLIC PLACE, FOR EXAMPLE, A LIBRARY OR MALL 6
- SCACENT** A COMMUNITY OR RECREATIONAL CENTER 7
- SCAOUT** OUTDOORS 8
- SCASCHL** A SCHOOL 9
- SCAPLOTH** OTHER 91
- SCAPLOS/R** SPECIFY _____

SJ13. During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

- SCAEDUC** HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL 1
- SCACOMP** COMPUTERS 2
- SCAREAD** READING/WRITING (NON-SCHOOL-RELATED) 3
- SCAART** ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) .. 4
- SCACHOR** CHORES/WORK..... 5
- SCAOUTPL** OUTDOOR PLAY/ACTIVITIES/SPORTS 6
- SCAINPLA** INDOOR PLAY 7
- SCAPHON** TELEPHONE..... 8
- SCAEAT** EATING/SNACKS 9
- SCATV** TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC 10
- SCATALK** TALKING TO PARENT/CARE PROVIDER 11
- SCAFRIE** TALKING WITH FRIENDS/SOCIALIZING..... 12
- SCAOTHER** OTHER 91
- SCAOTHOS/R** SPECIFY _____

If SI1 = 1 (before- or after school activities) AND any response to SJ12 > 2 (child is somewhere other than home during after-school self-care) or SI1 =1 and SJ2 = 1, then ask SJ14. Else, go to SJ15.

SJ14. Earlier you told me about (before-) (and) (after-) school activities in which (CHILD) participates. Does the time when (he/she) is responsible for (himself/herself) overlap with the time (he/she) participates in those activities?

SCOVRLP YES 1 (GO TO SJ14OV)
 NO..... 2 (GO TO SJ15)

SJ14OV. How many of the (HOURS) hours each week that (CHILD) is responsible for (himself/herself) overlap with the activities you told me about earlier?

SCOVHRH HOURS: _____ (EDIT: Cannot exceed hours in SJ6 and SJ7or SJ11)

SJ15. Can (CHILD) reach you (or) (his/her) (parents) (mother/stepmother/foster mother) (or) (father/stepfather/foster father) (or another adult in the household) whenever (he/she) might need to during out-of-school hours?

SCREACH YES 1
 NO..... 2

SJ16. Does (CHILD) like this arrangement, that is, being responsible for (himself/herself),...

SCLIKE Always,..... 1
 Usually, 2
 Sometimes, or 3
 Hardly ever?..... 4

Arrangement Confirmation and Continuity [Path = S]

If SF1, SG1, SH1, SI9, and SJ1 all = 2 (child has no current care arrangements), or SF9, SG8, SH9, SI3, and SJ3 = 2 (all arrangements do not occur at least once each week) then go to box before SK2. Else, ask SK1 for all arrangements that occur at least once each week. Include before- or after-school activities only if activities are for adult supervision (SI9 = 1).

SK1. Now I'd like to confirm the out-of-school arrangement(s) that (CHILD) has at least once each week.

I've recorded the following arrangement(s).

- (ARRANGEMENT 1)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 2)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 3)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 4)..... (LOCATION; DAYS & HOURS/WEEK)
- (ARRANGEMENT 5)..... (LOCATION; DAYS & HOURS/WEEK)

That's a total of (HOURS) hours each week. Is that right?

- * YES, CORRECT 1 (GO TO SK2)
- NO, ADD ARRANGEMENT 2 (CORRECTION SCREENS)¹⁴
- NO, DELETE ARRANGEMENT 3 (CORRECTION SCREENS)
- NO, CHANGE INFORMATION 4 (CORRECTION SCREENS)

If SF1, SG1, SH1, SI9 and SJ1 NE 1 (child does not participate in nonparental care or programs), go to SK4. Else, ask SK2.

SK2. What arrangements do you have for (CHILD) on days when school is scheduled to be closed, such as school holidays or teacher inservice days?
[CODE ALL THAT APPLY.]

- PCMOMHM** MOTHER STAYS HOME 1
- PCDADHM** FATHER STAYS HOME 2
- PCNONRS** NONRESIDENT PARENT 3
- PCSIB** BROTHER OR SISTER..... 4
- PCRELA** RELATIVE CARE (OTHER THAN BROTHER OR SISTER)..... 5
- PCNREL** NONRELATIVE CARE (NEIGHBOR, FRIEND, BABYSITTER)..... 6
- PCSELF** CHILD TAKES CARE OF HIMSELF/HERSELF 7
- PCCENT** CENTER-BASED OR SCHOOL-BASED PROGRAM 8
- PCMOMWK** MOTHER TAKES CHILD TO WORK 9
- PCDADWK** FATHER TAKES CHILD TO WORK 10
- PCSSEXHM** SAME SEX PARENT STAYS HOME 11
- PCAROTH** OTHER 91
- PCAROS/R** SPECIFY _____

If more than one response to SK2 (more than one backup arrangement), ask SK3. Else, autocode SK3 = SK2 and go to SK4.

¹⁴ The correction screens permitted the interviewer to: 1) correct the location and the number of days and hours for all arrangements, as well as correct the type of relative caregiver, whether an arrangement takes place before or after school; 2) identify any duplicate arrangements so that one can be deleted; and 3) add an arrangement that was omitted. If another arrangement was added, the CATI system cycled through the appropriate set of questions (e.g., relative, nonrelative, center) to collect relevant items.

SK3. Which of these other arrangements do you use the most on those days?

PCMOST	MOTHER STAYS HOME	1
	FATHER STAYS HOME	2
	NONRESIDENT PARENT	3
	BROTHER OR SISTER.....	4
	RELATIVE CARE (OTHER THAN BROTHER OR SISTER).....	5
	NONRELATIVE CARE (NEIGHBOR, FRIEND, BABYSITTER).....	6
	CHILD TAKES CARE OF HIMSELF/HERSELF	7
	CENTER-BASED OR SCHOOL-BASED PROGRAM	8
	MOTHER TAKES CHILD TO WORK	9
	FATHER TAKES CHILD TO WORK	10
	SAME SEX PARENT STAYS HOME	11
	MOTHER AND FATHER TAKE CHILD TO WORK ABOUT EQUALLY	12
	MOTHER AND FATHER STAY HOME ABOUT EQUALLY	13
OTHER	91	
PCMOSTOS/R	SPECIFY _____	

SK4. (Other than the arrangement(s) (he/she) has now,) since the school year started, have you used any other out-of-school arrangements for (CHILD) on a regular basis, (including (CHILD) being responsible for (himself/herself))? Please do not include activities or lessons, like sports or piano.

PCOTHER	YES	1	(GO TO SK5)
	NO.....	2	(GO TO BOX BEFORE SL1)

SK5. How many other out-of-school arrangements have you used for (CHILD) on a regular basis since the beginning of the school year [, not counting the ones (he/she) has now]?

PCNUM NUMBER.....

SK6. (Let's start with the most recent of those other arrangements or programs./Now let's talk about the second most recent arrangement.) Who provided that care or program? Was it ...

PCWHO1- PCWHO2	A relative such as a grandparent or a brother or sister;	1	(GO TO SK7)
	A nonrelative such as a home child care provider or neighbor;.....	2	(GO TO SK7)
	A center-based program;.....	3	(GO TO SK8)
	A community recreation program, pool, or supervised playground;	4	(GO TO SK8)
	Did (he/she) take care of (himself/herself);.....	5	(GO TO SK8)
	Or did you have some other arrangement?	91	(GO TO SK8)
PCWHOOS1/R- PCWHOOS2/R	SPECIFY _____		

SK7. Did that (relative/nonrelative) care for (CHILD) in your own home or in another home?

PCPLACE1- PCPLACE2	OWN HOME.....	1
	OTHER HOME	2
	BOTH/VARIES	3

SK8. When did that arrangement start and end? That is, in what month and year?
 [MUST HAVE ENDED SINCE THIS PAST SEPTEMBER.]

PCSTRM1-PCSTRM2 START MONTH [] [] START YEAR [] [] [] []
 PCSTRY1-PCSTRY2
 PCENDMM1 PCENDMM2 END MONTH [] [] END YEAR [] [] [] []
 PCENDYY1-PCENDYY2

SK9. What is the main reason that arrangement ended?
 [PROBE: (IF MORE THAN ONE REASON) Which would you say was the main reason?]

- PCREASN1- PROVIDER CLOSED/STOPPED PROVIDING CARE 1
 - PCREASN2 CHILD EXCEEDED AGE OF OLD ARRANGEMENT 2
 - CHILD REACHED AGE FOR NEW ARRANGEMENT 3
 - PARENT UNHAPPY WITH ARRANGEMENT 4
 - CHILD UNHAPPY WITH ARRANGEMENT 5
 - CARE PROVIDER WAS UNABLE TO CARE FOR CHILD'S
 SPECIAL NEEDS 6
 - WANTED EDUCATIONAL ARRANGEMENT 7
 - PREFERRED ARRANGEMENT BECAME AVAILABLE 8
 - COULD NO LONGER AFFORD CARE/ARRANGEMENT 9
 - PARENT CHANGED JOB OR SCHEDULE 10
 - RESPONDENT/CHILD MOVED 11
 - PARENT STOPPED WORKING/FINISHED SCHOOL 12
 - ARRANGEMENT WAS TEMPORARY/SEASONAL 13
 - TRANSPORTATION DIFFICULTIES 14
 - OTHER 91
- PCREASO1/R SPECIFY _____
 PCREASO4/R

If SK5 >= 2, go to SK6 and ask for next most recent arrangement.

Parental Care [Path = S]

If SF1, SG1, SH1, SI9, SJ1 NE 1 (no type of nonparental supervision before or after school) or all of SF8, SG7, SH8, SJ2 not = 1 or 3 (no before-school arrangement), go to SL1. Else, go to box before SL2.

SL1. Currently, are you (or) (his/her) (parents) (mother/stepmother/foster mother) (or) (father/stepfather/foster father) (or another adult in the household) at home each day until (CHILD) goes to school?

- PABHOME YES 1
- NO 2

If SF1, SG1, SH1, SI9, SJ1 = 2 (no type of nonparental supervision before or after school) or all of SF8, SG7, SH8, SJ2 not = 2 or 3 (no after-school arrangement), then go to SL2. Else, go to box before SL5.

SL2. Currently, are you (or) (his/her) (parents) (mother/stepmother/foster mother) (or) (father/stepfather/foster father) (or another adult in the household) at home each day when (CHILD) gets home from school?

PAAHOME YES 1
NO..... 2

SL3. Where does (CHILD) usually spend (his/her) time during after-school hours?
[CODE ALL THAT APPLY.]

PAAHMIN OWN HOME/INSIDE 1
PAAHMOUT OWN HOME/OUTSIDE..... 2
PAARELA A RELATIVE'S HOME 3
PAAFRND A FRIEND'S HOME 4
PAANEIG A NEIGHBOR'S HOME..... 5
PAAPUBL A PUBLIC PLACE, FOR EXAMPLE, A LIBRARY OR MALL..... 6
PAACENT A COMMUNITY OR RECREATIONAL CENTER 7
PAAOUT OUTDOORS 8
PAASCHL A SCHOOL 9
PAAPLOTH OTHER 91
PAAPLOS/R SPECIFY _____

SL4. During these after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

PAAEDUC HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL 1
PAACOMP COMPUTERS..... 2
PAAREAD READING/WRITING (NON-SCHOOL-RELATED) 3
PAAART ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) .. 4
PAACHOR CHORES/WORK..... 5
PAAOUTPL OUTDOOR PLAY/ACTIVITIES/SPORTS 6
PAAINPLA INDOOR PLAY 7
PAAPHON TELEPHONE..... 8
PAAEAT EATING/SNACKS 9
PAATV TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC 10
PAATALK TALKING TO PARENT/CARE PROVIDER 11
PAAACTIV BEFORE- OR AFTER-SCHOOL ACTIVITIES 12
PAAFRIE TALKING WITH FRIENDS/SOCIALIZING..... 13
PAAOTHER OTHER 91
PAAOTH01/R- SPECIFY _____
PAAOTH04/R

If SF1, SG1, SH1, SI9, SJ1 = 2 (no nonparental care arrangements), ask SL5. Else, go to SM2.

SL5. Some parents prefer to stay home to care for their children before and after school. Others choose to have care arrangements with someone other than a parent. If you could find high-quality, affordable before- or after-school care by a relative, nonrelative, or in a program, would you choose to place (CHILD) in one of these kinds of arrangements?

PACHOOSE YES 1
NO..... 2

Perceptions of Quality and Factors in Parental Choice [Path = S]

If SL5 = 2 (would not want nonparental care arrangement), ask SM1. Else, go to SM2.

SM1. What were your main reasons for choosing to have a parent care for (CHILD) during before- and after-school hours?
[CODE ALL THAT APPLY.] [DO NOT PROBE.]

PPNOWORK	PARENT DOES NOT WORK/ <i>FLEXIBLE SCHEDULE</i> /	
	NO NEED FOR CARE	1
PPDAYCAR	PARENT IS DAY CARE PROVIDER IN THE HOME.....	2
PPWORKHO	PARENT WORKS OR STUDIES AT HOME	3
PPSPECL	CHILD HAS SPECIAL NEEDS.....	4
PPDEPEND	PARENTS NEED TO CARE FOR OTHER DEPENDENTS AS WELL	5
PPBARR	COST/AVAILABILITY/TRANSPORTATION	6
PPHMWRK	TO HELP WITH CHILD'S EDUCATION/HOMEWORK.....	7
PPCAREER	PARENT VIEWS STAYING HOME AS CAREER.....	8
PPBEST	PARENTAL CARE IS BEST FOR CHILD/DEVELOPMENT.....	9
PPRESPON	PARENTS SHOULD BE RESPONSIBLE FOR CARE	10
PPRELIG	RELIGIOUS REASONS	11
PPSAFETY	CHILD'S SAFETY/SECURITY/PARENT DOESN'T	
	TRUST OTHERS.....	12
PPWANT	PARENT WANTS TO BE WITH CHILD.....	13
PPOTHER	OTHER	91
PPOTHEOS/R	SPECIFY _____	

If only SM1_6 = 1 (cost/availability/transportation), ask SM2. Else, go to PTINTRO.

SM2. We've asked you about a number of kinds of arrangements parents make for their children's out-of-school time. If you had your choice of any kind of arrangement for (CHILD) during after-school hours, not including care by a parent or guardian, what arrangement would you prefer most?

PPPREFER	CHILD RESPONSIBLE FOR HIMSELF/HERSELF	1
	CHILD TAKEN CARE OF BY OLDER BROTHER OR SISTER	2
	CARE BY A RELATIVE (NOT BROTHER OR SISTER)	3
	CARE BY A NONRELATIVE IN A PRIVATE HOME	4
	PARTICIPATION IN A CENTER-BASED OR SCHOOL-BASED	
	PROGRAM	5
	INFORMAL ADULT SUPERVISED ACTIVITIES.....	6
	OTHER	91
PPPREFOS/R	SPECIFY _____	

If SH1 = 2, then ask SM3. (Ask SM3 once per household.) Else, go to box before SM4.

SM3. Are you aware of any before- or after-school programs in your community?

PPAWARE YES 1
NO..... 2

If SM2 = 5, then go to SM4. Else, go to box before SM5.

SM4. What (is/was) your biggest obstacle, if any, to enrolling (CHILD) in a before- or after-school program?

PPOBSTCL COST 1
LOCATION/TRANSPORTATION 2
CHILD'S WISHES 3
AVAILABILITY 4
POOR QUALITY OF AVAILABLE PROGRAMS 5
NO OBSTACLES..... 6
AGE OF CHILD..... 7
OTHER 91
PPOBSOS/R SPECIFY _____

If SF1, SG1, SH1, SI9, or SJ1 = 1 (child currently participates in at least one arrangement or self-care), ask SM5. Else, go to SM7.

SM5. How much difficulty did you have finding the type of out-of-school care you wanted for (CHILD)?
Would you say...

PPDIFCLT A lot, 1
Some,..... 2
A little, 3
No difficulty, or 4
Have you not found the out-of school care you wanted? .. 5

SM6. When you made your arrangement(s) for (CHILD)'s out-of-school time, did you feel that you had more than one option that you were willing to consider?

PPOPTION YES 1
NO..... 2

Ask SM7, SM8, and SM9 only once per household.

SM7. Do you feel there are good choices for before-school care where you live?

PPBCHOIC YES 1
NO..... 2
HAVE NOT TRIED TO FIND CARE..... 3

SM8. Do you feel there are good choices for after-school care where you live?

PPACHOIC YES 1
NO..... 2
HAVE NOT TRIED TO FIND CARE..... 3

SM9. I'm going to read some things that people look for in selecting before- or after-school arrangements for their children. For each one, please tell me if you think it is very important, somewhat important, or not too important in a before- or after-school arrangement for (CHILD). How about...

[PROBE: Would that be very important, somewhat important, or not too important?]

		VI	SI	NI
	[RANDOM START]			
PPHWLHP	a. Time for homework or schoolwork	1	2	3
PPENRCH	b. Enrichment education, like special drama, science, or computer activities	1	2	3
PPSPORT	c. Time for sports or physical activities.	1	2	3
PPRELIA	d. A reliable arrangement	1	2	3
PPCONV	e. A convenient location	1	2	3
PPCOST	f. A reasonable cost.....	1	2	3
PPKIDS	g. A small number of children in the same group.....	1	2	3
PPTRANS	h. Transportation to the arrangement.....	1	2	3
PPENGL	i. A care provider or teacher who speaks English with your child.	1	2	3

If PA6 = 2 or 91 (does not speak English mostly or equally with another language at home), ask SM9j. Else, go to SM9k.

PPLANG	j. A care provider who speaks (CHILD)'s native language.....	1	2	3
PPKNEW	k. Knowing the care provider <u>before</u> making the arrangement	1	2	3

Health and Disability

PTINTRO. Now I have a few questions about (CHILD)'s health.

If PATH = I, N ask PT1. Else, go to box after PT2.

PT1. Has a doctor or other health professional ever told you that (CHILD) was developmentally delayed?

HDDELAY	YES	1
	NO.....	2

PT2. About how long has it been since (CHILD) last saw a medical doctor or other health professional for a checkup, shots, or other routine care? Would you say...

HNDWCWHN	Less than 1 year	1
	1 year, but less than 2 years, or	2
	2 years or more?.....	3
	CHILD HAS NEVER BEEN SEEN BY A MEDICAL DOCTOR	4

If PATH = N ask PT3. Else, go to box after PT4.

PT3. Has (CHILD) ever been to a dentist or dental hygienist for dental care?

HNDNTIST	YES	1	(GO TO PT4)
	NO.....	2	(GO TO BOX AFTER PT4)

PT4. About how long has it been since (CHILD) last saw a dentist or dental hygienist for dental care? [PROBE USING CATEGORIES.]

HNDNTWHN	LESS THAN 1 YEAR,	1
	1 YEAR, BUT LESS THAN 2 YEARS	2
	2 YEARS OR MORE	3

If PATH = I, go to PT7. Else, ask PT5.

PT5. Does (CHILD) have any of the following disabilities? [RANDOM START; KEEP h LAST.]

		YES	NO
HDLEARN	a. A specific learning disability?	1	2
HDRETARD	b. Mental retardation?	1	2
HDSPEECH	c. A speech impairment?	1	2
HDDISTRB	d. A serious emotional disturbance?	1	2
HDDEAFIM	e. Deafness or another hearing impairment?	1	2
HDBLNDIM	f. Blindness or another visual impairment?	1	2
HDORTHO	g. An orthopedic impairment?	1	2
HDOTHER	h. Another health impairment lasting 6 months or more?	1	2

PT6. Does (child) have...

HDAUTISM	a. Autism?	1	2
HDADD	b. Attention deficit disorder, ADD, or ADHD?	1	2

If any PT5a-h = 1, or PT6, a or b = 1, go to PT8. Else, go to box before PUINTRO.

PT7. Does (CHILD) have any of the following disabilities? [RANDOM START; KEEP e LAST.]

		YES	NO
HDDEAFIM	a. Deafness or another hearing impairment?	1	2
HDBLNDIM	b. Blindness or another visual impairment?	1	2
HDORTHO	c. An orthopedic impairment?	1	2
HDDEVEL	d. Severe developmental delay?	1	2
HDOTHER	e. Another health impairment lasting 6 months or more?	1	2

If any PT7a-e=1, go to PT8. Else, go to box before PUINTRO.

PT8.	Is (CHILD) receiving services for (his/her) (disability/disabilities) ...		YES	NO
<i>HDSCHL</i>	a.	From your local school district?	1	2
<i>HDGOVT</i>	b.	From a state or local health or social service agency?	1	2
<i>HDDOCTOR</i>	c.	From a doctor or clinic? [<i>INCLUDES OTHER HEALTH CARE PROVIDERS IF VOLUNTEERED</i>].....	1	2
<i>HDSOURCE</i>	d.	From some other source?	1	2
<i>HDSOUROS/R</i>		What is that? _____		

If any PT8 a, b, c, or d = 1, ask PT9. Else, go to box before PT10.

PT9. Are any of these services provided through an Individualized (Family Service Plan, or IFSP/ Educational Program, or IEP)?

<i>HNIFSP</i>	YES.....	1
	NO	2

If path = N, S, or H, ask PT10. Else, if path = I, go to box before PUINTRO.

PT10. (Does/Do) (CHILD)'s (disability/disabilities) affect (his/her) ability to learn?

<i>HDAFFECT</i>	YES.....	1
	NO	2

Parent/Guardian Characteristics

Mother Items¹⁵

Ask questions PU18, PU22, PU23, PU26-PU38, and PV17, PV21, PV22, PV25 and PV26 for each sampled child. But, ask all other parent/guardian characteristics (PUINTRO through PV24) only once per mother/father in the household.

If HHMOM = 1, 2, or 3 (mother or female guardian), go to PUINTRO Else, if HHMOM = 4 (no mother/female guardian), go to box before PVINTRO.

¹⁵ These items were asked about the child's mother if she resided in the household. If the father but no mother resided in the household, these items were not asked. If no mother or father was in the household, items were asked about the female respondent. If there was no mother or father in the household and the respondent was male, these items were not asked.

PUINTRO. These next questions are about (you/(and) (CHILD)'s (mother/stepmother/foster mother) (father/stepfather/foster father)). (Let's start with (you/(CHILD)'s mother)).

PU1. [Are you/Is (CHILD'S) (mother/stepmother/foster mother)] currently...

- MOMSTAT**
- Married, 1 (GO TO PU3)
 - Separated, 2 (GO TO BOX)
 - Divorced, 3 (GO TO BOX)
 - Widowed, or 4 (GO TO BOX)
 - Never married? 5 (GO TO BOX)

*If any HH member other than mother is age 16 or older ask PU10V.
Else go to PU3.*

PU10V. (Are you/Is she) currently living with a partner?

- MOMLIVW**
- YES 1 (GO TO BOX)
 - NO 2 (GO TO PU3)

*If HHMOM = 1 or 2 and HHDAD = 1 or 2 (child's mother and father live in the household), autocode PU2 =1, and go to PU3.
Else ask PU2.*

PU2. Is (your/(CHILD)'s (mother's/stepmother's/foster mother's) partner's relationship to (CHILD) like that of a parent?

- MOMPART**
- YES 1
 - NO 2

PU3. How old (were you/was (CHILD)'s (mother/stepmother/foster mother) when (you/she) first became a mother, stepmother, or guardian to any child?

MOMNEW YEARS OF AGE.....

PU4. What was the first language (you/(CHILD)'s (mother/stepmother/foster mother)) learned to speak?

- MOMLANG**
- ENGLISH 1 (AUTOCODE PU5=1 AND GO TO PU6)
 - SPANISH 2 (GO TO PU5)
 - ENGLISH AND SPANISH EQUALLY 3 (GO TO PU5)
 - ENGLISH AND ANOTHER LANGUAGE EQUALLY 4 (GO TO PU5)
 - SPECIFY _____
 - ANOTHER LANGUAGE 91 (GO TO PU5)
 - SPECIFY _____
- MOMLANOS/R**

PU5. What language (do you/does (CHILD)'s (mother/stepmother/foster mother)) speak most at home now?

- MOMSPEAK**
- ENGLISH 1
 - SPANISH 2
 - ENGLISH AND SPANISH EQUALLY 3
 - ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
 - SPECIFY _____
 - ((ENGLISH AND) OTHER LANGUAGE SPECIFIED IN PU4 (EQUALLY))..... 5
 - ANOTHER LANGUAGE 91
- MOMSPEOS/R**
- SPECIFY _____

PU6. [Were you/Was (CHILD)'s (mother/stepmother/foster mother)] born in...

- MOMBORN**
- One of the 50 states or the District of Columbia, 1 (GO TO PU7)
 - One of the U.S. territories, [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS] 2 (GO TO PU6OV)
- MOMTEROS/R**
- SPECIFY _____
- MOMCONOS/R**
- Or some other country? 3 (GO TO PU6OV)
 - SPECIFY _____

PU6OV. How old (were you/was she) when (you/she) first moved to the (United States/50 states or the District of Columbia)?

MOMUSAGE AGE

PU7. What is the highest grade or year of school that (you/(CHILD)'s (mother/stepmother/foster mother)) completed?

- MOMGRADE**
- UP TO 8TH GRADE 1 (ENTER GRADE, GO TO PU8)
 - 9TH TO 11TH GRADE..... 2 (ENTER GRADE, GO TO PU8)
- MOMGRAD1**
- 12TH GRADE BUT NO DIPLOMA..... 3 (GO TO PU8)
- MOMGRAD2**
- HIGH SCHOOL DIPLOMA/EQUIVALENT..... 4 (GO TO PU9)
 - VOC/TECH PROGRAM AFTER HIGH SCHOOL BUT NO VOC/TECH DIPLOMA..... 5 (GO TO PU8)
 - VOC/TECH DIPLOMA AFTER HIGH SCHOOL..... 6 (GO TO PU8)
 - SOME COLLEGE BUT NO DEGREE 7 (GO TO PU7OV)
 - ASSOCIATE'S DEGREE (AA, AS) 8 (GO TO PU8)
 - BACHELOR'S DEGREE (BA, BS)..... 9 (GO TO PU9)
 - GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE... 10 (GO TO PU9)
 - MASTER'S DEGREE (MA, MS)..... 11 (GO TO PU9)
 - DOCTORATE DEGREE (PHD, EDD)..... 12 (GO TO PU9)
 - PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE (MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.)..... 13 (GO TO PU9)

PU7OV. Did (you/she) earn a vocational or technical diploma after leaving high school?

- MOMVOTEC**
- YES 1
 - NO..... 2

PU8. (Do you/Does she) have a high school diploma or its equivalent, such as a GED?

MOMDIPL YES 1
NO..... 2

PU9. During the past week, did (you/(CHILD)'s (mother/stepmother/foster mother)) work at a job for pay or income?

MOMWORK YES 1 (GO TO PU11)
NO..... 2 (GO TO PU10)
RETIRED 3 (GO TO PU12)
DISABLED/UNABLE TO WORK..... 4 (GO TO PU12)

PU10. (Were you/Was she) on leave or vacation from a job during the past week?

MOMLEAVE YES 1 (GO TO PU11)
NO..... 2 (GO TO PU12)

PU11. About how many total hours per week (do you/does she) usually work for pay or income, counting all jobs?
[IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

MOMHOURS WEEKLY HOURS..... □□

PU12. In the past 12 months, how many months (,if any,) (have you/has she) worked for pay or income?

MOMMTHS MONTHS..... □□

If PU9 or PU10 = 1 (working or on leave/vacation), go to PU16. If PU9 =3, then autocode PU15 = 3, and go to PU16. If PU9 = 4, then autocode PU15 = 4, and go to PU16. Else, ask PU13.

PU13. (Have you/Has she) been actively looking for work in the past 4 weeks?

MOMLOOK YES 1 (GO TO PU14)
NO..... 2 (GO TO PU15)

PU14. What (have you/has she) been doing in the past 4 weeks to find work?
[CODE ALL THAT APPLY.]

MOMPUBL CHECKED WITH PUBLIC EMPLOYMENT AGENCY 1
MOMPRIV CHECKED WITH PRIVATE EMPLOYMENT AGENCY 2
MOMEMPL CHECKED WITH EMPLOYER DIRECTLY/
SENT RESUME/FILLED OUT APPLICATIONS..... 3
MOMREL CHECKED WITH FRIENDS OR RELATIVES 4
MOMANSAD PLACED OR ANSWERED ADS/SENT RESUME 5
MOMREAD READ WANT ADS 6
MOMOTHER SOMETHING ELSE 91
MOMOTHOS/R SPECIFY _____

If PU14 = 1 through 5 (looking for work), go to PU16.
Else, ask PU15.

PU15. What (were you/was she) doing most of last week? Would you say...

- MOMACTY**
- Keeping house or caring for children or other dependents, 1
 - Going to school, 2
 - Retired, 3
 - Unable to work, or 4
 - Something else? 91
- MOMACTOS/R** What was that? _____

If PU15 = 2, autocode PU16 = 1 and go to PU17. Else, ask PU16.

PU16. (Are you/is (CHILD)'s mother) attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training [other than at (your/her) regular job]?

- MOMENROL**
- YES 1 (GO TO PU17)
 - NO 2 (GO TO BOX BEFORE PU18)

PU17. How many hours each week (do you/does she) attend school or training? [REFERS TO ACTUAL TIME, NOT CREDIT HOURS.]

MOMENHRS WEEKLY HOURS

If PU9 = 1 or PU10 = 1 (working or on leave/vacation), ask PU18.
Else, go to box before PU22.

PU18. Have (CHILD)'s (child/before- and after-school) care needs influenced [your/(his/her) mother's/stepmother's/foster mother's] choice of a job or work schedule in any way?

- MOMCHOIC**
- YES 1
 - NO 2

Ask PU19, PU20, and PU21 only once per mother per household.

PU19. How easy is it for (you/(CHILD)'s mother/stepmother/foster mother) to leave work if (CHILD/one of your children/one of her children) gets sick or needs (you/her) unexpectedly? Would you say...

- MOMLVEAS**
- [VERY] Easy, 1
 - Somewhat easy, 2
 - Not very easy, or 3
 - Difficult? 4

PU20. Does (your/(CHILD)'s mother's/stepmother's/foster mother's) employer have a program that allows employees to put part of their pay -- before taxes -- into an account that can be used to pay for child care costs?

MOMACCT YES 1 (GO TO PU21)
NO..... 2 (GO TO BOX BEFORE PU24)
SELF-EMPLOYED..... 3 (GO TO BOX BEFORE PU24)

PU21. (Do you/Does she) participate in this program to cover any child care costs?

MOMACUSE YES 1 (GO TO BOX BEFORE PU24)
NO..... 2 (GO TO BOX BEFORE PU24)

*If SF1, SG1, SH1, or SI9 = 1 (participation in nonparental care/programs), go to box before PU24.
Else, ask PU22.*

PU22. Would (you/(CHILD)'s mother/stepmother/foster mother) be working outside of the home if (you/she) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

MOMWLDWK YES 1
NO..... 2

If PU16 NE 1, ask PU23. Else, go to box before PU24.

PU23. Would (you/(CHILD)'s mother/stepmother/foster mother) enter job training or school if (you/she) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

MOMWLDSC YES 1
NO..... 2

Ask PU24 and PU25 only once per household.

PU24. There is a federal income tax credit specifically for child care expenses called the Child and Dependent Care Tax Credit. Have you ever heard of it?

FAMTCREM YES 1 (GO TO PU25)
NO..... 2 (GO TO BOX BEFORE PU26)

PU25. Did or will anyone in your household claim this credit for child care costs on your tax return for 2000?

FAMTCUSM YES 1
NO..... 2

*If PU9 = 1 or PU10 = 1 or PU16 = 1 (mother/female guardian is employed for pay or attending school or training), ask PU26 for each sampled child.
Else, go to box before PVINTRO.*

PU26. [DISPLAY CARE ARRANGEMENTS/PROGRAMS, IF ANY]
 When mothers are at work or school, children may be in school, in a care arrangement, with their other parent, or somewhere else. What is (CHILD) usually doing or how is (he/she) usually cared for during most of the hours when [you/(CHILD)'s mother/stepmother/foster mother] (are/is) at (work) (or) (school or training)?

- MOMCARE**
- ARRANGEMENT NUMBER (GO TO PU32)
 - IN SCHOOL [S PATH ONLY] 21 (GO TO PU32)
 - MOTHER WORKS OR STUDIES AT HOME/CARES FOR CHILD
 - AT WORK OR SCHOOL 22 (GO TO PU32)
 - CARED FOR BY CHILD'S OTHER PARENT/
 - STEPPARENT/FOSTER PARENT (EXCEPT SAME SEX) 23 (GO TO PU27)
 - MATERNITY LEAVE 24 (GO TO PU32)
 - OTHER RELATIVE ARRANGEMENT NOT PREVIOUSLY
 - MENTIONED 25 (GO TO PU28)
 - OTHER NONRELATIVE ARRANGEMENT NOT PREVIOUSLY
 - MENTIONED 26 (GO TO PU29)
 - OTHER CENTER-BASED OR SCHOOL-BASED ARRANGEMENT
 - NOT PREVIOUSLY MENTIONED 27 (GO TO PU29)
 - SELF-CARE ARRANGEMENT NOT PREVIOUSLY
 - MENTIONED 28 (GO TO PU29)
 - SAME-SEX PARENT CARES FOR CHILD 29 (GO TO PU32)
 - SOMETHING ELSE 91 (GO TO PU32)
- MOMCAROS/R** SPECIFY _____

PU27. Does that parent live in (CHILD)'s household?

- MOMAHOUS**
- YES 1 (GO TO BOX BEFORE PU28)
 - NO 2 (GO TO PU32)

If PU27 = 1 and HHDAD not = 1 or 2 (no father enumerated but father is said to live in HH), code interview a problem. Else, go to PU32.

PU28. Is that relative (CHILD)'s...

- MOMARELA**
- Grandmother, 1
 - Grandfather, 2
 - Aunt, 3
 - Uncle, 4
 - Brother, 5
 - Sister, or 6
 - Another relative? 7

PU29. Is that arrangement regularly scheduled at least once each week (before or after school)?

- MOMAWEEK**
- YES 1 (GO TO PU30)
 - NO 2 (GO TO PU32)

PU30. How many days each week does (CHILD) participate in that arrangement (before or after school)?

- MOMADAYS** DAYS

PU31. How many hours each week does (CHILD) participate in that arrangement (before or after school)?

MOMAHRS HOURS.....

PU32. Does (that arrangement/the time (CHILD) is in school) cover all of the hours that [you/(CHILD)'s mother/stepmother/foster mother] (are/is) at (work) (or) (school or training)?

MOMCAROT YES 1 (GO TO BOX BEFORE PVINTRO)
NO 2 (GO TO PU33)

PU33. [DISPLAY CARE ARRANGEMENTS/PROGRAMS, IF ANY]
What is (CHILD) usually doing or how is (he/she) usually cared for during most of the other hours that [you/(CHILD)'s mother/stepmother/foster mother] (are/is) at (work) (or) (school or training)?

MOMCARWH ARRANGEMENT NUMBER (GO TO BOX BEFORE PVINTRO)
IN SCHOOL [S PATH ONLY] 21 (GO TO BOX BEFORE PVINTRO)
MOTHER WORKS OR STUDIES AT HOME/CARES FOR CHILD
AT WORK OR SCHOOL 22 (GO TO BOX BEFORE PVINTRO)
CARED FOR BY CHILD'S OTHER PARENT/
STEPPARENT/FOSTER PARENT (EXCEPT SAME SEX) 23 (GO TO PU34)
MATERNITY LEAVE 24 (GO TO BOX BEFORE PVINTRO)
OTHER RELATIVE ARRANGEMENT NOT PREVIOUSLY
MENTIONED 25 (GO TO PU35)
OTHER NONRELATIVE ARRANGEMENT NOT PREVIOUSLY
MENTIONED 26 (GO TO PU36)
OTHER CENTER-BASED OR SCHOOL-BASED ARRANGEMENT
NOT PREVIOUSLY MENTIONED 27 (GO TO PU36)
SELF-CARE ARRANGEMENT NOT PREVIOUSLY
MENTIONED 28 (GO TO PU36)
SAME-SEX PARENT CARES FOR CHILD 29 (GO TO BOX BEFORE PVINTRO)
SOMETHING ELSE 91 (GO TO BOX BEFORE PVINTRO)
MOMCWHOS/R SPECIFY _____

PU34. Does that parent live in (CHILD)'s household?

MOMBHOUS YES 1 (GO TO BOX BEFORE PU35)
NO..... 2 (GO TO BOX BEFORE PVINTRO)

If PU34 = 1 and HHDAD not = 1 or 2 (no father enumerated but father is said to live in HH), code interview a problem. Else, go to PVINTRO.

PU35. Is that relative (CHILD)'s...

MOMBRELA Grandmother, 1
Grandfather, 2
Aunt, 3
Uncle, 4
Brother, 5
Sister, or 6
Another relative? 7

PU36. Is that arrangement regularly scheduled at least once each week (before or after school)?

MOMBWEEK YES 1 (GO TO PU37)
NO..... 2 (GO TO BOX BEFORE PVINTRO)

PU37. How many days each week does (CHILD) participate in that arrangement (before or after school)?

MOMBDAYS DAYS

PU38. How many hours each week does (CHILD) participate in that arrangement (before or after school)?

MOMBHRS HOURS.....

Father Items.¹⁶

*If HHDAD = 1, 2, or 3 (father or male guardian), go to PVINTRO.
Else, if HHDAD = 4 (no father or male guardian), go to box
before PV25*

PVINTRO. Now I have some questions about (you/(CHILD)'s (father/stepfather/foster father)).

PV1. [Are you/Is (CHILD'S) (father/stepfather/foster father)] currently...

DADSTAT Married, 1 (GO TO PV3)
Separated, 2 (GO TO BOX)
Divorced, 3 (GO TO BOX)
Widowed, or 4 (GO TO BOX)
Never married? 5 (GO TO BOX)

*If any HH member other than father is age 16 or older ask PV10V.
Else go to PV3.*

PV10V. (Are you/Is he) currently living with a partner?

DADLIVW YES 1 (GO TO BOX)
NO..... 2 (GO TO PV3)

*If HHMOM = 1 or 2 and HHDAD = 1 or 2 (child's mother and father
live in the household), autocode PV2 =1, and go to PV3.
Else ask PV2.*

¹⁶ These items were asked about the child's father if he resided in the household. If the mother but no father resided in the household, these items were not asked. If no father or mother was in the household, items were asked about the male respondent. If there was no father or mother in the household and the respondent was female, these items were not asked.

PV2. Is (that/(CHILD)'s (father's/stepfather's/foster father's) partner's relationship to (CHILD) like that of a parent?

DADPART YES 1
NO..... 2

PV3. What was the first language (you/(CHILD)'s (father/stepfather/foster father)) learned to speak?

DADLANG ENGLISH 1 (AUTOCODE PV4=1 AND GO TO PV5)
SPANISH 2 (GO TO PV4)
ENGLISH AND SPANISH EQUALLY 3 (GO TO PV4)
ENGLISH AND ANOTHER LANGUAGE EQUALLY 4 (GO TO PV4)
SPECIFY _____
DADLANOS/R ANOTHER LANGUAGE 91 (GO TO PV4)
SPECIFY _____

PV4. What language (do you/does (CHILD)'s (father/stepfather/foster father)) speak most at home now?

DADSPEAK ENGLISH 1
SPANISH 2
ENGLISH AND SPANISH EQUALLY 3
ENGLISH AND ANOTHER LANGUAGE EQUALLY 4
SPECIFY _____
((ENGLISH AND) OTHER LANGUAGE SPECIFIED IN PV1 (EQUALLY)) 5
ANOTHER LANGUAGE 91
DADSPEOS/R SPECIFY _____

PV5. [Were you/Was (CHILD)'s (father/stepfather/foster father)] born in...

DADBORN One of the 50 states or the District of Columbia, 1 (GO TO PV6)
One of the U.S. territories, [PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS] 2 (GO TO PV5OV)
DADTEROS/R SPECIFY _____
Or some other country? 3 (GO TO PV5OV)
DADCONOS/R SPECIFY _____

PV5OV. How old (were you/was he) when (you/he) first moved to the (United States/50 states or the District of Columbia)?

DADUSAGE AGE

PV6. What is the highest grade or year of school that (you/(CHILD)'s (father/stepfather/foster father)) completed?

- DADGRADE** UP TO 8TH GRADE 1 (ENTER GRADE, GO TO PV7)
- 9TH TO 11TH GRADE..... 2 (ENTER GRADE, GO TO PV7)
- DADGRAD1** 12TH GRADE BUT NO DIPLOMA..... 3 (GO TO PV7)
- DADGRAD2** HIGH SCHOOL DIPLOMA/EQUIVALENT..... 4 (GO TO PV8)
- VOC/TECH PROGRAM AFTER HIGH SCHOOL
- BUT NO VOC/TECH DIPLOMA 5 (GO TO PV7)
- VOC/TECH DIPLOMA AFTER HIGH SCHOOL..... 6 (GO TO PV7)
- SOME COLLEGE BUT NO DEGREE 7 (GO TO PV6OV)
- ASSOCIATE'S DEGREE (AA, AS) 8 (GO TO PV7)
- BACHELOR'S DEGREE (BA, BS)..... 9 (GO TO PV8)
- GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE.... 10 (GO TO PV8)
- MASTER'S DEGREE (MA, MS)..... 11 (GO TO PV8)
- DOCTORATE DEGREE (PHD, EDD)..... 12 (GO TO PV8)
- PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE
(MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.)..... 13 (GO TO PV8)

PV6OV. Did (you/he) earn a vocational or technical diploma after leaving high school?

- DADVOTEC** YES 1
- NO..... 2

PV7. (Do you/Does he) have a high school diploma or its equivalent, such as a GED?

- DADDIPL** YES 1
- NO..... 2

PV8. During the past week, did (you/(CHILD)'s (father/stepfather/foster father)) work at a job for pay or income?

- DADWORK** YES 1 (GO TO PV10)
- NO..... 2 (GO TO PV9)
- RETIRED 3 (GO TO PV11)
- DISABLED/UNABLE TO WORK..... 4 (GO TO PV11)

PV9. (Were you/Was he) on leave or vacation from a job during the past week?

- DADLEAVE** YES 1 (GO TO PV10)
- NO..... 2 (GO TO PV11)

PV10. About how many total hours per week (do you/does he) usually work for pay or income, counting all jobs?
[IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

DADHOURS WEEKLY HOURS..... □□

PV11. In the past 12 months, how many months (,if any,) (have you/has he) worked for pay or income?

DADMTHS MONTHS..... □□

If PV8 or PV9 = 1 (working or on leave/vacation), go to PV15. If PV8 = 3, then autocode PV14 = 3, and go to PV15. If PV8 = 4, then autocode PV14 =4, and go to PV15. Else, ask PV12.

PV12. (Have you/Has he) been actively looking for work in the past 4 weeks?

DADLOOK YES 1 (GO TO PV13)
 NO..... 2 (GO TO PV14)

PV13. What (have you/has he) been doing in the past 4 weeks to find work?
 [CODE ALL THAT APPLY.]

DADPUBL CHECKED WITH PUBLIC EMPLOYMENT AGENCY 1
DADPRIV CHECKED WITH PRIVATE EMPLOYMENT AGENCY 2
DADEMP CHECKED WITH EMPLOYER DIRECTLY/
 SENT RESUME/*FILLED OUT APPLICATIONS*..... 3
DADREL CHECKED WITH FRIENDS OR RELATIVES 4
DADANSAD PLACED OR ANSWERED ADS/SENT RESUME 5
DADREAD READ WANT ADS..... 6
DADOTHER SOMETHING ELSE 91
DADOTHOS/R SPECIFY _____

If PV13 = 1 through 5 (looking for work), go to PV15. Else, ask PV14.

PV14. What (were you/was he) doing most of last week? Would you say...

DADACTY Keeping house or caring for children or other dependents, 1
 Going to school, 2
 Retired, 3
 Unable to work, or..... 4
 Something else? 91
DADACTOS/R What was that? _____

If PV14 = 2, then autocode PV15 = 1, and go to PV16. Else, ask PV15.

PV15. (Are you/is (CHILD)'s father) attending or enrolled in a school, college, university, or adult learning center, or receiving vocational education or job training [other than at (your/his) regular job]?

DADENROL YES 1 (GO TO PV16)
 NO..... 2 (GO TO BOX BEFORE PV17)

PV16. How many hours each week (do you/does he) attend school or training? [REFERS TO ACTUAL TIME, NOT CREDIT HOURS]

DADENHRS WEEKLY HOURS.....□□

*If PV8 = 1 or PV9 = 1 (working or on leave/vacation), ask PV17.
Else, go to box before PV21.*

PV17. Have (CHILD)'s (child/before- and after-school) care needs influenced [your/(his/her) father's/stepfather's/foster father's] choice of a job or work schedule in any way?

DADCHOIC YES 1
NO..... 2

Ask PV18, PV19, and PV20 once per father per household.

PV18. How easy is it for (you/(CHILD)'s father/stepfather/foster father) to leave work if (CHILD/one of your children/one of his children) gets sick or needs (you/him) unexpectedly? Would you say...

DADLVEAS [VERY] Easy, 1
Somewhat easy, 2
Not very easy, or..... 3
Difficult? 4

PV19. Does (your/(CHILD)'s father's/stepfather's/foster father's) employer have a program that allows employees to put part of their pay -- before taxes -- into an account that can be used to pay for child care costs?

DADACCT YES 1 (GO TO PV20)
NO..... 2 (GO TO BOX BEFORE PV23)
SELF-EMPLOYED..... 3 (GO TO BOX BEFORE PV23)

PV20. (Do you/Does he) participate in this program to cover any child care costs?

DADACUSE YES 1 (GO TO BOX BEFORE PV23)
NO..... 2 (GO TO BOX BEFORE PV23)

If SF1, SG1, SH1, or SI9 = 1 (participation in nonparental care/programs), go to box before PV23. Else, ask PV21.

PV21. Would (you/(CHILD)'s father/stepfather/foster father) be working outside of the home if (you/he) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

DADWLDWK YES 1
NO..... 2

If PV15 NE 1, ask PV22. Else, go to box before PV23.

PV22. Would (you/(CHILD)'s father/stepfather/foster father) enter job training or school if (you/he) could find acceptable and affordable (child/before- and after-school) care for (CHILD)?

DADWLDSC YES 1
NO..... 2

Ask PV23 and PV24 only once per household.

PV23. There is a federal income tax credit specifically for child care expenses called the Child and Dependent Care Tax Credit. Have you ever heard of it?

FAMTCRED YES 1 (GO TO PV24)
NO..... 2 (GO TO BOX BEFORE PV25)

PV24. Did or will anyone in your household claim this credit for child care costs on your tax return for 2000?

FAMTCUSD YES 1
NO..... 2

If HHMOM = 2, 3, or 4, ask PV25. Else, go to box before PV26.

PV25. Does (CHILD)'s biological mother sometimes provide care for (him/her)?

DADBIMOM YES 1
NO..... 2

If HHDAD = 2, 3, or 4, ask PV26. Else, go to 1st box before PV27.

PV26. Does (CHILD)'s biological father sometimes provide care for (him/her)?

DADBIDAD YES 1
NO..... 2

Ask PV27 once per household.

If (PU9 or PU10 =1) (mother worked or was on vacation last week) and/or if (PV8 or PV9 =1) (father worked or was on vacation last week), then ask PV27. Else go to PWINTRO.

PV27. Some parents work because they have to for financial reasons, some work because it's interesting and rewarding for them, and some work for both these reasons. Would (you/one parent/(CHILD)'s mother/(CHILD)'s father¹⁷) stop working or work fewer hours to stay home with ((CHILD)/the children) if your family could afford it?

PWRKHOME YES 1
 NO..... 2

Household Characteristics

The following questions are asked only once per household.

PWINTRO. Now, a few questions about your household.

PW1. Do you...

HOWNHOME Own your home,..... 1
 Rent your home, or 2
 Have some other arrangement? 3

PW2. Besides (PHONE NUMBER), do you have other telephone numbers in your household, not including cellular phones?

HOTHNUM YES 1 (GO TO PW4)
 NO..... 2 (GO TO PW5)
 NOT MY NUMBER 3 (GO TO PW3)

PW3. [INTERVIEWER: ASK FOR AND RECORD THE TELEPHONE NUMBER REACHED. RECORD REASON FOR REACHING DIFFERENT TELEPHONE NUMBER.]

* TELEPHONE NUMBER REACHED _____

AREA CODE CHANGE1
 OTHER NUMBER IN HOUSEHOLD2
 ORIGINAL NUMBER IS THAT OF ANOTHER HOUSEHOLD AND
 NUMBER IS BEING FORWARDED TO THIS HOUSEHOLD3
 NEVER HEARD OF ORIGINAL NUMBER4
 OTHER [RECORD EXPLANATION IN COMMENTS]5

If PW3 = 3, go to Close2. Else, for cases where PW2 = 3 (not number dialed), ask PW2 again with new number.

¹⁷ In households with one working parent who was the respondent, "you" was displayed. In households with two working parents, "one parent" was displayed. In households with a working mother who was not the respondent, "(CHILD)'s mother" was displayed. In households with a working father who was not the respondent, "(CHILD)'s father" was displayed. In households with no mother and no father and the respondent works, "you" was displayed.

PW4. How many of these additional telephone numbers are for home use, not including cellular phones?

HNUMUSE NUMBER..... (GO TO BOX)

*If PW4 > 0 (other telephone numbers for home use), go to PW6.
Else, go to PW5.*

PW5. Besides this phone number, do you have any telephone numbers in your household that are used for computer or fax lines?

* YES1 (GO TO PW6)
NO.....2 (GO TO PW9)

PW6. How many of these additional telephone numbers are used for computer or fax lines?

* NUMBER..... (GO TO PW7)

PW7. Some households have telephone numbers that are used both for talking and for computer or fax lines. (Is the number/Are any of the numbers) used for (a) computer or fax line(s) ever answered for talking?

* YES1 (GO TO BOX)
NO.....2 (GO TO PW9)

*If PW6 = 1 (only 1 other telephone number for computer or fax),
autocode PW8= 1, and go to PW9. Else, ask PW8*

PW8. How many computer or fax telephone numbers are also answered for talking?

* NUMBER.....

PW9. So that we can group households geographically, may I have your ZIP code?

HZIPCODE/R ZIP CODE

PW10. In the past 3 years, that is, since (DATE), has your family received benefits from Temporary Assistance to Needy Families or TANF, AFDC, or your state welfare program?

HAFDC3YR YES 1 (GO TO PW11)
NO..... 2 (GO TO BOX BEFORE PW15)

PW11. Are you currently receiving benefits from TANF, AFDC, or your state welfare program?

HAFDCCUR YES 1 (GO TO BOX BEFORE PW15)
NO..... 2 (GO TO PW12)

PW12. What month and year did you stop receiving benefits from your state welfare program or Temporary Assistance to Needy Families (TANF)?

HSTOPMM | | | MONTH
HSTOPYY | | | | YEAR

PW13. While you were receiving welfare benefits, did you receive money from the state government or welfare agency to help you pay for (child/before- or after-school) care costs (for any child)?

HGOVEVR YES 1
 NO..... 2

PW14. At any time since (MONTH, YEAR) have you received funds from the state government or welfare agency to help you pay for (child/before- or after-school) care costs (for any child)?

HGOVSINC YES 1 (GO TO BOX BEFORE PW15)
 NO..... 2 (GO TO PW16)

If number of children in household age 15 or younger = 1, and if all of SF25, SG25, and SH33, are not = 1, then skip PW15 and go to PW16. Else, ask PW15.

PW15. Is a state government or welfare agency currently helping you pay for any (child/before- or after-school) care costs (for any child)?

HGOVCUR YES 1
 NO..... 2

PW16. In the past 12 months, has your family received benefits from any of the following programs? How about...

		YES	NO
HWIC	a. Women, Infants, and Children, or WIC?	1	2
HFOODST	b. Food Stamps?	1	2
HMEDIC	c. Medicaid?	1	2
HCHIP	d. Child Health Insurance Program or CHIP?	1	2

PW17. In studies like this, households are sometimes grouped according to income. What was the total income of all persons in your household over the past year, including salaries or other earnings, interest, retirement, and so on for all household members?

Was it...
HINCMRNG \$25,000 or less, or 1 (READ SET 1)
 More than \$25,000? 2 (GO TO PW18)

PW18. Was it...
HINCM50K \$50,000 or less, or 1 (READ SET 2)
 More than \$50,000? 2 (READ SET 3)

Was it...
HINCOME [SET 1]
 \$5,000 or less 1
 \$5,001 to \$10,000 2
 \$10,001 to \$15,000 3
 \$15,001 to \$20,000, or 4
 \$20,001 to \$25,000? 5

[SET 2]
 \$25,001 to \$30,000 6
 \$30,001 to \$35,000 7
 \$35,001 to \$40,000 8
 \$40,001 to \$45,000, or 9
 \$45,001 to \$50,000 10

[SET 3]
 \$50,001 to \$60,000, 11
 \$60,001 to \$75,000, 12
 \$75,001 to \$100,000, or 13
 Over \$100,000? 14

*Ask PW18OV if
 (Number in HH = 2 and HINCOME <= 3) or
 (Number in HH = 3 and HINCOME <= 3) or
 (Number in HH = 4 and HINCOME <= 4) or
 (Number in HH = 5 and HINCOME <= 5) or
 (Number in HH = 6 and HINCOME <= 5) or
 (Number in HH = 7 and HINCOME <= 6) or
 (Number in HH = 8 and HINCOME <= 7) or
 (Number in HH >= 9 and HINCOME <= 8).
 Else, go to CLOSE2.*

PW18OV. What was your total household income last year, to the nearest thousand?

HINCMEXT AMOUNT..... \$,

CLOSE1. Thank you, but we are only asking about children in a specific age or grade range. Please hold on for a moment while I check to see if there is anyone else I need to ask you about or anyone else I need to speak with.

CLOSE2. Those are all the questions I have about (CHILD). Please hold on for a moment while I check to see if there is anyone else I need to ask about. [THANK RESPONDENT]

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NHES:2001 ADULT EDUCATION AND LIFELONG LEARNING INTERVIEW

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NHES:2001 Adult Education and Lifelong Learning Interview

INTRO1. [READ IF RESPONDENT WAS NOT SCREENER RESPONDENT: Hello, this is (INTERVIEWER). I'm calling for the U.S. Department of Education. We are conducting a voluntary and confidential national study about the educational activities of adults.]

INTRO2. The purpose of this interview is to learn what kinds of educational activities adults may take part in. We will talk about degree programs and classes in colleges and vocational schools, courses or training sessions related to work or personal interest, and other ways of learning new information or skills. On average, the interview takes 20 minutes.

INITIAL BACKGROUND

AA1. First, I have a few questions about your background and work experience. What is the highest grade or year of school that you completed?

IBGRADE	UP TO 8TH GRADE	1	(ENTER GRADE, GO TO AA2)
IBGRAD1	9TH TO 11TH GRADE	2	(ENTER GRADE, GO TO AA2)
IBGRAD2	12TH GRADE BUT NO DIPLOMA	3	(GO TO AA2)
	HIGH SCHOOL DIPLOMA/EQUIVALENT	4	(GO TO AA2OV)
	VOC/TECH PROGRAM AFTER HIGH SCHOOL BUT NO VOC/ TECH DIPLOMA	5	(GO TO AA2)
	VOC/TECH DIPLOMA AFTER HIGH SCHOOL	6	(GO TO AA2)
	SOME COLLEGE BUT NO DEGREE	7	(GO TO AA1OV)
	ASSOCIATE'S DEGREE (AA, AS)	8	(GO TO AA2)
	BACHELOR'S DEGREE (BA, BS)	9	(GO TO AA4)
	GRADUATE OR PROFESSIONAL SCHOOL BUT NO DEGREE	10	(GO TO AA4)
	MASTER'S DEGREE (MA, MS)	11	(GO TO AA4)
	DOCTORATE DEGREE (PHD, EDD).....	12	(GO TO AA4)
	PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE (MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.).....	13	(GO TO AA4)

AA1OV. Did you earn a vocational or technical diploma after leaving high school?

IBVOCDIP	YES	1
	NO	2

AA2. (Do you have/Did you later receive) a high school diploma or its equivalent, such as a GED?

IBDIPL	YES	1	(GO TO AA2OV)
	NO	2	(GO TO AA6)

NOTE: Response categories shown in mixed upper and lower cases are read to the respondent by the interviewer. Those shown in uppercases are not read.

Variables designated by /R appear on the restricted file only. Those designated by * do not appear on either the public or the restricted data files. They were used for administrative, verification, or coding purposes only.

AA2OV. Did you receive your high school diploma or its equivalent in the U.S.?

IBUSDIPL YES 1
NO 2

AA3. Did you receive your high school diploma or its equivalent in the past 12 months?

IBDIPLYR YES 1
NO 2

AA4. Did you complete your high school requirements through a regular high school diploma or through a GED test, (or did you go to college without earning a high school diploma)?

IBHSREQ REGULAR HIGH SCHOOL DIPLOMA 1 (GO TO AA6)
GED TEST 2 (GO TO AA5)
NO HIGH SCHOOL DIPLOMA/GED 3 (GO TO AA6)

AA5. Did you ever take classes or have a tutor to prepare for taking the GED test?

IBGEDCLS YES 1
NO 2

AA6. Did you work at a job for pay or income at any time in the past 12 months?

IBWORK12 YES 1 (GO TO AA7)
NO 2 (GO TO AA10)

AA7. Were you self-employed at any time in the past 12 months?

IBSELFEM YES 1 (GO TO AA8)
NO 2 (GO TO AA9)

AA8. Besides being self-employed, did you also work for another employer in the past 12 months?

IBOTHEMP YES 1
NO 2

If AA8 =2 (self-employed only), then autocode AA9 (number of employers) = 1.

AA9. (Counting your self-employment as one job,) how many different employers did you work for in the past 12 months?

IBEMPNUM NUMBER

AA10. About your language background, what was the first language you learned to speak?

IBLANG ENGLISH 1 (AUTOCODE AA11=1 AND GO TO INTRO3)
SPANISH 2 (GO TO AA11)
ENGLISH AND SPANISH EQUALLY 3 (GO TO AA11)
ENGLISH AND ANOTHER LANGUAGE EQUALLY 4 (GO TO AA11)
SPECIFY _____
ANOTHER LANGUAGE 91 (GO TO AA11)
IBLANGOS/R SPECIFY _____

AA11. What language do you speak most at home now?

IBSPEAK	ENGLISH	1
	SPANISH	2
	ENGLISH AND SPANISH EQUALLY	3
	ENGLISH AND ANOTHER LANGUAGE EQUALLY	4
	SPECIFY _____	
	((ENGLISH AND) (ANOTHER LANGUAGE SPECIFIED IN AA10) (EQUALLY))	5
IBSPEAKOS/R	ANOTHER LANGUAGE	91
	SPECIFY _____	

INTRO3. Now, I'd like to ask you about different kinds of education and training programs, courses, workshops, and seminars you may have taken during the past 12 months. (Please don't include daytime high school programs.)

ENGLISH AS A SECOND LANGUAGE CLASSES

If AA10 NE 1 (first language is not English), go to AB1. Else, go to box before AC1.

AB1. During the past 12 months, did you take any classes or have a tutor to learn English as a Second Language?

ESLANG	YES	1	(GO TO AB2)
	NO	2	(GO TO AB22)

AB2. Are you currently taking ESL classes or tutoring, have you completed the ESL instruction, or did you stop without completing it?

ESNOW	CURRENTLY TAKING.....	1	(GO TO AB4)
	COMPLETED	2	(GO TO AB3)
	STOPPED WITHOUT COMPLETION.....	3	(GO TO AB3)

AB3. If you had it to do again, would you take the ESL classes or tutoring?

ESAGAIN	YES	1
	NO	2

AB4. (Do/Did) you take the ESL classes mainly for work-related reasons or mainly for personal interest?

ESREAS	WORK-RELATED	1
	PERSONAL INTEREST	2
	BOTH EQUALLY.....	3

AB5. (Are you taking/Did you take) the ESL classes...

		YES	NO
ESCHIL	a. To help your children with school work?	1	2
ESUSCIT	b. To get U.S. citizenship?.....	1	2
ESJOB	c. To get a new job with a different employer?.....	1	2
ESRAISE	d. To help you get a raise or promotion?.....	1	2
ESCOLVOC	e. To be able to attend college or vocational school?	1	2
ES PUBAST	f. To meet a requirement for public assistance?	1	2
ESFEEL	g. To improve the way you feel about yourself.....	1	2
ESLIFE	h. To make it easier to do things on a day-to-day basis?.....	1	2
ESRSOTH	i. Some other reason?	1	2
ESRSOS/R	SPECIFY _____		

AB6. Who (do/did) you take your ESL classes from? That is, what type of school, organization, or business (teaches/taught) the ESL classes?

ESPRTYP	POSTSECONDARY SCHOOL (COLLEGE/UNIVERSITY, COMMUNITY/JUNIOR COLLEGE, VOCATIONAL/TECHNICAL/ OCCUPATIONAL SCHOOL)	1
	OTHER SCHOOL OR SCHOOL DISTRICT (ELEMENTARY, JUNIOR HIGH, HIGH SCHOOL, OR ADULT LEARNING CENTER)	2
	BUSINESS OR INDUSTRY	3
	GOVERNMENT AGENCY (FEDERAL, STATE, LOCAL)	4
	PROFESSIONAL ASSOCIATION/ORGANIZATION.....	5
	PUBLIC LIBRARY	6
	OTHER (RELIGIOUS, COMMUNITY ORGANIZATION, TUTOR)	91
ESPTOS/R	SPECIFY _____	

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AB7. Else, go to AB8.

AB7. (Is/Was) the (INSTRUCTIONAL PROVIDER) also your employer?

ESPROVEM	YES	1
	NO	2

AB8. (Are you taking /Did you take) the ESL classes for college credit?

ESCOLL	YES	1
	NO	2

If AB6 = 1 (school is a postsecondary institution) or AB8 = 1 (ESL for college credit), go to AB9. Else, go to AB10.

AB9. What is the school name and in what city and state is the school located?

ESSCNAM/R SCHOOL _____
ESSCCITY/R CITY _____
ESSCST/R STATE _____

AB10. In the past 12 months, how many total hours did you attend the ESL classes?

ESHRYR TOTAL HOURS □□□

If R has difficulty reporting the total hours, ask AB11 and AB12. Else, go to AB13.

AB11. Thinking about the length of the ESL classes you (are attending/attended), how many days, weeks, or months did you attend the classes in the past 12 months?
[DO NOT ROUND. USE DECIMAL IF NEEDED.]

* NUMBER □□

* Unit
DAYS 1
WEEKS 2
MONTHS 3
SEMESTER 4
QUARTER 5
OTHER 91
* SPECIFY _____

AB12. For about how many hours did you attend the ESL classes (during each (day/week/month))?
[DO NOT ROUND. USE DECIMAL IF NEEDED.]

* HOURS □□□

AB13. In the past 12 months, about how much of your own or your family's money did you pay for...

ESTUITON a. Tuition and fees to attend the ESL classes? \$□□,□□□
ESMATLS b. How much for books and other materials? \$□□,□□□

If AB13a > 0 (paid some amount for tuition and fees) and AB13b = 0 (paid nothing for books or materials), ask AB14. Else, go to box before AB15.

AB14. Did the tuition and fees also include books and other materials?

ESINCBK YES 1
NO 2

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AB15. Else, go to AB23.

AB15. (Have you been/Were you) employed during the time you (have been/were) taking the ESL classes?

ESWORK YES 1 (GO TO AB16)
 NO 2 (GO TO AB23)

AB16. Did your employer require you to take the ESL classes?

ESEMPREQ YES 1 (GO TO AB18)
 NO 2 (GO TO AB17)

AB17. Did your employer suggest or encourage you to take the ESL classes?

ESEMPUG YES 1
 NO 2

AB18. (Are you taking/Did you take) the ESL classes at your workplace?

ESWRKPL YES 1
 NO 2

AB19. (Are you taking/Did you take) the ESL classes during your regular work hours?

ESWRKHR YES 1
 NO 2

AB20. (Are/Were) you being paid by your employer during the hours you (are/were) taking the ESL classes?

ESEMPAID YES 1
 NO 2

AB21. Did your employer...

		YES	NO
ESEMPTUI	a. Pay all or part of the tuition and fees for the ESL classes?	1	2
ESEMPMAT	b. Pay all or part of the costs of books and other materials?	1	2

Go to AB23.

AB22. As an adult, have you ever taken classes or had a tutor to learn English?

ESEVER YES 1
 NO 2

AB23. How well do you read English? Would you say...

READENGL	Very well,	1
	Well,	2
	Not well, or	3
	Not at all.....	4

AB24. How well do you write English? Would you say...

WRITENGL	Very well,	1
	Well,	2
	Not well, or	3
	Not at all.....	4

BASIC SKILLS AND GED PREPARATION CLASSES

If AA2 = 2 (no high school diploma) or AA3 = 1 (received high school diploma in the past 12 months) or (AA1 = 1-8 and AA2OV = 2) (foreign high school diploma and no college degree), then go to AC1. Else, go to AD1.

AC1. (Not including regular daytime high school classes,) During the past 12 months, did you take any classes or have a tutor...

		YES	NO
BSIMPROV	a. To improve your basic reading, writing, and math skills?.....	1	2
BSGED	b. To prepare to take the General Educational Development test, or GED?	1	2
BSHSEQUV	c. In some other high school equivalency program or adult high school program?.....	1	2

If AA3 = 1 (received high school diploma in the past 12 months) and AA4 = 1 (regular high school), go to AD1. Else, go to next box.

If AC1a-c = 2 (no basic skills or GED preparation classes), go to AC22. Else, go to AC2.

AC2. Are you currently taking basic skills or high school completion classes, have you completed those classes, or did you stop without completing the classes?

BSNOW	CURRENTLY TAKING.....	1	(GO TO AC4)
	COMPLETED	2	(GO TO AC3)
	STOPPED WITHOUT COMPLETION.....	3	(GO TO AC3)

AC3. If you had it to do again, would you take the basic skills or high school completion classes?

BSAGAIN YES 1
 NO 2

AC4. (Do/Did) you take the basic skills or high school completion classes mainly for work-related reasons or mainly for personal interest?

BSREAS WORK-RELATED 1
 PERSONAL INTEREST 2
 BOTH EQUALLY 3

AC5. (Are you taking/Did you take) the basic skills or high school completion classes...

		YES	NO
BSCHIL	a. To help your children with school work?	1	2
BSJOB	b. To get a new job with a different employer?	1	2
BSRAISE	c. To help you get a raise or promotion?.....	1	2
BSCOLVOC	d. To be able to attend college or vocational school?	1	2
BSPUBAST	e. To meet a requirement for public assistance?	1	2
BSFEEL	f. To improve the way you feel about yourself.....	1	2
BSLIFE	g. To make it easier to do things on a day-to-day basis?.....	1	2
BSRSOTH	h. Some other reason?	1	2
BSRSOS/R	SPECIFY _____		

AC6. Who (do/did) you take your basic skills or high school completion classes from? That is, what type of school, organization, or business (teaches/taught) the classes?

BSPRTYP POSTSECONDARY SCHOOL (COLLEGE/UNIVERSITY,
 COMMUNITY/JUNIOR COLLEGE, VOCATIONAL/TECHNICAL/
 OCCUPATIONAL SCHOOL) 1
 OTHER SCHOOL OR SCHOOL DISTRICT (ELEMENTARY, JUNIOR
 HIGH, HIGH SCHOOL, OR ADULT LEARNING CENTER) 2
 BUSINESS OR INDUSTRY 3
 GOVERNMENT AGENCY (FEDERAL, STATE, LOCAL) 4
 PROFESSIONAL ASSOCIATION/ORGANIZATION..... 5
 PUBLIC LIBRARY 6
 OTHER (RELIGIOUS, COMMUNITY ORGANIZATION, TUTOR) 91
BSPRTOS/R SPECIFY _____

If AA6 = 1 and AA8 NE 2 (worked in the last 12 months and not self-employed only), go to AC7. Else, go to box after AC7.

AC7. (Is/Was) the (INSTRUCTIONAL PROVIDER) also your employer?

BSPROVEM YES 1
 NO 2

If AC6 = 1 (school is a postsecondary institution), go to AC8. Else, go to AC9.

AC8. What is the school name and in what city and state is the school located?

BSSCNAM/R SCHOOL _____
BSSCCITY/R CITY _____
BSSCST/R STATE _____

AC9. (Are/Were) the basic skills or high school completion classes part of a family literacy program, such as Even Start or Head Start?

BSFMLIT YES 1
NO 2

AC10. In the past 12 months, how many total hours did you attend the basic skills or high school completion classes?

BSHRYR TOTAL HOURS □□□

If R has difficulty reporting the total hours, go to AC11 and AC12. Else, go to AC13.

AC11. Thinking about the length of the basic skills or high school completion classes you (are attending/attended), how many days, weeks, or months did you attend the classes in the past 12 months?

[DO NOT ROUND. USE DECIMAL IF NEEDED.]

* NUMBER □□

* Unit
DAYS 1
WEEKS 2
MONTHS 3
SEMESTER 4
QUARTER 5
OTHER 91

* SPECIFY _____

AC12. For about how many hours did you attend the basic skills or high school completion classes (during each (day/week/month))?

[DO NOT ROUND. USE DECIMAL IF NEEDED.]

* HOURS □□□

AC13. In the past 12 months, about how much of your own or your family's money did you pay for...

BSTUITON a. Tuition and fees to attend the basic skills or high school completion classes? \$□□,□□□
BSMATLS b. How much for books and other materials? \$□□,□□□

If AC13a > 0 (paid some amount for tuition and fees) and AC13b = 0 (paid nothing for books or materials), ask AC14. Else, go to box before AC15.

AC14. Did the tuition and fees also include books and other materials?

BSINCBK YES 1
NO 2

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AC15. Else, go to AD1.

AC15. (Have you been/Were you) employed during the time you (have been/were) taking the basic skills or high school completion classes?

BSWORK YES 1 (GO TO AC16)
NO 2 (GO TO AD1)

AC16. Did your employer require you to take the basic skills or high school completion classes?

BSEMPREQ YES 1 (GO TO AC18)
NO 2 (GO TO AC17)

AC17. Did your employer suggest or encourage you to take the basic skills or high school completion classes?

BSEMPSUG YES 1
NO 2

AC18. (Are you taking/Did you take) the basic skills or high school completion classes at your workplace?

BSWRKPL YES 1
NO 2

AC19. (Are you taking/Did you take) the basic skills or high school completion classes during your regular work hours?

BSWRKHR YES 1
NO 2

AC20. (Are/Were) you being paid by your employer during the hours you (are/were) taking the basic skills or high school completion classes?

BSEMPAID YES 1
NO 2

AC21. Did your employer...

		YES	NO
BSEMPUI	a. Pay all or part of the tuition and fees for the basic skills or high school completion classes?	1	2
BSEMPMAT	b. Pay all or part of the cost for books and other materials?	1	2

Go to AD1.

AC22. As an adult, have you ever taken classes or had a tutor to learn basic skills or to prepare to take a GED test?

BSEVER	YES	1
	NO	2

CREDENTIAL PROGRAMS: COLLEGE OR UNIVERSITY DEGREE PROGRAMS

AD1. (Not including the classes you told us about earlier,) During the past 12 months, were you enrolled in a program to earn a college or university degree, such as an associate's, bachelor's, or graduate degree?

CRDEGREE	YES	1	(GO TO AD2)
	NO	2	(GO TO FIRST BOX AFTER AD2)

AD2. In what types of college degree programs were you enrolled?
[CODE UP TO 5. CATEGORIES CAN BE ENTERED MORE THAN ONCE FOR MULTIPLE PROGRAMS OF THE SAME PROGRAM TYPE.]

CRTYASC	ASSOCIATE'S DEGREE (AA, AS).....	1
CRTYBCH	BACHELOR'S DEGREE (BA, BS)	2
CRTYMAS	MASTER'S DEGREE (MA, MS)	3
CRTYDOC	DOCTORATE (PHD, EDD)	4
CRTYPRF	PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE (MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.).....	5
CRTYOTH	ANOTHER DEGREE.....	91
CRTYOS1/R-	SPECIFY _____	
CRTYOS3/R		

If AA1 (IBGRADE) >= 9 (bachelor's degree) go to next box.
Else, go to box after AD4.

If AA1 (IBGRADE) = 9 or 10 (bachelor's degree or some graduate school), display post-baccalaureate certificate. If AA1 = 11 (master's degree), display post-baccalaureate certificate and post-master's certificate. If AA1 = 12 or 13 (doctorate or professional degree), display post-baccalaureate, post-master's certificate, and post-doctoral certificate.

AD3. During the past 12 months, were you enrolled in a program to earn a post-baccalaureate certificate, (post-master's certificate,) (or post-doctoral certificate)?

CRPOSTDG YES 1 (GO TO AD4)
 NO 2 (GO TO BOX AFTER AD4)

AD4. Which certificate was that?
 [CODE ALL THAT APPLY]

CRPOSBAC POST-BACCALAUREATE CERTIFICATE 1
CRPOSMAS POST-MASTER'S CERTIFICATE 2
CRPOSDOC POST-DOCTORAL CERTIFICATE 3

If AD1 = 1 (college degree program) or AD3 = 1 (certificate program), ask AD5 for each program coded in AD2 and/or AD4. Else, go to AE1.

AD5. What was the major subject or field of study of your (DEGREE/CERTIFICATE) program?

CRMAJOR1/R MAJOR FIELD OF STUDY _____
CRMAJOR3/R

For Each Program Mentioned

AD6. Did you take the (DEGREE/CERTIFICATE) program (in (MAJOR)) mainly for work-related reasons or mainly for personal interest?

CRREAS1- WORK-RELATED 1
CRREAS3 PERSONAL INTEREST 2
 BOTH EQUALLY 3

AD7. Did you also take your (DEGREE/CERTIFICATE) program (in (MAJOR)) to get or to keep a state, industry, or company certificate or license?

CRCERT1- YES 1 (GO TO AD8)
CRCERT3 NO 2 (GO TO AD11)

AD8. In addition to coursework, do you or did you have to take a test or examination specifically to get this certificate or license?

CREXAM1- YES 1
CREXAM3 NO 2

AD9. What was the name of the certificate or license?

CRCERNA1/R- CERTIFICATE/LICENSE _____
CRCERNA3/R

AD10. Did you receive your certificate or license before (MONTH), 2000?

CRCERMO1- YES 1
CRCERMO3 NO 2

AD11. In what month and year did you start your (DEGREE/CERTIFICATE) program (in (MAJOR))?

CRSTRM1- MONTH □□
CRSTRM3
CRSTRY1- YEAR □□□□
CRSTRY3

AD12. In what month and year did you complete or do you expect to complete your (DEGREE/CERTIFICATE) program (in (MAJOR))? [IF DON'T KNOW, PROBE WHETHER NEVER COMPLETED OR DON'T INTEND TO COMPLETE.]

CRCOMP1- MONTH □□
CRCOMP3
CRCOMPY1- YEAR □□□□
CRCOMPY3
 NEVER COMPLETED 13
 DO NOT INTEND TO COMPLETE 14

*If CRCOMP1 – CRCOMP3 = 13 or 14, autocode
 CRCOMPY1 – CRCOMPY3 = 13 or 14, respectively.*

AD13. At what college or university (are/were) you enrolled in your (DEGREE/CERTIFICATE) program (in (MAJOR)), and in what city and state is the school located?

CRSCNAM1/R- SCHOOL _____
CRSCNAM3/R
CRSCCIT1/R- CITY _____
CRSOCIT3/R
CRSCST1/R- STATE _____
CRSCST3/R

*If AA6=1 and AA8 NE 2 (worked in the past 12 months and
 not self-employed only), go to AD14. Else, go to AD17.*

AD14. (Is/Was) the (SCHOOL) also your employer?

CRPROVE1- YES 1 (GO TO AD15)
CRPROVE3 NO 2 (GO TO AD17)

AD15. (Are/Were) you a member of the faculty, adjunct faculty, or staff at (SCHOOL) while attending the (DEGREE/CERTIFICATE) program (in (MAJOR))?

CRFACUL1- YES 1 (GO TO AD17)
CRFACUL3 NO 2 (GO TO AD16)

AD16. (Is/Was) your employment at (SCHOOL) an assistantship, a fellowship, or part of a work study program?

CRASSIS1- YES 1
CRASSIS2 NO 2

AD17. During the past 12 months, have you been enrolled in the (DEGREE/CERTIFICATE) program (in (MAJOR)) as a full-time student, part-time student, or both?

CRPTFT1- FULL-TIME STUDENT 1
CRPTFT3 PART-TIME STUDENT 2
BOTH..... 3

AD18. In the past 12 months, how many semesters or quarters were you enrolled in your (DEGREE/ CERTIFICATE) program (in (MAJOR))?

CRENRNU1- NUMBER □□
CRENRNU3
CRENRUN1- Unit
CRENRUN3 SEMESTER 1
QUARTER..... 2

AD19. How many courses did you take in your (DEGREE/CERTIFICATE) program (in (MAJOR)) in the past 12 months?

CRCRSNU1- NUMBER □□
CRCRSNU3

AD20. How many total credit hours were you enrolled in your (DEGREE/CERTIFICATE) program (in (MAJOR)) in the past 12 months?

CRCRDHR1- TOTAL CREDIT HOURS..... □□□
CRCRDHR3 CREDIT HOURS DO NOT APPLY TO THE DEGREE/CERTIFICATE PROGRAM..... 99

If (AD18 UNIT = 1 and AD20 < 3-semester) or (AD18 UNIT = 2 and AD20 < 5-quarter) (less than 3 semester hours or 5 quarter hours), go to AD21. Else, go to box before AD22.

AD21. How many total classroom hours was that?

CRCLSHR1- TOTAL CLASSROOM HOURS..... □□□
CRCLSHR2

If AD19 = 0 (took no course), go to AD25.

AD22. Were any of the following methods used in the (DEGREE/CERTIFICATE) program? How about...

			YES	NO
CRINTV1- CRINTV3 CRINCOM1- CRINCOM3 CRINCON1- CRINCON3 CRINWWW1- CRINWWW3 CRINOTH1- CRINOTH3 CRINOTO1/R- CRINOTO3/R	a.	Instruction by television, video, or radio?	1	2
	b.	Instruction using computers?.....	1	2
	c.	Instruction using computer conferencing?.....	1	2
	d.	Instruction over the Internet or World Wide Web?	1	2
	e.	Any other types of technology?	1	2
		SPECIFY _____		

If AD19 = 1 (took 1 course) and any AD22a-e = 1 (technology was used), autocode AD23 = 1 and go to AD24. If all AD22a-e NE 1 (no technology was used), go to AD25. Else, go to AD23.

AD23. Of the (NUMBER OF COURSES) courses you took in the (DEGREE/CERTIFICATE) program during the past 12 months, how many courses were taught by using technology?

**CRTECHN1-
CRTECHN3** NUMBER OF COURSES□□

AD24. What percentage of the instruction was taught by using technology in (that course/those courses)?

**CRTECHP1-
CRTECHP3** PERCENTAGE □□□

AD25. In the past 12 months, about how much of your own or your family's money did you pay for...

**CRTUITO1-
CRTUITO3
CRMATLS1-
CRMATLS3**

a. Tuition and fees to attend the (DEGREE/CERTIFICATE) program?.....\$□□,□□□

b. How much for books and other materials?.....\$□□,□□□

If AD25a > 0 (paid some amount for tuition and fees) and AD25b = 0 (paid nothing for books or materials), ask AD26. Else, go to box before AD27.

AD26. Did the tuition and fees also include books and other materials?

CRINCBK1- YES 1
CRINCBK3 NO 2

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AD27. If AD16 = 1 (assistantship, fellowship, or work study), go to AE1. Else, go to AE1.

AD27. (Have you been/Were you) employed during the time you (have been/were) taking the (DEGREE/CERTIFICATE) program (in (MAJOR))?

CRWORK1- YES 1 (GO TO AD28)
CRWORK3 NO 2 (GO TO AE1)

AD28. Did your employer require you to take the (DEGREE/CERTIFICATE) program (in (MAJOR))?

CREMPRE1- YES 1 (GO TO AD30)
CREMPRE3 NO 2 (GO TO AD29)

AD29. Did your employer suggest or encourage you to take the (DEGREE/CERTIFICATE) program (in (MAJOR))?

CREMPUSU1- YES 1
CREMPUSU3 NO 2

AD30. (Are you taking/Did you take) the (DEGREE/CERTIFICATE) program (in (MAJOR)) at your workplace?

CRWRKPL1- YES 1
CRWRKPL3 NO 2

AD31. (Are you taking/Did you take) the (DEGREE/CERTIFICATE) program (in (MAJOR)) during your regular work hours?

CRWRKHR1- YES 1
CRWRKHR3 NO 2

AD32. (Are/Were) you being paid by your employer during the hours you (are/were) taking the (DEGREE/CERTIFICATE) program (in (MAJOR))?

CREMPAI1- YES 1
CREMPAI3 NO 2

AD33. Did your employer...

	YES	NO
CREMPTU1- a. Pay all or part of the tuition and fees for the (DEGREE/CERTIFICATE) program (in (MAJOR))?.....	1	2
CREMPTU3		
CREMPMA1- b. Pay all or part of the costs of books and other materials?	1	2
CREMPMA3		

CREDENTIAL PROGRAMS: VOCATIONAL OR TECHNICAL DIPLOMA PROGRAMS

AE1. During the past 12 months, were you enrolled in a program to earn a vocational or technical diploma after high school?

CRVOCDIP YES 1 (GO TO AE2)
 NO 2 (GO TO AF1)

AE2. In what types of vocational or technical diploma programs were you enrolled?
 [CODE UP TO 5. CATEGORIES CAN BE ENTERED MORE THAN ONCE FOR MULTIPLE PROGRAMS OF THE SAME PROGRAM TYPE.]

VOVOC VOCATIONAL DIPLOMA 1
VOTECH TECHNICAL DIPLOMA..... 2
VOASSOC ASSOCIATE'S DEGREE (AA, AS)..... 3
VOOHDIP ANOTHER DIPLOMA OR CERTIFICATE 91
VOTYOS1/R- SPECIFY _____
VOTYOS2/R

Ask AE3 for each program coded in AE2.

AE3. What was the major subject or field of study of your (VOC/TECH) program?

VOMAJOR1/R- MAJOR FIELD OF STUDY _____
VOMAJOR2/R

For Each Program Mentioned

AE4. Did you take the (VOC/TECH) program (in (MAJOR)) mainly for work-related reasons or mainly for personal interest?

VOREAS1- WORK-RELATED 1
VOREAS2 PERSONAL INTEREST 2
 BOTH EQUALLY..... 3

AE5. Did you also take your (VOC/TECH) program (in (MAJOR)) to get or to keep a state, industry, or company certificate or license?

VOCERT1- YES 1 (GO TO AE6)
VOCERT2 NO 2 (GO TO AE9)

AE6. In addition to coursework, do you or did you have to take a test or examination specifically to get this certificate or license?

VOEXAM1- YES 1
VOEXAM2 NO 2

AE7. What was the name of the certificate or license?

VOCERNA1/R- CERTIFICATE/LICENSE _____
VOCERNA2/R

AE8. Did you receive your certificate or license before (MONTH), 2000?

VOCERMO1- YES 1
 VOCERMO2 NO 2

AE9. In what month and year did you start your (VOC/TECH) program (in (MAJOR))?

VOSTRTM1- MONTH □□
 VOSTRTM2
 VOSTRTY1- YEAR □□□□
 VOSTRTY2

AE10. In what month and year did you complete or do you expect to complete your (VOC/TECH) program (in (MAJOR))? [IF DON'T KNOW, PROBE WHETHER NEVER COMPLETED OR DON'T INTEND TO COMPLETE.]

VOCOMPM1- MONTH □□
 VOCOMPM2
 VOCOMPY1- YEAR □□□□
 VOCOMPY2
 NEVER COMPLETED 13
 DO NOT INTEND TO COMPLETE 14

*If VOCOMPM1 – VOCOMPM2 = 13 or 14, autocode
 VOCOMPY2 – VOCOMPY2 = 13 or 14, respectively.*

AE11. At what school (are/were) you enrolled in your (VOC/TECH) program (in (MAJOR)), and in what city and state is the school located?

VOSCNAM1/R- SCHOOL _____
 VOSCNAM2/R
 VOSCCIT1/R- CITY _____
 VOSCCIT2/R
 VOSCST1/R- STATE _____
 VOSCST2/R

*If AA6 =1 and AA8 NE 2 (worked in the past 12 months and
 not self-employed only), go to AE12. Else, go to AE15.*

AE12. (Is/Was) the (SCHOOL) also your employer?

VOPROVE1- YES 1 (GO TO AE13)
 VOPROVE2 NO 2 (GO TO AE15)

AE13. (Are/Were) you a member of faculty, adjunct faculty, or staff at (SCHOOL) while attending the (VOC/TECH) program (in (MAJOR))?

VOFACUL1- YES 1 (GO TO AE15)
 VOFACUL2 NO 2 (GO TO AE14)

AE14. (Is/Was) your employment at (SCHOOL) an assistantship, a fellowship, or part of a work study program?

VOASSIS1- YES 1
VOASSIS2 NO 2

AE15. During the past 12 months, have you been enrolled in the (VOC/TECH) program (in (MAJOR)) as a full-time student, part-time student, or both?

VOPTFT1- FULL-TIME STUDENT 1
VOPTFT2 PART-TIME STUDENT 2
BOTH 3

AE16. In the past 12 months, how many months, semesters, or quarters were you enrolled in your (VOC/TECH) program (in (MAJOR))?

VOENRNU1- NUMBER □□
VOENRNU2
VOENRUN1- Unit
VOENRUN2 MONTH 1
SEMESTER 2
QUARTER 3

AE17. How many courses did you take in your (VOC/TECH) program (in (MAJOR)) in the past 12 months?

VOCRSNU1- NUMBER □□
VOCRSNU2

AE18. How many total credit hours were you enrolled in your (VOC/TECH) program (in (MAJOR)) in the last 12 months?

VOCRDHR1- TOTAL CREDIT HOURS □□□
VOCRDHR2 CREDIT HOURS DO NOT APPLY TO THE DEGREE/CERTIFICATE PROGRAM 99

If (AE16 = 2 and AE18 < 3-semester) or (AE16 = 3 and AE18 < 5-quarter) (less than 3 credit semester hours or 5 credit quarter hours), go to AE19. Else, go to box before AE20.

AE19. How many total classroom hours was that?

VOCLSHR1- TOTAL CLASSROOM HOURS □□□
VOCLSHR2

If AE17 = 0 (took no course), go to AE23.

AE20. Were any of the following methods used in the (VOC/TECH) program? How about...

		YES	NO
VOINTV1-	a.	Instruction by television, video, or radio?	1 2
VOINTV2			
VOINCOM1-	b.	Instruction using computers?.....	1 2
VOINCOM2			
VOINCON1-	c.	Instruction using computer conferencing?.....	1 2
VOINCON2			
VOINWWW1-	d.	Instruction over the Internet or World Wide Web?	1 2
VOINWWW2			
VOINOTH1-	e.	Any other types of technology?	1 2
VOINOTH2			
VOINOTO1/R-		SPECIFY _____	
VOINOTO2/R			

If AE17 = 1 (took 1 course) and any AE20a-e = 1 (technology was used), autocode AE21 = 1 and go to AE22. If all AE20a-e NE 1 (no technology was used), go to AE23. Else, go to AE21.

AE21. Of the (NUMBER OF COURSES) courses you took in the (VOC/TECH) program during the past 12 months, how many courses were taught by using technology?

VOTECHN1- NUMBER OF COURSES
VOTECHN2

AE22. What percentage of the instruction was taught by using technology in (that course/those courses)?

VOTECHP1- PERCENTAGE
VOTECHP2

AE23. In the past 12 months, about how much of your own or your family's money did you pay for...

VOTUITO1- a. Tuition and fees to attend the (VOC/TECH) program? \$
VOTUITO2
VOMATLS1- b. How much for books and other materials?..... \$
VOMATLS2

If AE23a > 0 (paid some amount for tuition and fees) and AE23b = 0 (paid nothing for books or materials), ask AE24. Else, go to box before AE25.

AE24. Did the tuition and fees also include books and other materials?

VOINCBK1- YES 1
VOINCBK2 NO 2

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AE25. If AE14 = 1 (assistantship, fellowship, or work study), go to AF1. Else, go to AF1.

AE25. (Have you been/Were you) employed during the time you (have been/were) taking the (VOC/TECH) program (in (MAJOR))?

VOWORK1- YES 1 (GO TO AE26)
VOWORK2 NO 2 (GO TO AF1)

AE26. Did your employer require you to take the (VOC/TECH) program (in (MAJOR))?

VOEMPRE1- YES 1 (GO TO AE28)
VOEMPRE2 NO 2 (GO TO AE27)

AE27. Did your employer suggest or encourage you to take the (VOC/TECH) program (in (MAJOR))?

VOEMPSU1- YES..... 1
VOEMPSU2 NO 2

AE28. (Are you taking/Did you take) the (VOC/TECH) program (in (MAJOR)) at your workplace?

VOWRKPL1- YES 1
VOWRKPL2 NO 2

AE29. (Are you taking/Did you take) the (VOC/TECH) program (in (MAJOR)) during your regular work hours?

VOWRKHR1- YES 1
VOWRKHR2 NO 2

AE30. (Are/Were) you being paid by your employer during the hours you (are/were) taking the (VOC/TECH) program (in (MAJOR))?

VOEMPAI1- YES 1
VOEMPAI2 NO 2

AE31. Did your employer...

		YES	NO
VOEMPTU1-	a. Pay all or part of the tuition and fees for the (VOC/TECH)		
VOEMPTU2	program (in (MAJOR))?	1	2
VOEMPMA1-	b. Pay all or part of the costs of books and other materials?	1	2
VOEMPMA2			

APPRENTICESHIP PROGRAMS

AF1. During the past 12 months, were you in a formal apprenticeship program leading to journeyman status in a skilled trade or craft?

APPRENTI YES 1 (GO TO AF2)
 NO 2 (GO TO AG1)

AF2. In what trade or craft did you apprentice?

APTRADE/R TRADE OR CRAFT _____

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AF3a. Else, go to AF3b.

AF3. Who provided the program? Was it...

		YES	NO
APEMPLOY	a. Your employer?	1	2
APUNION	b. A labor union?	1	2
APSTAGOV	c. The local or state government?	1	2
APFEDGOV	d. The federal government?	1	2
APOTHER	e. Anyone else?	1	2
APOTHEOS/R	Who was that? _____		

AF4. In what month and year did you start the (TRADE) apprenticeship program?

APSTRTMM MONTH □□
APSTRYY YEAR □□□□

AF5. In what month and year did you complete or do you expect to complete the program?

APCOMPMM MONTH □□
APCOMPYY YEAR □□□□
 LEFT PROGRAM WITHOUT COMPLETION OR WILL NOT FINISH..... 13

*If APCOMPMM – APCOMPMM = 13,
 autocode APCOMPYY = 13.*

AF6. In the past 12 months, how many total classroom or instruction hours did you spend in the (TRADE) apprenticeship program?

APCLSHR TOTAL HOURS □□□

If AF6 = 0 (no classroom hours), go to AF8. Else, go to AF7.

AF7. Were any of these courses you took in the past 12 months taken for college credit?

APCOLCR YES 1
NO 2

AF8. In the past 12 months, about how much of your own or your family's money did you pay for...

APTUITON a. Tuition and fees to attend the (TRADE) apprenticeship program? \$□□,□□□
APMATLS b. How much for books and other materials? \$□□,□□□

If AF8a > 0 (paid some amount for tuition and fees) and AF8b = 0 (paid nothing for books or materials), ask AF9. Else, go to AG1.

AF9. Did the tuition and fees also include books and other materials?

APINCBK YES 1
NO 2

PARTICIPATION IN FORMAL COURSES

AG1. These next questions are about any courses that were not part of a degree or diploma program. This includes work or career-related courses, seminars, training, or workshops whether or not you had a job when you took them. Also, you might have taken other courses related to your personal interests or hobbies, first aid or CPR, religion, health, and so on. (Not counting the programs we talked about earlier,) Did you take any courses in the past 12 months?

FCACTY YES 1 (GO TO AG3)
NO 2 (GO TO AG2)

AG2. Have you taken any training sessions, seminars, or courses on computer skills, the Internet, communication or diversity, stress management, or any other work-related issues?

What about any Bible study classes, personal finance or home computing classes, dance or musical instrument, health or fitness, or foreign language classes or workshops?
[READ BOTH PROBES.]

FCACTOTH YES, ONE OR BOTH 1 (GO TO AG3)
NO TO BOTH 2 (GO TO AJ1)

Roster Courses

AG3. With your help, I'm going to make a list of the courses you took where there was an instructor. (Again, not counting the programs we talked about earlier,) please tell me the name and subject matter for each course you have taken in the past 12 months. [MAY RECORD UP TO 20 COURSES.]

FCNAME1/R-	COURSE NAME _____	SUBJECT _____
FCNAME20/R	COURSE NAME _____	SUBJECT _____
FCSUBJ1/R-	COURSE NAME _____	SUBJECT _____
FCSUBJ20/R	COURSE NAME _____	SUBJECT _____
	COURSE NAME _____	SUBJECT _____
	COURSE NAME _____	SUBJECT _____

Go to AG3VERF if AG1 = 1. Else, go to AG3VERF2.

AG3VERF. Have you taken any other training sessions, seminars, or courses on computer skills, the Internet, communication or diversity, stress management, or any other work-related issues in the past 12 months?

What about any Bible study classes, personal finance or home computing classes, dance or musical instrument, health or fitness, or foreign language classes or workshops?
[READ BOTH PROBES.]

- * MATRIX CORRECT 1
- RETURN TO MATRIX 2

AG3VERF2. Have you taken any other work-related or personal interest courses in the past 12 months?

- * MATRIX CORRECT 1
- RETURN TO MATRIX 2

If R report any courses after AG3VERF or AG3VERF2, record course names at AG2 and go to AG3. Else, go to next box.

For each course listed in AG3, ask AG4 and AG5.

AG4. Did you take the (COURSE NAME) course mainly for work-related reasons or mainly for personal interest?

- | | | |
|-------------------|-------------------------|---|
| FCREAS1/R- | WORK-RELATED | 1 |
| FCREAS20/R | PERSONAL INTEREST | 2 |
| | BOTH EQUALLY | 3 |

AG5. In the past 12 months, how many total hours did you attend the (COURSE NAME) course?

FCCLSHR1-
FCCLSHR20/R
WRCLSHR1-
WRCLSHR4-¹⁸
SACLSHR1-
SACLSHR2 ¹

TOTAL HOURS □□□

If R reported fewer than 20 courses at AG3 and all AG4 = 1 (reported courses are all work-related courses) or all AG4 = 2 (reported courses are all personal interest courses), go to AG6. Else, go to box before INTRO4.

AG6. In the past 12 months, did you take any courses mainly for (work-related reasons/personal interest)?

FCOTH

YES 1
NO 2

If AG6 = 1 (any additional courses), go to AG7. Else, if any AG4 = 1 or 3 then go to box before INTRO4. Else, if any AG4 = 2, go to box before INTRO5.

AG7. Please tell me the name and subject matter for each of these courses you took in the past 12 months. [RECORD UP TO 20 COURSES.]

FCNAME1/R-
FCNAME20/R
FCSUBJ1/R-
FCSUBJ20/R

COURSE NAME _____ SUBJECT _____
COURSE NAME _____ SUBJECT _____
COURSE NAME _____ SUBJECT _____
COURSE NAME _____ SUBJECT _____
COURSE NAME _____ SUBJECT _____

For all courses reported at AG7, autocode AG4 = 1 if all previously reported courses were personal development (AG4 = 2) or autocode AG4 = 2 if all previously reported courses were work-related (AG4 = 1). Ask AG5 for each course reported at AG7 then go to box before INTRO4.

¹⁸ FCCLSHR1-FCCLSHR20 were used to sort courses for sampling work-related or personal interest courses. Then, FCCLSHR1-FCCLSHR20 were copied to WRCLSHR1-WRCLSHR4 for sampled work-related courses and SACLSHR1-SACLSHR2 for sampled personal interest courses. WRCLSHR1-WRCLSHR4 and SACLSHR1-SACLSHR2 appear on the AELL data file.

WORK-RELATED COURSES

If no work-related courses (all AG4 = 2), go to box before INTRO5. Else, sort work-related courses by hours. If 4 or fewer courses, select all. If 5 courses or more, select systematic random sample of 4 courses.

INTRO4. Right now I'm interested in talking with you about (some of) the course(s) you took for work-related reasons. That is, [DISPLAY COURSE NAME(S)].

For each course sampled, ask AH1-AH19.

AH1. Are you currently taking the (COURSE NAME) course, have you completed the course, or did you stop without completing it?

WRCURR1- CURRENTLY TAKING..... 1
WRCURR4 COMPLETED 2
 STOPPED WITHOUT COMPLETION..... 3

AH2. (Are you taking/Did you take) the (COURSE NAME) course...
 [ROTATE RESPONSE CATEGORIES.]

		YES	NO
WRRSSKI1-	a. To maintain or improve skills or knowledge you		
WRRSSKI4	already had?.....	1	2
WRNWSKI1-	b. To learn new skills or methods you did not already know? ...	1	2
WRNWSKI4			
WRRSRAI1-	c. To help you get a raise or promotion.....	1	2
WRRSRAI4			
WRRSNEW1-	d. To get a new job with a different employer?.....	1	2
WRRSNEW4-			
WRRSCER1-	e. To get or to keep a state, industry, or company		
WRRSCER4	certificate or license?	1	2
WRRSREQ1-	f. Because you were required to take it?	1	2
WRRSREQ4			
WRRSOTH1-	g. Some other reason?	1	2
WRRSOTH4			
WRRSOS1/R-	SPECIFY _____		
WRRSOS4/R			

If AH2e = 1 (to get a certificate or license), go to AH2OV1. Else, go to AH3.

AH2OV1. In addition to coursework, do you or did you have to take a test or examination specifically to get this certificate or license?

WREXAM1- YES 1
WREXAM4 NO 2

AH2OV2. What is the name of the certificate or license?

WRCERNA1/R- CERTIFICATE/LICENSE _____
WRCERNA4/R

AH2OV3. Did you receive your certificate or license before (MONTH), 2000?

WRCERMO1- YES 1
WRCERMO4 NO 2

AH3. Who (do/did) you take the (COURSE NAME) course from? That is, what type of school, organization, or business (teaches/taught) the course?

WRPRTYP1- POSTSECONDARY SCHOOL (COLLEGE/UNIVERSITY,
WRPRTYP4 COMMUNITY/JUNIOR COLLEGE, VOCATIONAL/TECHNICAL/
OCCUPATIONAL SCHOOL) 1
OTHER SCHOOL OR SCHOOL DISTRICT (ELEMENTARY, JUNIOR
HIGH, HIGH SCHOOL, OR ADULT LEARNING CENTER) 2
BUSINESS OR INDUSTRY 3
GOVERNMENT AGENCY (FEDERAL, STATE, LOCAL) 4
PROFESSIONAL ASSOCIATION/ORGANIZATION 5
PUBLIC LIBRARY 6
OTHER (RELIGIOUS, COMMUNITY ORGANIZATION, TUTOR) 91
WRPRTOS1/R- SPECIFY _____
WRPRTOS4/R

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AH4. Else, go to AH5.

AH4. (Is/Was) the (INSTRUCTIONAL PROVIDER) also your employer?

WRPROVE1- YES 1
WRPROVE4 NO 2

AH5. (Will/Did) you earn college credit for the (COURSE NAME) course?

WRCRED1- YES 1
WRCRED4 NO 2

AH6. (Will/Did) you (also) earn Continuing Education Units, or CEUs, for the (COURSE NAME) course?

WRCEU1- YES 1
WRCEU4 NO 2

If AH3 = 1 (school is a postsecondary institution) or AH5 = 1 (college credit), go to AH7. Else, go to AH8.

AH7. What is the school name and in what city and state is the school located?

WRSCNAM1/R- SCHOOL _____
WRSCNAM4/R CITY _____
WRSCCIT1/R- STATE _____
WRSCCIT4/R
WRSCST1/R-
WRSCST4/R

AH8. Were any of the following methods used in the (COURSE NAME) course? How about...

		YES	NO
WRINTV1- WRINTV4	a. Instruction by television, video, or radio?	1	2
WRINCOM1- WRINCOM4	b. Instruction using computers?.....	1	2
WRINCON1- WRINCON4	c. Instruction using computer conferencing?.....	1	2
WRINWWW1- WRINWWW4	d. Instruction over the Internet or World Wide Web?	1	2
WRINOTH1- WRINOTH4	e. Any other types of technology?	1	2
WRINOTO1/R- WRINOTO4/R	SPECIFY _____		

If any AH8a-e = 1 (technology was used), go to AH9. Else, go to box before AH10.

AH9. What percentage of the instruction was taught by using technology?

WRTECHP1- PERCENTAGE
WRTECHP4

If AA6 NE 1 (not worked in the past 12 months), go to AH11.

AH10. How useful are the skills or knowledge you learned in the (COURSE NAME) course in your job? Would you say...

WRJOBBSK1- Very useful,..... 1
WRJOBBSK4 Useful,..... 2
Somewhat useful, or 3
Not too useful? 4
NOT CURRENTLY EMPLOYED 5

AH11. In the past 12 months, about how much of your own or your family's money did you pay for...

WRTUITO1- a. Tuition and fees to attend the (COURSE NAME) course? \$
WRTUITO4
WRMATLS1- b. How much for books and other materials?..... \$
WRMATLS4

If AH11a > 0 (paid some amount for tuition and fees) and AH11b = 0 (paid nothing for books or materials), ask AH12. Else, go to box before AH13.

AH12. Did the tuition and fees also include books and other materials?

WRINCBK1- YES 1
WRINCBK4 NO 2

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AH13. Else, go to box before AH20.

AH13. (Have you been/Were you) employed during the time you (have been/were) taking the (COURSE NAME) course?

WRWORK1- YES 1 (GO TO AH14)
WRWORK4 NO 2 (GO TO BOX BEFORE AH20)

AH14. (Did your employer require/Was it your employer who required) you to take the (COURSE NAME) course?

WREMPRE1- YES 1 (GO TO AH16)
WREMPRE4 NO 2 (GO TO AH15)

AH15. Did your employer suggest or encourage you to take the (COURSE NAME) course?

WREMPSU1- YES 1
WREMPSU4 NO 2

AH16. (Are you taking/Did you take) the (COURSE NAME) course at your workplace?

WRWRKPL1- YES 1
WRWRKPL4 NO 2

AH17. (Are you taking/Did you take) the (COURSE NAME) course during your regular work hours?

WRWRKHR1- YES 1
WRWRKHR4 NO 2

AH18. (Are/Were) you being paid by your employer during the hours you (are/were) taking the (COURSE NAME) course?

WREMPAI1- YES 1
WREMPAI4 NO 2

AH19.	Did your employer...	YES	NO
WREMPMU1- WREMPMU4 WREMPMA1- WREMPMA4	a. Pay all or part of the tuition and fees for the (COURSE NAME) course?.....	1	2
	b. Pay all or part of the costs of books and other materials?	1	2

If R took more than 4 work-related courses, ask AH20 after all sampled courses are cycled through. If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), ask AH20a-f. Else, ask AH20b, AH20e, and AH20f.

AH20. In addition to the courses we just talked about, you mentioned earlier that you took (an)other course(s) for work-related reasons. That is, [DISPLAY COURSE NAMES]. (Was/Were) any of the(se) other work-related course(s)...

		YES	NO
WROREQ	a. Required by your employer?	1	2
WROCOLL	b. Taught by a college or university?.....	1	2
WROPAY	c. Supported by your employer through paying all or part of the cost?	1	2
WROTIME	d. Supported by your employer through giving you time off with pay?	1	2
WROCERT	e. To get or to keep a state, industry, or company certificate or license?	1	2
WROTECH	f. Taught by using technology, such as computer, computer conferencing, TV, video, or the Internet?	1	2

PERSONAL INTEREST/DEVELOPMENT COURSES

If no course was taken mainly for personal interest (all AG4 = 1, 3), go to AJ1. Else, if there are 1 or 2 personal development courses, select both. Else, if there are more than 2 courses, sort by total hours and take systematic random sample of 2 courses.

INTRO5. Right now I'm interested in talking with you about (some of) the course(s) you took for personal interest or personal development. That is, [DISPLAY COURSE NAME(S)].

For each course sampled, ask AI1-AI15.

AI1. Are you currently taking the (COURSE NAME) course, have you completed the course, or did you stop without completing it?

SACURR1- SACURR2	CURRENTLY TAKING.....	1
	COMPLETED	2
	STOPPED WITHOUT COMPLETION.....	3

A12. Who (do/did) you take the (COURSE NAME) course from? That is, what type of school, organization, or business (teaches/taught) the course?

- SAPRTYP1-
SAPRTYP2**
- POSTSECONDARY SCHOOL (COLLEGE/UNIVERSITY,
COMMUNITY/JUNIOR COLLEGE, VOCATIONAL/TECHNICAL/
OCCUPATIONAL SCHOOL) 1
 - OTHER SCHOOL OR SCHOOL DISTRICT (ELEMENTARY, JUNIOR
HIGH, HIGH SCHOOL, OR ADULT LEARNING CENTER) 2
 - BUSINESS OR INDUSTRY 3
 - GOVERNMENT AGENCY (FEDERAL, STATE, LOCAL) 4
 - PROFESSIONAL ASSOCIATION/ORGANIZATION..... 5
 - PUBLIC LIBRARY 6
 - OTHER (RELIGIOUS, COMMUNITY ORGANIZATION, TUTOR) 91
- SAPRTOS1/R-
SAPRTOS2/R**
- SPECIFY _____

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to A13. Else, go to A14.

A13. Was the (INSTRUCTIONAL PROVIDER) also your employer?

- SAPROVE1-
SAPROVE2**
- YES 1
 - NO 2

A14. (Will/Did) you earn college credit for the (COURSE NAME) course?

- SACRED1-
SACRED2**
- YES 1
 - NO 2

A15. (Will/Did) you (also) earn Continuing Education Units, or CEUs, for the (COURSE NAME) course?

- SACEU1-
SACEU2**
- YES 1
 - NO 2

If A12 = 1 (school is a postsecondary institution) or A14 = 1 (college credit), go to A16. Else, go to A17.

A16. What is the school name and in what city and state is the school located?

- SASCNAM1/R-
SASCNAM2/R
SASCCIT1/R-
SASCCIT2/R
SASCST1/R-
SASCST2/R**
- SCHOOL _____
 - CITY _____
 - STATE _____

AI7. Were any of the following methods used in the (COURSE NAME) course? How about...

- SAINTV1- a. Instruction by television, video, or radio? 1 2
- SAINTV2
- SAINCOM1- b. Instruction using computers?..... 1 2
- SAINCOM2
- SAINCON1- c. Instruction using computer conferencing?..... 1 2
- SAINCON2
- SAINWWW1- d. Instruction over the Internet or World Wide Web? 1 2
- SAINWWW2
- SAINOTH1- e. Any other types of technology? 1 2
- SAINOTH2
- SAINOTO1/R- SPECIFY _____
- SAINOTO2/R

*If any AI7a-e = 1 (technology was used), and go to AI8.
Else, go to AI9.*

AI8. What percentage of the instruction was taught by using technology?

SATECHP1- PERCENTAGE □□□

SATECHP2

AI9. In the past 12 months, about how much of your own or your family's money did you pay for...

- SATUITO1- a. Tuition and fees to attend the (COURSE NAME) course?\$□□,□□□
- SATUITO2
- SAMATLS1- b. How much for books and other materials?.....\$□□,□□□
- SAMATLS2

If AI9a > 0 (paid some amount for tuition and fees) and AI9b = 0 (paid nothing for books or materials), ask AI10. Else, go to box before AI11.

AI10. Did the tuition and fees also include books and other materials?

SAINCBK1- YES 1

SAINCBK2 NO 2

If AA6 = 1 and AA8 NE 2 (worked in the past 12 months and not self-employed only), go to AI11. Else, go to box before AI16.

AI11. (Have you been/Were you) employed during the time you (have been/were) taking the (COURSE NAME) course?

SAWORK1- YES 1 (GO TO AI12)

SAWORK2 NO 2 (GO TO BOX AFTER AI15)

AI12. (Are you taking/Did you take) the (COURSE NAME) course at your workplace?

SAWRKPL1- YES1
SAWRKPL2 NO 2

AI13. (Are you taking/Did you take) the (COURSE NAME) course during your regular work hours?

SAWRKHR1- YES 1
SAWRKHR2 NO 2

AI14. (Are/Were) you being paid by your employer while taking the (COURSE NAME) course?

SAEMPA1- YES 1
SAEMPA2 NO 2

AI15. Did your employer...

		YES	NO
SAEMPTU1- SAEMPTU2 SAEMPMA1- SAEMPMA2	a. Pay all or part of the tuition and fees for the (COURSE NAME) course?	1	2
	b. Pay all or part of the costs of books and other materials?	1	2

If R took more than 2 personal interest courses, ask AI16 after all sampled courses are cycled through. If AA6 = 1 and (AA8 = 1 or -1) (worked in the past 12 months and not self-employed only), ask AI16a-e. Else, ask AI16b and AI16e.

AI16. Excluding the courses we just talked about, you mentioned earlier that you took (an)other course(s) for personal interest. That is, [DISPLAY COURSE NAMES]. (Was/Were) any of the(se) other personal interest course(s)...

		YES	NO
SAOREQ	a. Required by your employer?	1	2
SAOCOLL	b. Taught by a college or university?.....	1	2
SAOPAY	c. Supported by your employer through paying all or part of the cost?	1	2
SAOTIME	d. Supported by your employer through giving you time off with pay?	1	2
SAOTECH	e. Taught by using technology, such as computer, computer conferencing, TV, video, or the Internet?	1	2

WORK-RELATED INFORMAL LEARNING ACTIVITIES

If AA6 NE 1 (not worked in the past 12 months), go to AJ1b (self-paced study).

AJ1. Up to now, we've talked about programs, courses, or classes. Now I'd like to talk with you about other ways that people learn new information or new skills for work-related reasons. Please tell me if you have done any of the following things related to your job or career in the past 12 months. How about...

			YES	NO
ILMENTOR	a.	Received supervised training or mentoring on the job, including demonstrations by a supervisor or coworker?	1	2
ILSELF	b.	Self-paced study using books, procedures manuals, audio tapes, or videos?	1	2
ILCOMP	c.	Self-paced study using computer-based software tutorials, including CD-ROM or from the Internet?	1	2
ILBBAG	d.	Attending "brown-bag" or informal presentations?	1	2
ILCONF	e.	Attending conferences or conventions related to your work or profession?	1	2
ILOMAG	f.	Reading professional journals or magazines?	1	2
ILOTH	g.	Some other kind of less formal learning?	1	2
ILOTOS/R		SPECIFY _____		

If any of AJ1a-f = 1 (participated in informal learning activities), go to AJ2. Else, go to box before AK1.

AJ2. Did you (do the supervised training or mentoring/do self-paced study/attend the brown bag or informal presentation/attend the conferences or convention/read the professional journal or magazines/do the less formal learning/ do any of these things) to get or to keep a state, industry, or company certificate or license?

ILCERT	YES		1	(GO TO AJ2OV1)
	NO		2	(GO TO BOX BEFORE AK1)

AJ2OV1. In addition to coursework, do you or did you have to take a test or examination specifically to get this certificate or license?

ILEXAM	YES		1
	NO		2

AJ2OV2. What is the name of the certificate or license?

ILCERNM/R CERTIFICATE/LICENSE _____

AJ2OV3. Did you receive your certificate or license before (MONTH), 2000?

ILCERMO	YES		1
	NO		2

REMAINING BACKGROUND

Any background information gathered in a previous interview is not asked again.

AK1. Now, I would like to ask you a few more questions about your background. In what month and year were you born?

ADOBMM	MONTH <input type="checkbox"/> <input type="checkbox"/>	YEAR 19 <input type="checkbox"/> <input type="checkbox"/>
ADOBY		
	1 JANUARY	7 JULY
	2 FEBRUARY	8 AUGUST
	3 MARCH	9 SEPTEMBER
	4 APRIL	10 OCTOBER
	5 MAY	11 NOVEMBER
	6 JUNE	12 DECEMBER

Calculate current age for display in AK2. If current age does not match Screener age or birth month is current month, go to AK2. Else, go to AK3.

AK2. That would mean that you [are (AGE)/turn (AGE) this month]. Is that right?

* YES 1 (GO TO AK3)
 NO 2 (RETURN TO AK1)

AK3. Are you...
 [IF RESPONDENT GIVES ETHNICITY (E.G., HISPANIC), PROBE FOR RACE. IF NO RACE OR MORE THAN ONE RACE GIVEN, CODE 91.]

ARACE

White,.....	1	(GO TO AK5)
Black,	2	(GO TO AK5)
American Indian or Alaska Native,	3	(GO TO AK5)
Asian or Pacific Islander, or.....	4	(GO TO AK5)
Some other race?	91	(GO TO AK4)

AK4. [CODE RESPONSE IF AK3=91.]

AOTHRACE

HISPANIC/LATINO/MEXICAN/SPANISH/ PUERTO RICAN.....	1	(AUTOCODE AK5=1 AND GO AK6)
MORE THAN ONE RACE/BIRACIAL/MULTIRACIAL	2	(GO TO AK5)
OTHER.....	91	(GO TO AK5)

ARACEOS/R SPECIFY _____

AK5. Are you of Hispanic origin?

AHISPANI

YES	1
NO	2

AK6. Are you currently...

AMARSTAT

Married..... 1 (GO TO AK7)
 Separated 2 (GO TO BOX)
 Divorced..... 3 (GO TO BOX)
 Widowed, or..... 4 (GO TO BOX)
 Never married? 5 (GO TO BOX)

If any HH member other than adult is age 16 or over, ask AK6OV. Else, go to AK7.

AK6OV. Are you currently living with a partner?

ALIVWITH

YES 1
 NO 2

AK7. Does any long-term physical, mental, or emotional problem limit you in any way? Please include only conditions that have lasted 6 months or more, but not (pregnancy or) temporary conditions such as a cold.

ADISABL

YES 1
 NO 2

AK8. Were you born in...

ABORNUS

One of 50 states or the District of Columbia..... 1 (GO TO BOX BEFORE AK11)

One of the U.S. territories (PUERTO RICO, GUAM, AMERICAN SAMOA, U.S. VIRGIN ISLANDS, MARIANA ISLANDS, OR SOLOMON ISLANDS), 2 (GO TO AK8OV)

ATERROS/R SPECIFY _____

Or some other country? 3 (GO TO AK8OV)

ACONTOS/R SPECIFY _____

AK8OV. How old were you when you first moved to the (United States/50 states or the District of Columbia)?

AMOVEAGE AGE..... □□

If AK8OV ≥ 6, go to AK9. Else, go to box before AK10.

AK9. What was the highest grade or year of school that you completed before moving to the U.S.?

USGRADE	NO SCHOOL	1
	LESS THAN HIGH SCHOOL DIPLOMA.....	2
	HIGH SCHOOL DIPLOMA/EQUIVALENT	3
	SOME COLLEGE BUT NO DEGREE	4
	ASSOCIATE'S DEGREE (AA, AS).....	5
	BACHELOR'S DEGREE (BA, BS)	6
	MASTER'S DEGREE (MA, MS)	7
	DOCTORATE DEGREE (PHD, EDD).....	8
	PROFESSIONAL DEGREE BEYOND BACHELOR'S DEGREE (MEDICINE/MD; DENTISTRY/DDS; LAW/JD/LLB; ETC.).....	9

If AA10 NE 1 (first language is not English), go to AK10. Else, go to box after AK10.

AK10. Did you study English before you first came to the (United States/50 states or the District of Columbia)?

ASTUENG	YES	1
	NO	2

If AA6 NE 1 (not worked in the past 12 months), go to AK11. Else, go to box before AK12.

AK11. Have you ever worked at a job for pay or income?

JOBEVER	YES	1
	NO	2

If AA6 =2 (not worked in the past 12 months), autocode AK12 = 0. Else, go to AK12.

AK12. How many months have you worked for pay or income in the past 12 months?

IBWORKMO	MONTHS	<input type="checkbox"/> <input type="checkbox"/>
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If AK12 <12 (not worked for the entire 12 months), go to AK13. Else, go to AK15.

AK13. In the past 12 months, were you ever unemployed and looking for work?

AUNEMP	YES	1
	NO	2

AK14. During the month(s) you did not work for pay or income, what was your primary activity? Would you say...

- JOBACTY** Keeping house or caring for children or other dependents, .. 1
 Going to school,..... 2
 Retired, 3
 Unable to work,..... 4
 Looking for work, or 5
 Something else? 91
- JOBACTOS/R** What was that? _____

*If AA6 NE 1 (not worked in the past 12 months), go to AK24.
 Else, go to AK15.*

AK15. (When you worked,) About how many total hours per week (do/did) you usually work for pay or income?
 [IF HOURS VARY, PROBE FOR AVERAGE PER WEEK.]

PAYHRS WEEKLY HOURS □□□

AK16. For whom (do/did) you work (at your longest job during the past 12 months) and what kind of business or industry (is/was) this?
 [EMPLOYER PROBE: Name of the company, business, organization, or other employer.]
 [BUSINESS/INDUSTRY PROBE: For example, TV and radio manufacturing, retail shoe store, state labor department, or farm.] [IF MORE THAN ONE JOB, COLLECT JOB WHERE R WORKS MOST HOURS.]

EMPLNAME/R NAME OF COMPANY _____
INDUSTRY/R TYPE OF INDUSTRY _____

*If AA7 = 1 (self-employed in the past 12 months), go to AK17.
 Else, go to AK18.*

AK17. [IS THIS RESPONDENT'S OWN BUSINESS?]

- * YES 1
 NO 2

AK18. What kind of work (are/were) you doing and what (are/were) your most important activities or duties?
 [JOB PROBE: For example, electrical engineer, stock clerk, typist, or farmer]
 [IMPORTANT DUTY PROBE: For example, typing, keeping account books, filing, selling cars, operating printing press, or finishing concrete.]
 [IF MORE THAN ONE JOB, COLLECT JOB WHERE R WORKS MOST HOURS.]

PROFESSN/R KIND OF WORK _____
DUTIES/R IMPORTANT DUTY _____

AK19. Do you currently work for (EMPLOYER/your business)?

- CUREMP** YES 1
 NO 2

AK20. Counting all the locations where (EMPLOYER/your business) operates, what is the total number of persons who work for (EMPLOYER/your business)? Would you say...

- NUMPEEP** Under 10 people, 1
10 to 24, 2
25 to 99, 3
100 to 499, 4
500 to 999, or 5
More than 1,000 people..... 6

AK21. (If you had worked for all 12 months this past year,) About how much (would/do) you (have earned/earn) before taxes and other deductions at (EMPLOYER/your business)?

EARNAMT AMOUNT \$□□□,□□□.□□

- EARNUNT** Per
HOUR 1
DAY 2
WEEK 3
BI WEEKLY 4
MONTH 5
YEAR 6
OTHER..... 91

EARNUNOS/R What (is/was) that? _____

AK22. (Do/Did) you have any supervisory role at (EMPLOYER/your business)?

- SUPERV** YES 1
NO 2

AK23. Do you have any certification or licensure for the job you (have now/had) at (EMPLOYER/your business)?

- CERTJOB** YES 1 (GO TO AK23OV)
NO 2 (GO TO AK24)

AK23OV. What is the name of the certification or licensure?

CERTNAM/R CERTIFICATION _____

AK24. Do you have any (other) certification or licensure to practice a trade or profession?

- CERTPROF** YES 1 (GO TO AK24OV)
NO 2 (GO TO AK25)

AK24OV. What is the name of the certification or licensure?

PROFNAM/R CERTIFICATION _____

AK25. Does your occupation have legal or professional requirements for continuing training or education?

- CONTREQ** YES 1
NO 2

If AA8 = 2 (self-employed only), go to AK28. Else, go to AK26.

AK26. Are you currently a member of a labor union or of a labor organization?

LABUNION YES 1 (GO TO AK27)
 NO 2 (GO TO AK28)

AK27. Are you currently covered by a union contract?

UNIONCON YES 1
 NO 2

AK28. Do you have a computer or laptop at home?

COMPHOME YES 1
 NO 2

If AA6 = 1 (worked in the past 12 months), go to AK29. Else, go to AK30.

AK29. Do you have access to a computer at work?

COMPWORK YES 1
 NO 2
 NOT CURRENTLY EMPLOYED 3

AK30. Do you have access to the Internet at home?

WEBHOME YES 1
 NO 2

If AA6 = 1 (worked in the past 12 months), go to AK31. Else, go to AK32.

AK31. Do you have access to the Internet at work?

WEBWORK YES 1
 NO 2
 NOT CURRENTLY WORKING 3

AK32. Have you ever heard of...

			YES	NO
GILIFE	a.	The Lifetime Learning tax credit?	1	2
GIHOPE	b.	The HOPE tax credit?	1	2

If AK32a = 1 (heard of Lifetime Learning tax credit) and R is a participant, go to AK33. Else, go to box before AK34.

AK33. Did you or will you use the Lifetime Learning tax credit for any courses you have taken in the past 12 months?

GILIFUS YES 1
NO 2

If AK32b = 1 (heard of HOPE tax credit) and R is a participant, go to AK34. Else, go to box before AL1.

AK34. Did you or will you use the HOPE tax credit for any courses you have taken in the past 12 months?

GIHOPUS YES 1
NO 2

HOUSEHOLD CHARACTERISTICS

The following questions are asked only once per household.

HHINTRO. Now, a few questions about your household.

AL1. Do you...

HOWNHOME Own your home, 1
Rent your home, or 2
Have some other arrangement? 3

AL2. Besides (PHONE NUMBER), do you have other telephone numbers in your household, not including cellular phones?

HOTHNUM YES 1 (GO TO AL4)
NO 2 (GO TO AL5)
NOT MY NUMBER 3 (GO TO AL3)

AL3. [INTERVIEWER: ASK FOR AND RECORD THE TELEPHONE NUMBER REACHED. RECORD REASON FOR REACHING DIFFERENT TELEPHONE NUMBER.]

* TELEPHONE NUMBER REACHED _____

AREA CODE CHANGE 1
OTHER NUMBER IN HOUSEHOLD 2
ORIGINAL NUMBER IS THAT OF ANOTHER HOUSEHOLD AND
NUMBER IS BEING FORWARDED TO THIS HOUSEHOLD 3
NEVER HEARD OF ORIGINAL NUMBER 4
OTHER [RECORD EXPLANATION IN COMMENTS] 5

If AL3 = 3, go to CLOSE. Else, for cases where AL2 = 3 (not number dialed), ask AL2 again with new number.

AL4. How many of these additional telephone numbers are for home use, not including cellular phones?

HNUMUSE NUMBER□□ (GO TO BOX)

If AL4 > 0 (other telephone numbers for home use), go to AL6. Else, go to AL5.

AL5. Besides this phone number, do you have any telephone numbers in your household that are used for computer or fax lines?

* YES 1 (GO TO AL6)
NO 2 (GO TO AL9)

AL6. How many of these additional telephone numbers are used for computer or fax lines?

* NUMBER□□ (GO TO AL7)

AL7. Some households have telephone numbers that are used both for talking and for computer or fax lines. (Is the number/Are any of the numbers) used for (a) computer(s) or fax line(s) ever answered for talking?

* YES 1 (GO TO BOX)
NO 2 (GO TO AL9)

If AL5 = 1 or AL6 = 1 (only 1 other telephone number for computer or fax), autocode AL8 = 1, and go to AL9. Else, ask AL8.

AL8. How many computer or fax telephone numbers are also answered for talking?

* NUMBER□□

AL9. So that we can group households geographically, may I have your ZIP code?

HZIPCODE/R ZIP CODE□□□□

If HH has no child(ren) sampled for ECPP or ASPA, go to box after AL15. Else, go to AL10.

AL10. In the past 3 years, that is, since (DATE), has your family received benefits from Temporary Assistance to Needy Families or TANF, AFDC, or your state welfare program?

- *19 YES 1 (GO TO AL11)
- NO 2 (GO TO AL15)

AL11. Are you currently receiving benefits from TANF, AFDC, or your state welfare program?

- *19 YES 1 (GO TO AL15)
- NO 2 (GO TO AL12)

AL12. What month and year did you stop receiving benefits from your state welfare program or Temporary Assistance to Needy Families (TANF)?

- *19 MONTH □□
- *19 YEAR □□□□

AL13. While you were receiving welfare benefits, did you receive money from the state government or welfare agency to help you pay for (child/before- or after-school) care costs (for any child)?

- *19 YES 1
- NO 2

AL14. At any time since (MONTH, YEAR) have you received funds from the state government or welfare agency to help you pay for (child/before- or after-school) care costs (for any child)?

- *19 YES 1 (GO TO AL15)
- NO 2 (GO TO BOX AFTER AL15)

AL15. ...Is a state government or welfare agency currently helping you pay for any (child/before- or after-school) care costs (for any child)?

- *19 YES 1
- NO 2

*If more than 1 child age 15 or younger in HH, go to AL16.
Else, go to AL17.*

AL16. In the past 12 months, has your family received benefits from any of the following programs? How about...

		YES	NO
HWIC	a. Women, Infants, and Children, or WIC?.....	1	2
HFOODST	b. Food Stamps?	1	2
HMEDIC	c. Medicaid?	1	2
HCHIP	d. Child Health Insurance Program, or CHIP	1	2

¹⁹ These variables (AL10-AL15) are not included in the AELL data file. The questions were asked in this section of the AELL interview only if a child in the household was sampled. Therefore, the data do not represent the population of adults. Responses to these items are included in the ECPP and ASPA data files if one or both types of interviews were completed in the adult's household.

AL17. In studies like this, households are sometimes grouped according to income. What was the total income of all persons in your household over the past year, including salaries or other earnings, interest, retirement, and so on for all household members?

Was it...
HINCMRNG \$25,000 or less, or 1 (READ SET 1)
 More than \$25,000? 2 (GO TO AL17OV)

AL17OV.
HINCM50K Was it...
 \$50,000 or less, or 1 (READ SET 2)
 More than \$50,000? 2 (READ SET 3)

Was it...
 [SET 1]
HINCOME \$5,000 or less 1
 \$5,001 to \$10,000..... 2
 \$10,001 to \$15,000..... 3
 \$15,001 to \$20,000, or 4
 \$20,001 to \$25,000?..... 5

[SET 2]
 \$25,001 to \$30,000..... 6
 \$30,001 to \$35,000..... 7
 \$35,001 to \$40,000..... 8
 \$40,001 to \$45,000, or 9
 \$45,001 to \$50,000..... 10

[SET 3]
 \$50,001 to \$60,000,..... 11
 \$60,001 to \$75,000,..... 12
 \$75,001 to \$100,000, or 13
 Over \$100,000..... 14

*Ask AL17OV2 if
 (Number in HH = 2 and HINCOME <= 3) or
 (Number in HH = 3 and HINCOME <= 3) or
 (Number in HH = 4 and HINCOME <= 4) or
 (Number in HH = 5 and HINCOME <= 5) or
 (Number in HH = 6 and HINCOME <= 5) or
 (Number in HH = 7 and HINCOME <= 6) or
 (Number in HH = 8 and HINCOME <= 7) or
 (Number in HH => 9 and HINCOME <= 8).
 Else, go to CLOSE.*

AL17OV2. What was your total household income last year, to the nearest thousand?

HINCMEXT INCOME \$□□,□□□

CLOSE. Those are all the questions I have about you. Please hold on for a moment while I check to see if there is anyone else I need to ask about or anyone else I need to speak with. [THANK RESPONDENT.]

APPENDIX B

Extant Data Sources for Comparison of NHES Topics

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EARLY CHILDHOOD PROGRAM PARTICIPATION

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TITLE

Child Care Policy Research Consortium

PURPOSE

The study is meant to increase and strengthen capacity for research on critical child care issues affecting welfare recipients and low-income working families.

SPONSORSHIP

The Child Care Policy Research Consortium is an alliance of Child Care Research Partnerships sponsored by the Child Care Bureau in the Administration on Children, Youth, and Families (ACYF), U.S. Department of Health and Human Services. Partnerships include state child care agencies, university research teams, national, state, and local child care resource and referral networks, providers and parents, professional organizations, and businesses.

DESIGN

Although the Consortium focuses on low-income child care markets in the states of Maryland, Illinois, New Jersey, Oregon, California, and Florida, each project has its own research design. "A Study of Child-Care Subsidy Duration," for example, includes Florida, Illinois, Maryland, Massachusetts, and Oregon as participating states. Its design requires state records each month for a large number of children, ranging from approximately 20,000 in Oregon to nearly 100,000 in Florida. "NCCP Child Care Research Partnership" works with the states of Maryland, Illinois, and New Jersey to analyze statewide databases of families using child care vouchers and regulated child care programs in the three states.

PERIODICITY

The first wave of three research partnerships was initiated in 1995 and concluded in 1998. The second wave of five partnerships is in the field, and is projected to be completed in 2001.

CONTENT

The Consortium membership organizations conduct the following individual projects:

How is Welfare Reform Influencing Child Care Supply and Parental Choices? This study primarily looks at the ways in which welfare reform in three states, California, Florida, and Connecticut, affects child care availability, quality, and parental selection. Children's early learning and development are used as outcome measures

National Center on Children in Poverty (NCCP) Child Care Research Partnership. This project focuses on the availability and distribution of subsidized care for low-income families and the interrelationships between child care and welfare policies, child care services, children's development, and parental outcomes.

Neighborhoods, Parent Involvement and Child Outcomes for Low-Income Families. This study investigates how neighborhood characteristics are related to supply and demand for child care, quality of child care available, parent involvement and advocacy, and the use of child care subsidies.

Oregon Child Care Policy Research Project. This project focuses on three areas: consumer behavior, community and state needs assessment, and welfare reform. It examines parental needs, parental assessments of quality, and availability of child care. It also explores the relationship between the receipt of child care, health care, and other supports and family success in securing and maintaining employment and increasing wages.

Child Care Needs and Outcomes for Low-Income Families Under Welfare Reform. This study explores how child care subsidies and new welfare policies affect the economic self-sufficiency of low-income families, the quality of care received by low-income children, and the availability of care in child care markets used by low-income families. The availability and price of child care low income markets is compared with that in more affluent communities. The effect of subsidies and new welfare-to-work policies on the price of care in child care markets used by low-income families is also explored.

Study of Child Care Subsidy Duration. This study focuses on duration of subsidy receipt and how the duration is related to characteristics of the family, the child, and the child care arrangement.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

Given the focus on impacts of welfare policies on child care market for low-income families, the Child Care Policy Consortium does not provide as broad range of child care issues as the NHES. For instance, the Consortium does not address the home activities, nor disabled child care. In addition, the data from the state and local level are not as nationally representative as those of the NHES.

AVAILABILITY

The Child Care Policy Research Consortium is still in the field. Therefore, the final data and report are not currently available, but information about the study can be found at the Child Care Bureau web page:

<http://www.acf.dhhs.gov/programs/ccb/data/index.htm>

Additional questions can be addressed to:

Patricia L. Divine, Ed.D
Research Coordinator
Child Care Bureau
Administration on Children, Youth, and Families
Room 2046, Switzer Building
330 C Street, SW
Washington, DC 20447
202/690-6705
fax: 202/690-5600
email: pdivine@acf.dhhs.gov

TITLE

The Cost, Quality, and Child Outcomes in Child Care Centers Study

PURPOSE

The study was designed to examine the influence of typical center-based child care on children's development during the preschool years and as they move into elementary school.

SPONSORSHIP

This research project was funded by grants from the Carnegie Corporation of New York, the William T. Grant Foundation, the JFM Foundation, the A.L. Mailman Family Foundation, the David and Lucile Packard Foundation, the Pew Charitable Trusts, the USWEST Foundation, the Smith Richardson Foundation, and the Educational Research and Development Centers Programs as administered by the Office of Educational Research and Improvement.

DESIGN

This longitudinal study included children and families from 401 randomly selected child care centers, half for-profit and half nonprofit, in four states (California, Colorado, Connecticut, and North Carolina). There were a total of 826 children, average age of 4.3 years old and in their next to last year of child care. These children were followed for 4 years (until average age of 8 years old). Data were collected to examine the relations between child care quality and children's development through classroom observations, individual child assessments, teacher ratings of children, and parent reports of child and family characteristics.

PERIODICITY

The longitudinal study began in 1993 and continued for 4 years, until 1997. There are no plans for another study at this time.

CONTENT

The study investigated the relationship between child care quality, including cost and children's patterns of development from preschool through the second grade. The study assessed the influence of center-based child care in America on children in areas such as cognitive and social skills, children's relationships with their teachers, and the long-term affects of child care quality on children. Children's background characteristics were also accounted for to determine if differences between children of different backgrounds emerged. This study measured two dimensions of child care quality: classroom practices and teacher-child relationships. Classroom practices were examined with a variety of observational instruments that measured the quality of the child care environment, teacher sensitivity and responsiveness, and teaching style. The key research question guiding this study was: "Do early child care experiences have long-term consequences for children's development over the time period from the preschool years into the early elementary years. Four sources of data were gathered to examine the relations between child care quality and children's development: (1) classroom observations, (2) individual child assessments, (3) teacher ratings of children, and (4) parent reports of child and family characteristics.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

Different from the NHES, which will provide nationally representative data on all different types of nonparental care and the characteristics of that care, the Cost, Quality, and Child Outcomes study only examined 401 center-based care programs in four states, which is a much smaller and constrained sample than the NHES. Although this study emphasized the dynamics of the care quality, such as classroom practices and teach-child relationships, it didn't use other quality measures that the NHES will explore in-depth.

AVAILABILITY

Findings of this study can be found on their web site:

<http://www.fpg.unc.edu/~NCEDL/PAGES/cqes.htm>

TITLE

Current Population Survey (CPS), 1997 October School Enrollment Supplement

PURPOSE

The purpose of the Current Population Survey is to provide estimates of employment, unemployment, and other characteristics of the labor force for the population at large and various subgroups of the population. The October School Enrollment Supplement provides specific information on the educational status of individuals in the population by demographic and socioeconomic characteristics.

SPONSORSHIP

The supplement has been jointly sponsored by the Bureau of Labor Statistics and the Bureau of the Census, with data collection conducted by the Census Bureau. The Department of Education sponsors additional questions on special educational issues that change from year to year.

DESIGN

The Current Population Survey (CPS) is designed to be representative of the civilian, noninstitutionalized population of the United States, including Armed Forces personnel living off base or on base with their families. The CPS uses a probability sample based on a multistage stratified sampling scheme. In general, the sample is selected by (a) grouping counties or groups of counties into primary sampling units (PSUs) that are assembled into homogeneous strata within each state; (b) selecting one PSU to represent each strata; and (c) selecting addresses within each PSU for membership in the sample. There is no oversampling of minority or low-income areas.

Each month, interviews are conducted in about 50,000 households. Households are in a rotating sample so that they are interviewed each month for 4 months, followed by an 8-month "rest period," and then interviews for the next 4 months. Interviews are conducted in person during the first and fifth month that households are in the sample; otherwise interviews are conducted by telephone (by a field interviewer or from a centralized telephone interviewing facility). The household respondent must be a knowledgeable household member aged 15 years or older; this respondent provides information for each household member. The questions in the school enrollment supplement are asked about all persons aged 3 or older in the household. The sample size for children in each 1-year age group is approximately 2,000.

PERIODICITY

The supplement has been conducted each October since 1946. Plans include retaining this supplement in the future.

CONTENT

Each year the basic school enrollment supplement contains questions on highest grade completed, enrollment status, and if enrolled, the grade or level of school and type of school (public or private). Additional questions on educational topics are also included, but the topics change each year. Topics in recent years include home activity of children in the household (October 1990); information on child care and educational experiences (October 1992); information on the use of home computers (October 1993); tuition and major/degree sought (October 1994); proficiency in English and disability (October 1995); summer activities (October 1996); and a remeasure of the

October 1992 questions on computer ownership and home use (October 1997). Future plans include remeasurement of the proficiency in English and disability questions in October 1999 and remeasurement of the computer ownership and home usage questions in October 2001.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

Given that the CPS October supplement is in fact a supplement to another major survey, it cannot provide information on the breadth of education-related topics that have been covered by the NHES, nor the depth of questions on certain subjects. For example, the October supplement includes questions asking whether children are enrolled in “nursery school,” but does not differentiate participation in Head Start programs.

AVAILABILITY

The Census Bureau usually releases reports on supplement data approximately 3 to 6 months after data collection, and final reports within 12 to 18 months. Published tabulations on school enrollment are available in the *Current Population Reports*, Series P-20.

Public use microdata files are available from the Bureau of the Census for months in which there is a supplement; these files are usually made available within 6 months to 1 year after data collection.

For further information on the October supplement to the CPS, contact

Gladys Martinez
Education and Social Stratification Branch
Population Division
U.S. Bureau of the Census
Washington, D.C. 20233-8800
301/457-2464

Data are also available through their web site
<http://www.bls.census.gov/cps>

TITLE

Early Childhood Longitudinal Study- Birth Cohort (ECLS-B)

PURPOSE

The purpose of the ECLS-B is to provide valuable detailed information on the early years of children, including topics such as health care, care, and education. Specifically, the study is interested in gaining insight into how children's neighborhoods, families, health care, and early childhood program participation influence variations in developmental outcomes.

SPONSORSHIP

The study is sponsored by the U.S. Department of Education, National Center for Education Statistics (NCES), in collaboration with the National Center for Health Statistics (NCHS), the National Institutes of Health (NIH), the U.S. Department of Agriculture, the National Institutes for Child Health and Human Development (NICHD), and the Administration for Children, Youth, and Families (ACYF).

DESIGN

The ECLS-B is a longitudinal study consisting of a nationally representative sample of approximately 12,000 children born in the year 2000. Researchers will follow the children through the first grade. The sample is representative of diverse racial/ethnic groups and socioeconomic backgrounds.

The planning of the study is currently underway. The first data collection will take place when children are 9 months old, and a second when they reach 18 months. Data will be collected through interviews with the parents and a child assessment of developmental skills. Also, at the second collection, data will be gathered from child care providers by telephone, if applicable.

PERIODICITY

The Early Childhood Longitudinal Study, Birth Cohort, is a new study. The study will run through the year 2007, when the children finish the first grade. Data will be collected each year, at various assessment points.

CONTENT

The ECLS-B will focus on three major areas regarding content. First, the study will provide information on the growth and development of children in their early years. Specifically, this will include learning about the children's physical, emotional, social, and cognitive development over the course of the study. Researchers are especially interested in differences among the children regarding race/ethnicity, economics, and family composition.

A second component of the study will focus on transitions to child care and early education programs. Examination of these transitions and the impact it has on children and families will shed light on creating ways to make transitions easier.

The third area of focus will delve into the children's transitions to kindergarten and the first grade, and school readiness. This involves studying the process of transition and adaptation as experienced by the children, their parents, teachers, and the schools.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The NHES provides data on a nationally representative sample of children from birth through age 6, but not enrolled in kindergarten. Because minority children are oversampled, estimates for certain subpopulations can be made. The focus of the study will be on parental report of non-parental care arrangements and their assessment of availability and quality. As such, the focus and goal of the NHES differs substantially from that of the ECLS-B.

AVAILABILITY

The first release of data will occur in the spring of 2001, and will include the 9-month parent interview, child assessment data, and father questionnaire data.

For information on this survey, contact

Jerry West
National Center for Education Statistics
555 New Jersey Avenue, NW
Room 320 B, Capitol Place
Washington, DC 20208
202/219-1574
Jerry_West@ed.gov

Or, visit their web site
<http://nces.ed.gov>

TITLE

National Child Care Survey (NCCS), 1990

PURPOSE

The three main purposes were: (1) to describe existing patterns of parental employment and use of child care and other early childhood programs, (2) to examine how personal characteristics and preferences of parents, as well as the characteristics of child care options available to them, are linked to their child care choices, and (3) to describe the characteristics of out-of-home care for these children, focusing particularly on family day care.

SPONSORSHIP

The sponsoring organization was the National Association for the Education of Young Children, and the sponsoring agency was the Administration for Children, Youth and Families. The two organizations jointly funded the study, which was conducted by the Urban Institute.

DESIGN

The NCCS consisted of three different data-gathering efforts, including (1) a telephone survey of a nationally representative sample of households with children under age 13 (the Parent Survey), (2) interviews with a subsample of providers of child care/early childhood education for the children in this national sample, identified by their parents (the Linked Provider Study), and (3) interviews with a representative sample of providers of care in their own homes identified through screening households for the parental survey (the Family Day Care Home Study).

Parent Survey. Telephone surveys were completed in 4,392 households. Households were selected through a three-stage sampling process. At the first stage, 100 primary sampling units (PSUs), or groups of counties in the nation, were selected. At the second stage, "100-banks" of telephone numbers (numbers with the same first 8 digits) were selected using Mitofsky-Waksberg methods. At the third stage were residential phone numbers in the telephone banks. The main sample included about 1,500 households with a youngest child under 3 years old, 1,500 households with a youngest child between 3 and 5 years-old, and 1,500 households with a youngest child between 6 and 12 years-old. In addition, about 1,000 low-income households with children were oversampled; approximately 330 of these households had youngest children in each of the three age groups defined above. Most families in the oversample were Black or Hispanic. Respondents were located through a random digit dialing (RDD) method and interviews were conducted using computer-assisted telephone interviewing (CATI).

Linked Provider Study. Parents were asked to provide telephone numbers of their center-based and family day care providers for their youngest children. This resulted in 250 provider interviews, which were also conducted using CATI.

Family Day Care Home Study. Approximately 162 individuals who provided care in their homes were identified during the household screening process and interviewed. The interviews were conducted with the same instrument used for the care providers identified by parents.

PERIODICITY

The survey was conducted once, beginning in late October 1989 and ending in May 1990. No updates or related collection efforts are planned at present.

CONTENT

The National Child Care Survey examined information on use of child care and preschool programs, including scheduling, type of arrangement, factors determining arrangement, cost of care, an assessment of the quality of care, characteristics of alternative child care arrangements, and employment characteristics of parents, including type of employment, employment history, and availability and type of benefits.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

With a focus strictly on child care issues, the NCCS does not address the range of educational topics that are covered in the NHES. The information collected on child care participation is quite detailed (e.g., differentiating different types of care, describing characteristics of care arrangements); however, the NCCS was conducted only one time, and thus it does not allow for monitoring trends over time in child care participation as does the NHES. Also, the data, collected in 1989-90, are relatively old.

AVAILABILITY

The final report, "The National Child Care Survey, 1990" is available from The Urban Institute publications office (202/857-8724).

For more information on the National Child Care Survey, contact:

Dr. Sandra Hofferth
Institute for Social Research
University of Michigan
P.O. Box 1248
Ann Arbor, MI 48106-1248
734/763-5131
fax: 734/647-4575
hofferth@umich.edu

or

The Urban Institute
2100 M St., N.W.
Washington, D.C. 20037
202/833-7200
paffairs@ui.urban.org

TITLE

National Institute of Child Health and Human Development (NICHD) Study of Early Child Care

PURPOSE

The purpose of the NICHD Study of Early Child Care is to examine how variations in child care relate to children's development. The study also seeks to determine how children's experiences in child care and family environment affect their cognitive, emotional, and social development.

SPONSORSHIP

The study is sponsored by the National Institute of Child Health and Human Development.

DESIGN

The NICHD Study of Early Child Care is a longitudinal research project involving 10 child care study sites across the United States. The study focused on the experiences of 1,364 children, from their birth in 1991 until June 1996. The 7 ½ year study was conducted in two phases. Phase I followed children from birth until age 3 and Phase II follows the 4 ½ year olds into the first grade.

Data collection included videotaped behavioral observations of the sampled children at their homes, child care settings, and during visits to the Wisconsin Center for Education Research laboratory. Parents and caregivers were also interviewed to gain additional information about the children. As the children move into school age, data will also be gathered from teachers and visits by researchers to the classroom.

PERIODICITY

The longitudinal study began in 1991 and the first phase was completed in June 1996. The second phase began in September 1996, when most of the children began kindergarten, and will be completed when all the children have finished the first grade.

CONTENT

The study examines several important questions related to early child care. Family characteristics and the role family plays in the child's entry into child care, the quality of that care, and the number of care arrangements, is one important component. A second area delves into the association between child care and the mother-child relationship. A third component looks at the characteristics of child care and how it relates to the children's cognitive and language development, as well as their behavior and self-control in the first 3 years.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The sample for the NICHD Study of Early Child Care is based on ten study sites, and therefore, it does not provide a nationally representative sample of U. S. children as does the NHES, nor . cover the variety of child care arrangements and programs in and of themselves. Issues regarding disabled children, which are covered in the NHES, are not explored in the NICHD. Also, the NICHD study does not focus on early childhood, the focus of the NHES, but on school age children.

AVAILABILITY

Although the data is still being collected for Phase II, results from Phase I are being analyzed and published. For information on the NICHD Study of Early Child Care, contact

Rebecca Wilmer
NICHD Study of Early Child Care
6110 Executive Blvd., Suite 420
Rockville, MD 20852

301/770-8201
rwilmer@rti.org

To view publications and instruments, visit the web site at
http://156.40.88.3/publications/pubs/early_child_care.htm

TITLE

National Maternal and Infant Health Survey (NMIHS)

PURPOSE

The main objective of the National Maternal and Infant Health Survey (NMIHS) was to gather data needed to study factors related to poor pregnancy outcomes including low birth weight, stillbirth, infant illness, and infant death.

SPONSORSHIP

The NMIHS was conducted by the National Center for Health Statistics in collaboration with the National Institutes of Health, the U.S. Department of Agriculture, the Human Resources and Services Administration, the Office of the Assistant Secretary for Health, the Alcohol, Drug Abuse, and Mental Health Administration, the Food and Drug Administration, the Centers for Disease Control, and the Agency for Toxic Substances and Disease Registry.

DESIGN

For the 1988 NMIHS, vital records for live births, late fetal deaths, and infant deaths were sampled from each state. Each mother named in the vital records was mailed questionnaires; respondents included approximately 10,000 women who had live births, 3,000 women who had late fetal deaths, and 5,000 women who had infant deaths. These samples are representative of live births, late fetal deaths, and infant deaths to U.S. women age 15 and older.

In 1991, the Longitudinal Followup to the 1988 NMIHS was conducted to provide information on children's health and development. The Followup consisted of three surveys: the live birth survey, the child medical provider survey, and the fetal and infant death survey. The live birth survey gathered information on health issues for children of women interviewed as part of the 1988 NMIHS live birth cohort. The child medical provider survey was administered to health care providers identified by the women as having provided care for their children. The fetal and infant death survey was given to a subsample of women from the 1988 NMIHS fetal and infant death cohorts and gathered information about the women's health and any pregnancies after 1988.

PERIODICITY

As indicated above, the NMIHS was conducted in 1988 and a longitudinal followup survey of the women in the 1988 NMIHS was conducted in 1991. There are plans for administering another followup in 2000.

CONTENT

Information on the following health-related topics was collected in the 1988 NMIHS: prenatal care; alcohol and drug use during pregnancy; pregnancy history; WIC use patterns; work patterns before and after delivery; infant feeding practices; infant health and medical care up to 6 months; and sociodemographic characteristics. Mothers were also asked about child care, including questions on who the child care providers were, payment for care, the location of care, and hours per week children spent in care arrangements.

The 1991 NMIHS collected information concerning the child's health status and development; including measures of family members reading to child, participation in the WIC program, child care and center-based participation; child's medical care; and problems getting medical care.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

The content of the NMIHS focuses on health issues, rather than educational issues, and thus does not cover the breadth or depth of information that has been included in the NHES. The range of children included in the NMIHS is also limited, to children born in 1988.

AVAILABILITY

For more information, contact:

Michael Kogan, Ph.D.
Reproductive Statistics Branch
Division of Vital Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 820
Hyattsville, MD 20782-2003
301/436-8954, ext 170

or visit the web site for the NMIHS:

<http://www.cdc.gov/nchswww/products/catalogs/subject/mihs/mihs.htm>

TITLE

National Study of the Changing Workforce

PURPOSE

The study was conducted to gain data on the changing roles of men and women in the workplace, and factors related to job loyalty, retention, and job satisfaction.

SPONSOR

Lead sponsor of the survey was KPMG Peat Marwick LLP. Other sponsors included Allstate Insurance Company, The Boeing Company, Ceridian, Citibank, N.A., The Commonwealth Fund, Fannie Mae, GE Fund, IBM Corporation, Johnson & Johnson, Merck & Co., Inc., Mobil Corporation, NCR Corporation, Salt River Project, and Xerox Corporation.

DESIGN

The 1997 National Study of the Changing Workforce interviewed 3,551 people. The interviews, which were conducted using a computer-assisted telephone (CATI) survey, ran about 40 minutes in length. The calls were made to a stratified unclustered random probability sample generated by random-digit-dial methods. Eligibility required that respondents work at a paid job, were age 18 or older, were in the civilian labor force, noninstitutionalized, and living within the 48 contiguous states. The respondents were offered 20 dollars in cash as an incentive.

The survey was designed to parallel the Labor Department's 1977 Quality of Employment Survey.

PERIODICITY

The study was first conducted in 1992; the second study was conducted in 1997.

CONTENT

The 1997 National Study of the Changing Workforce contains data on employee demographics, job and workplace characteristics, employee outcomes on the job, issues related to job satisfaction, commitment, performance, and retention. The study also looks at personal well-being and life outside of the workplace, such as family and relationships.

In addition, this study examines child care arrangements, parent participation in child care by gender, dependent care benefits, flexibility related to work schedule, and how home life affects productivity in the workplace.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The focus of this study was on the changing workforce, and therefore it did not provide information on early childhood care and program participation in the context of an educational study as does the NHES.

In addition, this study did not provide as detailed data on the child care arrangements as that were reported in the NHES. For instance, the Head Start program was subsumed under center-based care, rather than examined as an individual program as in the NHES.

AVAILABILITY

Public use data files are now available, along with survey findings. Ordering information can be found at the Families and Work Institute web page at:

<http://www.familiesandworkinst.org>

For more information, contact:

Families and Work Institute
330 Seventh Avenue,
New York, NY 10001
212/465-2044

TITLE

National Survey of Families and Households (NSFH)

PURPOSE

The NSFH is investigating the causes and consequences of the major changes in U.S. patterns of fertility, marriage, mortality, migration, family composition, and household structure that have occurred over the past several decades.

SPONSORSHIP

The Social and Behavioral Sciences Branch, Center for Population Research of the National Institute of Child Health and Human Development is funding the survey. Staff at the Center for Demography and Ecology of the University of Wisconsin-Madison designed the survey and are analyzing the information. The Institute for Survey Research at Temple University collected the data.

DESIGN

The NSFH was conducted in two waves. A baseline wave (Wave 1) was conducted in 1987-88 and a followup (Wave 2) was conducted in 1992-94.

The sample size for Wave 1 was approximately 13,000 households. The overall sample included a core cross-section of households plus an oversampling of Blacks, Puerto Ricans, Mexican Americans, single-parent families, families with stepchildren, cohabiting couples, and recently married couples. One adult per household was randomly selected as the primary respondent. Data were collected through personal interviews and self-administered forms. Spouses and cohabiting partners of primary respondents were given shorter self-administered questionnaires.

In Wave 1, some information was obtained about each of the children in the household, and additional information was obtained about a selected "focal child." The focal child was chosen by listing the first names of all children in the household, and selecting the child whose name came first alphabetically.

For Wave 2, about 10,000 surviving members of the original sample were interviewed in person. The following other interview components were also included for Wave 2: a personal interview with the current spouse or cohabiting partner of the primary respondent; a personal interview with the original spouse or partner of the primary respondent in cases where the relationship has ended; a telephone interview with the "focal children" who were age 13-18 in Wave 1 and age 18-23 for Wave 2; a short telephone interview with "focal children" who were age 5-12 in Wave 1 and age 10-17 in Wave 2; short proxy interviews with a surviving spouse or other relative in cases where the original respondent had died or was too ill to interview; and a telephone interview with a randomly selected parent of a main respondent.

PERIODICITY

As mentioned above, data collection took place in two waves. The first wave was from 1987-88 and the second wave was from 1992-94. There is another follow up planned for the future.

CONTENT

The questions included on this survey cover a very broad range of family-related topics. Those of relevance to the NHES in Wave 1 included questions about children's school attendance; grade repetition, behavior problems requiring a meeting, school suspension or expulsion; and emotional problems. Questions about children age 4 and younger included nursery and preschool participation, hours spent at programs, and how frequently the parent reads to the child. If the respondent was employed, there were questions about child care arrangements during working hours. For children age 5 through 11, parents were asked to assess their children's class ranking relative to other classmates and to state educational expectations for their children.

In Wave 2, primary respondents were asked several questions about their children. For children age 5 to 17, respondents were asked about their children repeating grades in school, children's behavior problems, educational expectations, activities with their children, and involvement in the child's school. For children under age 5, respondents were asked about long-lasting physical conditions, mental or emotional problems, readiness for kindergarten, behavior problems, television watching, and preschool participation. There were also questions regarding contact with nonresident parents.

In Wave 2, youth age 10 to 17 were also interviewed about several topics including having been a victim of stealing or having been threatened; fighting; grades in school; participation in school and community activities; expected educational attainment; cigarette, alcohol, and marijuana use; and contact with absent parents. Young adults age 18 to 23 were also interviewed about some educational issues, including receipt of high school diploma, expected educational attainment, postsecondary education, and degrees and certificates earned.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

Because this survey is based on a cohort of respondents in 1987-1988, the data are not appropriate for monitoring changes in educational issues over time among cross-sections of U.S. children and adults. Also, the substantive focus is not education, and thus, the range of educational data available in the NHES is not fully represented in the NSFH.

AVAILABILITY

The public use data tapes and associated documentation for both waves are available. These can be accessed by FTP and the World Wide Web for no charge. Assistance with the data may be obtained by contacting:

Jim Sweet or Larry Bumpass
Center for Demography, University of Wisconsin
1180 Observation Drive, Rm 4412
Madison, WI 53706-1393
608/262-1537, fax- 608/262-8400
email: nsfhhelp@ssc.wisc.edu

For additional information about the survey, visit the web site:

<http://ssc.wisc.edu/nsfh/home.htm>

TITLE

Panel Survey of Income Dynamics (PSID), Child Development Supplement (CDS)

PURPOSE

The purpose of the PSID is to gather data on a broad variety on the dynamic aspects of economic and demographic behavior and social issues. The Child Development Supplement is meant to provide researchers with a comprehensive, nationally representative, and longitudinal data base of children and their families.

SPONSORSHIP

Major funding for the Panel Study of Income Dynamics comes from the National Science Foundation. Additional support comes from the Office of the Assistant Secretary for Planning and Evaluation, Department of Health and Human Services, the Department of Labor, the National Institute on Aging, the Office of Economic Opportunity, and the National Institute of Child Health and Human Development. Funding for the Child Development Supplement is primarily from the National Institute of Child Health and Human Development (NICHD) and its additional funds are provided by the William T. Grant Foundation, the Annie E. Casey Foundation, the U.S. Department of Agriculture, and the U.S. Department of Education.

DESIGN

The Panel Study of Income Dynamics is a national sample that began with 5,000 households in 1968. This longitudinal study reinterviews the same individuals each year, following them through their life cycle. The study includes new family members as the individuals marry and have children. The survey collects data on all household members, but primarily on the heads of household. The sample has grown to include information on 50,000 individuals spanning as much as 28 years of their lives. In 1997, the Child Development Supplement collected data on 0-12 year old children from a variety of sources, including parents, teachers, and the children themselves. There are approximately 2,500 families who participated in the research, and participants who are selected have been involved in at least one Panel of Income Dynamics Study.

PERIODICITY

Panel Study of Income Dynamics has been conducted every year. But the first wave of the Child Development Supplement was in 1997 and the next wave is scheduled for 2001.

CONTENT

The focus of the Panel Study of Income Dynamics is on economic and demographic information, including items such as income sources and amounts, employment, family composition changes, and demographic events. The Child Development Supplement serves to enhance the PSID by obtaining detailed data on items not generally included in the main data base. The data supports studies of ways in which time, money, parenting and teaching styles, divorce, unemployment, etc. influence and affect children's development cognitively, emotionally, and physically, and how this is buffered by family, school, and community.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

Although there have been 31 data collections for the main database since 1968, the Child Development Supplement was first conducted in 1997. The next wave is scheduled for 2001. However, at this time, no subsequent waves have been scheduled beyond that. This limits the ability of this study to monitor and track change over time.

The substantive focus of the supplement is on school age children's academic achievement and cognitive ability, social and emotional well-being, and health. Thus, the study cannot provide information on the child care topics covered by the NHES, nor does it provide information on educational activities in the home.

AVAILABILITY

Current data is available and can be downloaded from the Panel Study of Income Dynamics web site at:

<http://www.isr.umich.edu/src/psid>

For information and inquires about the study, contact

PSID Staff
The Panel Study of Income Dynamics
Institute for Social Research
PO Box 1248
Ann Arbor, MI 48106-1248
734/763-5166
fax- 734/647-4575
email- psidhelp@isr.umich.edu

TITLE

Survey of Program Dynamics (SPD)

PURPOSE

The longitudinal survey collects data on the demographic, social, and economic characteristics of a nationally representative sample of the U.S. population. The purpose is to gather information on welfare reform legislation and how it affects people over time, in order to evaluate the reforms and how it meets the needs of the public.

SPONSOR

The Bureau of the Census, under the authority of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Public Law 104-193), Section 414.

DESIGN

The SPD is a longitudinal study that was conducted in three phases. The first phase, the 1997 SPD Bridge Survey, recontacted respondents from the 1992 and 1993 panels of the Survey of Income and Program Participation (SIPP). The sample size was approximately 38,000 households.

The second phase of the survey was the 1998 SPD (full implementation of the core SPD questionnaire), and included an adolescent questionnaire also. The sample size was about 18,500 households, with an overrepresentation of households in and near the poverty level.

The third phase of the SPD is currently being conducted. Respondents are knowledgeable household members over the age of 15.

PERIODICITY

The survey is conducted annually, with interviews taking place from May through June. Data collection began with the 1992 and 1993 panels of the Survey of the SIPP, and has continued into 1999.

CONTENT

The survey gathers data on welfare reform, particularly emphasizing program eligibility, access and participation, transfer income and in-kind benefits, detailed economic and demographic data on employment and job transitions, income, and family composition.

As previously mentioned, the SPD survey has three phases. The first phase collected data using a modified version of the March 1997 Current Population Survey. The second phase of data collection used the core SPD questionnaire and included an adolescent questionnaire as well. This component asked questions on school status, child care, health care, child support, and activities at home. The third phase of the survey includes a retrospective residence history for children, core SPD questions, and topics relating to children's well-being.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

Given the focus on welfare related topics, the SPD cannot be compared with the NHES in breadth and depth of child care topics. For example, SPD does not examine all types of child care programs discussed in the NHES. Also, population of interest of this study is not young children, which is the focus of the ECPP component of the NHES.

AVAILABILITY

The Survey of Program Dynamics's web page offers free data access, along with methodology reports, an overview, and publications. The web site is located at:

<http://www.sipp.census.gov/spd/spdmain.htm>

For further questions on the survey, contact:

Michael McMahon
301/457-3819
Michael.F.McMahon@cmail.census.gov

TITLE

Survey of Income and Program Participation (SIPP) -- Child Care Topical Module

PURPOSE

The SIPP is a multipanel longitudinal survey of adults, measuring their economic and demographic characteristics over a period of 2 1/2 years. The child care topical module to SIPP is designed to establish an ongoing database of child care statistics at the national level.

SPONSORSHIP

The topical module is funded and conducted by the U.S. Bureau of the Census. An Advisory Panel with representatives from selected Federal agencies oversees the questionnaire design and decides the frequency of interviewing.

DESIGN

The SIPP survey is based on a multistage stratified sample of the noninstitutional resident population of the U.S. The survey universe includes persons living in households plus those persons living in group quarters such as dormitories and rooming houses. The first stage of sampling involves the definition of primary sampling units (PSUs), which are counties or groups of counties. Those with similar key socioeconomic characteristics are grouped together into strata, and one sample PSU is selected from each stratum. The PSUs used for SIPP are a subsample of those used in the Current Population Survey (CPS). The second stage of sampling is the selection of households. To arrive at this sample, geographic units called "enumeration districts" (EDs), with an average of 350 housing units, are sampled from each PSU. Within each selected ED, two or four living quarters or "ultimate sampling units," are systematically selected.

The topical module on child care is asked of respondents who are the designated parents or guardians of children under 15 who are living in the sampled household. In the first administration of the module (1984 panel, wave 5), the respondents (usually mothers) had to be employed outside the home. In subsequent panels, the respondents were either working or enrolled in school. The questions asked of respondents in each panel pertain only to the three youngest children living in the household under 15 years of age. Child care data concerning approximately 5,400 children have been collected at each time of administration.

PERIODICITY

The first SIPP panel began in 1984 and a new panel has been introduced in February of each year. For each panel, the child care module has been administered in at least one wave of the survey. Each wave of interviewing is consecutive and lasts 4 months.

CONTENT

The SIPP child care module obtains basic information on child care arrangements for children during the time when respondents are working or are in school. Questions specifically concern the month prior to the interview. For each of the three youngest children, the respondent is asked about the main type of arrangement used (that is, the one where the child was cared for during most of the hours that the respondent worked or was in class), when the child was usually cared for under the arrangement, and the number of hours per week the child usually spent in the arrangement. Information about the type and location of the second major type of arrangement is also gathered.

Respondents are then asked about the total cost of child care arrangements in a typical week, and whether they have made any noncash payments. They are also asked if either they or their spouses have lost time from work because the person responsible for taking care of their children was not available.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

Until 1996, the SIPP child care module was administered only if the respondent (typically the mother) was employed or in school. Therefore, the data collected before 1996 were not representative of all children in the United States. Furthermore, the care arrangements discussed are only those that overlap the respondent's hours of employment or school, rather than any nonparental care arrangements.

AVAILABILITY

Results from all administrations of the child care module are available through 1996. Questions about data products and their availability should be directed to:

Carmen Campbell
Data User Services Division
U.S. Bureau of the Census
Washington, DC 20233
301/763-2005

For substantive questions on the child care topical module, contact:

Dr. Martin O'Connell
U.S. Bureau of the Census
Washington, DC 20233
301/763-7958

For information on the SIPP Child Care module and data access, visit the web site:

<http://www.sipp.census.gov/sipp/sipphome.htm>

TITLE

National Survey of America's Families (NSAF)

PURPOSE

The study provides a comprehensive look at the over all well-being of adults and children in the United States. Specifically, the study focuses on differences between low and high-income families and children.

SPONSORSHIP

The National Survey of America's Families has received funding from the Annie E. Casey Foundation, the W.K. Kellogg Foundation, The Robert Wood Johnson Foundation, The John D. and Catherine T. MacArthur Foundation, the Charles Stewart Commonwealth Fund, the Stuart Foundation, the Weingart Foundation, the Fund for New Jersey, the Lynde and Harry Bradley Foundation, the Joyce Foundation, and The Rockefeller Foundation.

DESIGN

The sample is representative of the noninstitutionalized, civilian population of persons under age 65 in the nation and comes from the following 13 states; Alabama, California, Colorado, Florida, Massachusetts, Michigan, Minnesota, Mississippi, New Jersey, New York, Texas, Washington, and Wisconsin. It represents a wide range of socioeconomic, race/ethnicity, educational attainment, and child well-being differences. Interviews were conducted from February to November 1997 with 44,000 households, yielding data on over 100,000 individuals.

The design of the sample had two parts; the primary sample consisted of a random digit dialing (RDD) survey of households with telephones. The second part came from an area probability sample of household without telephones, where in-person interviews connected respondents to the interviewing center via cellular phone for the CATI interview.

The first wave of the survey was conducted in 1997, and a second round is currently under way.

PERIODICITY

The National Survey of America's Families was conducted for the first time in 1997. A followup is currently underway and results from the first wave have not yet been released.

CONTENT

The NSAF looks at a variety of household and family variables, including health, children's education, child care, employment and earnings, welfare participation, and demographic information. The survey provides a general overview of the economic, health, and social characteristics of children, adults, and their families.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

Since the first NSAF survey was conducted in 1997 and the followup is still underway, no comparison data are presently yet available to monitor changes in nonparental child care over time, as the NHES data do. Moreover, the study does not address some important child care

issues covered by the NHES. For instance, the NSAF does not discuss the care location of care, nor parental preferences about child care.

AVAILABILITY

The National Survey of America's Families can be found at the Urban Institute Web Page:

<http://newfederalism.urban.org/nsaf/index.htm>

The web site allows access to Public Use Data, the survey questionnaire, and methodology reports. Additional questions should be addressed to:

NSAF@ui.urban.org

For more information contact:

Assessing the New Federalism
Urban Institute
2100 M Street, N.W.
Washington, D.C. 20037
202/261-5377
fax- 202/293-1918
<http://newfederalism.urban.org>.

BEFORE- AND AFTER- SCHOOL PROGRAMS AND ACTIVITIES

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TITLE

Effects of Crime on After-School Youth Development Programs in the United States, 1993-1994

PURPOSE

Youth organizations are attempting to provide constructive activities in neighborhoods where many children are at risk of becoming crime victims or offenders. To support these efforts, many federal agencies and private foundations are sponsoring research to learn about the needs that must be met and how best to decrease the number of children and teens involved in criminal incidents while increasing the number involved in productive activities in wholesome environments outside of school. This research addresses the dimensions of crime affecting organizations serving youth during after-school hours, and the approaches that can be taken to prevent such crimes.

SPONSORSHIP

The Carnegie Corporation of New York, and the United States Department of Justice, National Institute of Justice.

DESIGN

The research involved a national survey of affiliates and charter members of seven national organizations, including Boys and Girls Clubs of America, Boy Scouts of America, Girls Incorporated, Girl Scouts of the U.S.A., National Association of Police Athletic Leagues, National 4-H Council and United States Department of Agriculture 4-H and Youth Development Service, and YMCA of the U.S.A. Respondents were asked to provide information about their programs for the 1993-1994 school year, including summer 1994 if applicable. A total of 1,234 questionnaires were mailed to the 658 youth-serving organizations in 376 cities in October 1994. Survey data were provided by 579 local affiliates that were collectively serving 21,000 children during out-of-school hours on a typical weekday.

PERIODICITY

Effects of Crime on After-School Youth Development Programs was a one-time national study; there are no plans for future administrations.

CONTENT

This study obtained information on youth-serving organizations around the country that provide constructive activities for youth in the after-school and evening hours. Information was collected on the type of building where the organization was located, the months, days of the week, and hours of operation, number of adults on staff, number and sex of school-age participants, number of hours participants spent at the program location, other participants served by the program, and characteristics of the neighborhood where the program was located. Questions were also asked about the types of contacts the organization had with the local police department, types of crimes that occurred at the location in the school year, number of times each crime type occurred, number of times the respondent was a victim of each crime type, if the offender was a participant, other youth, adult with the program, adult from the neighborhood, or adult stranger, actions taken by the organization because crimes occurred, and crime prevention strategies recommended and adopted by the organization.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The Effects of Crime on After-School Youth Development Programs study was limited to data collected from after-school program providers (in this case, youth organizations), and so although data were gathered on program location, staffing, neighborhood characteristics, number of participants and hours of participation, the study does not address other types of out-of-school arrangements, nor does it involve the parents of school-age children. Thus, the study does not collect data relating to after-school programs and activities from the point of view of families, as will the NHES:2001.

AVAILABILITY

For more information on this project, contact:

Marcia R. Chaiken
Director of Research
LINC
Alexandria, Virginia.

TITLE

Family Involvement in Education: A National Portrait (1998)

PURPOSE

The purpose of the study was to examine how schools, parents, and employers work together to improve education.

SPONSORSHIP

The study was sponsored by the Partnership for Family Involvement in Education, the GTE Foundation, and the U.S. Department of Education.

DESIGN

Respondents were drawn from the General Social Survey (GSS 1996), and is a nationally representative sample of households. The total GSS sample was 3,814, with 2,904 of these completed. From this number, the National Portrait sample was drawn. Respondents were selected if a child aged 5 –14 was in the household at the time of the interview, and if the screener did not indicate an adult other than the respondent as the child's primary caretaker.

Data were collected in May and June 1997, through computer-assisted telephone interviewing (CATI). Eligible adults meeting the above criterion totaled 722, although the eligible sample totaled 523. Of this number, 376 of the cases were completed, for a response rate of 71.9 percent.

PERIODICITY

Family Involvement in Education: A National Portrait was a one-time national study; there are no plans for future administrations.

CONTENT

The study focused on the following areas; how parents feel about their opportunities to be involved in their children's schooling, how schools encourage parental involvement in students' learning, what additional educational resources parents value, and how and what schools communicate to parents about students' learning. A portion of the study addressed before- and after-school arrangements and parents' views on program quality and desirable program features.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The scope of this study is much wider than the before- and after-school component (ASPA) in the NHES. Therefore, the treatment of the after-school issues is quite limited in relation to the data that will be gathered through the NHES. For instance, the ASPA component will gather detailed information on 4 types of formal arrangements as well as information about activities that parents may arrange for the purpose of providing adult supervision for their children.

AVAILABILITY

For information on the study, contact:

Adriana de Kanter
Department of Education
Office of the Secretary
400 Maryland Avenue, SW.
Room Number 6W312
Washington, DC 20202
202/401-0272

TITLE

National Child Care Survey (NCCS), 1990

PURPOSE

The three main purposes were: (1) to describe existing patterns of parental employment and use of child care and other early childhood programs, (2) to examine how personal characteristics and preferences of parents, as well as the characteristics of child care options available to them, are linked to their child care choices, and (3) to describe the characteristics of out-of-home care for these young children and school-age children, focusing particularly on relative care.

SPONSORSHIP

The sponsoring organization was the National Association for the Education of Young Children, and the sponsoring agency was the Administration for Children, Youth and Families. The two organizations jointly funded the study, which was conducted by the Urban Institute.

DESIGN

The NCCS consisted of three different data-gathering efforts, including (1) a telephone survey of a nationally representative sample of households with children under age 13 (the Parent Survey), (2) interviews with a subsample of providers of child care/early childhood education for the children in this national sample, identified by their parents (the Linked Provider Study), and (3) interviews with a representative sample of providers of care in their own homes identified through screening households for the parental survey (the Family Day Care Home Study).

Parent Survey. Telephone surveys were completed in 4,392 households. Households were selected through a three-stage sampling process. At the first stage, 100 primary sampling units (PSUs), or groups of counties in the nation, were selected. At the second stage, “100-banks” of telephone numbers (numbers with the same first 8 digits) were selected using Mitofsky-Waksberg methods. At the third stage were residential phone numbers in the telephone banks. The main sample included about 1,500 households with a youngest child under 3 years old, 1,500 households with a youngest child between 3 and 5 years-old, and 1,500 households with a youngest child between 6 and 12 years-old. In addition, about 1,000 low-income households with children were oversampled; approximately 330 of these households had youngest children in each of the three age groups defined above. Most families in the oversample were Black or Hispanic. Respondents were located through a random digit dialing (RDD) method and interviews were conducted using computer-assisted telephone interviewing (CATI).

Linked Provider Study. Parents were asked to provide telephone numbers of their center-based and family day care providers for their youngest children. This resulted in 250 provider interviews, which were also conducted using CATI.

Family Day Care Home Study. Approximately 162 individuals who provided care in their homes were identified during the household screening process and interviewed. The interviews were conducted with the same instrument used for the care providers identified by parents.

PERIODICITY

The survey was conducted once, beginning in late October 1989 and ending in May 1990. No updates or related collection efforts are planned at present.

CONTENT

Of relevance to the NHES:2001 ASPA component, the NCCS parent survey addressed out-of-school arrangements for school-age children. Data were collected on scheduling, type of arrangement, factors determining arrangement, cost of care, an assessment of the quality of care, characteristics of alternative child care arrangements, and employment characteristics of parents, including type of employment, employment history, and availability and type of benefits. The survey included a schedule of when the respondent and his or her spouse or partner was at work and a schedule of when each child was at each child care arrangement to provide a detailed picture of the correspondence between child care arrangements and work.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

Data of the National Child Care Survey focused are relatively old and may no longer reflect the state of child care for school-age children in the United States. In addition, the study did not provide information on the nature of specific out-of-school arrangements, for example, the structure and activities of after-school programs. Nor did the study address barriers to after-school program participation, as will the NHES:2001.

AVAILABILITY

The final report, "The National Child Care Survey, 1990" is available from The Urban Institute publications office (202/857-8724).

For more information on the National Child Care Survey, contact:

Dr. Sandra Hofferth
Institute for Social Research
University of Michigan
P.O. Box 1248
Ann Arbor, MI 48106-1248
734/763-5131
fax: 734/647-4575
hofferth@umich.edu

or

The Urban Institute
2100 M St., N.W.
Washington, D.C. 20037
202/833-7200
paffairs@ui.urban.org

TITLE

National Network for Child Care, Mott Foundation Nationwide Survey on School-Age Child Care.

PURPOSE

The poll was conducted to assess the support of the American public regarding the expansion and implementation of after-school programs.

SPONSORSHIP

The survey was funded by the Charles Stewart Mott Foundation of Flint, Michigan.

DESIGN

The telephone survey of 800 registered voters nationwide was conducted by a bipartisan polling team comprised of Lake Snell Perry & Associates and The Tarrance Group of Washington, D.C.

PERIODICITY

The survey was conducted once, August 17 through 20, 1998.

CONTENT

The survey addresses the opinions of adults about the perceived value of after-school programs. Respondents give their views on topics such as demand for high-quality programs, parental involvement, supervision and safety, and cost.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The findings of this survey represent the views of all American adults and is not limited to the views of parents. Also, the survey did not obtain data related to before- and after-school arrangements for a specific sample of elementary and middle school students, as will the NHES. Nor did the survey address factors affecting choice of arrangements and barriers to program participation, topics to be addressed in the NHES:2001. In general, the Mott poll does not provide information on the breadth of topics related to after-school programs and activities that will be covered by the NHES:2001.

AVAILABILITY

For more information on the poll, visit the Mott web site at:
www.mott.org.

The National Network for Child Care web site also has information about the survey at:
<http://www.nncc.org>

TITLE

National Study of Before- and After-School Programs

PURPOSE

The purpose of the survey was to inform policy and practice by providing a descriptive foundation regarding the role of public schools in the provision of before- and after-school programs and the extent to which economically disadvantaged children participate in them.

SPONSORSHIP

The National Study of Before- and After-School Programs was funded by the Office of Policy and Planning, U.S. Department of Education.

DESIGN

Two methods were employed. The first involved 1,304 telephone interviews with a nationally representative sample of program providers across 144 U.S. counties in 100 primary sampling units. The second method complemented the first and involved site visits to 12 programs in 3 communities. Research questions centered on the relationships between program features and context-specific features of the program, informed by a conceptual framework that describes the essential characteristics of before- and after-school programs and the variable influences on program operations.

PERIODICITY

The National Study of Before- and After-School Programs was a one-time data collection (conducted in 1991); there are no plans for future administrations.

CONTENT

The study reported on what was learned about the national capacity for providing before- and after-school programs as well as program utilization rates. It summarized the organizational characteristics of providers, and presents findings on features of programs, such as varying purposes, activities, location and use of space, staffing, and the role of parents. The study also focused on the characteristics of programs that serve children from economically disadvantaged families. Finally, issues having to do with program quality were examined.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

Although the National Study of Before- and After-School Programs addressed the characteristics and availability of programs across the country, it did not gather any household data and therefore has little to say about program participation or nonparticipation of children with varying demographic characteristics. Nor did the study capture parents' perceptions of program availability or quality. In addition, while this study contributes to knowledge of the characteristics of before- and after-school programs associated with public schools, it does not examine the wider range of arrangements and programs that will be included in the NHES:2001 ASPA component.

AVAILABILITY

For further information, contact:

Michelle Seligson, M.Ed
Executive Director
National Institute on Out-of-School Time
Center for Research on Women
Wellesley College
106 Central Street
Wellesley, MA 02181
781-283-2547

Or, visit the web site at:

www.wellesley.edu/wcw/crw/sac/

TITLE

Social Ecology of After-school Care

PURPOSE

The study was designed to investigate; (1) the after-school arrangements of White, African-American, and Hispanic elementary school-age boys and girls, who vary in socio-economic status, and (2) the impact of these arrangements on the development of these children, through a prospective longitudinal study of a stratified random sample of 206 children.

SPONSORSHIP

The study was sponsored by the National Institute of Child Health and Human Development (NICHD).

DESIGN

The data for this study were drawn from a longitudinal study of 206 families in three racial/ethnic groups, non-Hispanic White (N=68), non-Hispanic Black (N=75), and Hispanic (N=63), from a single northeastern city. The study employed an accelerated longitudinal design, with 4 different overlapping age cohorts (children were in grades 1-4 at the time of enrollment, and in grades 3-7 at the end of data collection). The data set includes 4 waves of data on each child, collected over 3 or 4 school years, depending on the year in which the child was enrolled in the study.

PERIODICITY

The project began in 1993 and the last data collection occurred in 1998.

CONTENT

The study investigates the after-school arrangements of children from a variety of racial/ethnic and socio-economic backgrounds, and the impact of these arrangements on the development of the children. Specifically, topics focused on children's location after school and hours per week they spent there, how elementary school children spend their time in different after-school care arrangements, the role of family, community, culture, and child characteristics in familial selection of after-school arrangements, and the impact these arrangements have on children's development. The study also investigated the ways in which socioeconomic status and racial/ethnic differences affect children's after-school activities, and the outcomes on development. This included examining the role of children's time use after school in the development of poor and near-poor children, and the factors predicting entry into self-care among poor and near-poor children.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

This project is a community-based study, and therefore is not nationally representative, as is the NHES. The study also has a small sample size compared to that of the NHES. Further, the Social Ecology of After-school Care study does not collect data on parents' views about after-school program quality, parent involvement in after-school programs, program features, nor on arrangements during school vacations and weekends, as will the NHES:2001.

AVAILABILITY

For more information on this project, contact:

Nancy L. Marshall
Wellesley College
Center for Research on Women
106 Central St.
Wellesley, MA 02181-8259
Nmarshall@wellesley.edu

A complete list of publications, papers, and presentations from this study is available at the web site:

http://www.wellesley.edu/WCW/projects/base_proj.html

TITLE

Survey of Income and Program Participation (SIPP) – Child Care Topical Component

PURPOSE

The SIPP is a multipanel longitudinal survey of adults, measuring their economic and demographic characteristics over a period of 2 1/2 years. The child care topical module to SIPP is designed to establish an ongoing database of child care statistics at the national level.

SPONSORSHIP

The topical module is funded and conducted by the U.S. Bureau of the Census. An Advisory Panel with representatives from selected Federal agencies oversees the questionnaire design and decides the frequency of interviewing.

DESIGN

The SIPP survey is based on a multistage stratified sample of the noninstitutional resident population of the U.S. The survey universe includes persons living in households plus those persons living in group quarters such as dormitories and rooming houses. The first stage of sampling involves the definition of primary sampling units (PSUs), which are counties or groups of counties. Those with similar key socioeconomic characteristics are grouped together into strata, and one sample PSU is selected from each stratum. The PSUs used for SIPP are a subsample of those used in the Current Population Survey (CPS). The second stage of sampling is the selection of households. To arrive at this sample, geographic units called “enumeration districts” (EDs), with an average of 350 housing units, are sampled from each PSU. Within each selected ED, two or four living quarters or “ultimate sampling units,” are systematically selected.

The topical module on child care is asked of respondents who are the designated parents or guardians of children under 15 who are living in the sampled household. In the first administration of the module (1984 panel, wave 5), the respondents (usually mothers) had to be employed outside the home. In subsequent panels, the respondents were either working or enrolled in school. The questions asked of respondents in each panel pertain only to the three youngest children living in the household under 15 years of age. Child care data concerning approximately 5,400 children have been collected at each time of administration.

PERIODICITY

The first SIPP panel began in 1984 and a new panel has been introduced in February of each year. For each panel, the child care module has been administered in at least one wave of the survey. Each wave of interviewing is consecutive and lasts 4 months: Wave 1 begins in February and ends in May; Wave 2 begins in June and ends in September, etc. Each household in a panel is interviewed once each wave, so that each household is interviewed once every 4 months over a period of 3 years. The child care module was administered for each panel as follows: 1984 panel, wave 5; 1985 panel, wave 6; 1986 panel, waves 3 and 6; 1987 panel, waves 3 and 6; 1988 panel, waves 3 and 6; 1989 panel, wave 3; 1990 panel, wave 3; 1991 panel, wave 3; 1992 panel, waves 6 and 9; 1993 panel, waves 3 and 6, and 1996 panel wave 4.

CONTENT

The SIPP child care module obtains basic information on child care arrangements for children during the time when respondents are working or are in school. Questions specifically concern the month prior to the interview. For each of the three youngest children, the respondent is asked about the main type of arrangement used (that is, the one where the child was cared for during most of the hours that the respondent worked or was in class), when the child was usually cared for under the arrangement, and the number of hours per week the child usually spent in the arrangement. Information about the type and location of the second major type of arrangement is also gathered. Respondents are then asked about the total cost of child care arrangements in a typical week, and whether they have made any noncash payments. They are also asked if either they or their spouses have lost time from work because the person responsible for taking care of their children was not available.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

Up to 1996, the SIPP data regarding child care were not representative of all children. Until that time, the SIPP child care module was administered only when the respondent (usually the mother) was employed or in school. Also, arrangements made by families in which the mother is at home are not considered in SIPP, and the care arrangements discussed are only those that overlap the respondent's hours of employment or school, rather than any nonparental care arrangements. Further, the survey does not collect data on parents' perceptions of program quality, parent involvement in after-school programs, or barriers to program participation, as will the NHES:2001.

AVAILABILITY

Results from all administrations of the child care module are available through 1996. Questions about data products and their availability should be directed to:

Carmen Campbell
Data User Services Division
U.S. Bureau of the Census
Washington, DC 20233
301/763-2005

For substantive questions on the child care topical module, contact:

Dr. Martin O'Connell
U.S. Bureau of the Census
Washington, DC 20233
301/763-7958

For information on the SIPP Child Care module and data access, visit the web site:

<http://www.sipp.census.gov/sipp/sipphome.htm>

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ADULT EDUCATION AND LIFELONG LEARNING

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TITLE

Adult Education and Training Survey (AETS)

PURPOSE

The purpose of the survey was to provide information on the education and training experiences of adult Canadians.

SPONSORSHIP

The survey was sponsored by Human Resources Development Canada and conducted by Statistics Canada.

DESIGN

The AETS was administered in January 1994. The population for the survey was a subsample of the Labour Force Survey sample. Information was collected through telephone interviews of 41,645 individuals, which was 87 percent of the target population. The responses were weighted to represent a total population of 20,842,070.

PERIODICITY

Adult Education and Training in Canada Surveys have been conducted in 1984, 1985, 1986, 1990, 1992, and 1994.

CONTENT

The survey asks questions about job-related education and training, personal interest education and training activities, organizational aspects, and outcomes of adult education and training. Respondents also assessed the adequacy and usefulness of the training, as well as any barriers or limitations they experienced.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The survey is conducted in Canada and therefore is not representative of educational experiences of people living in the United States. The study, unlike the NHES, excludes the participation of Canadians who were exclusively enrolled in a full-time academic program that was not supported by their employer.

AVAILABILITY

Reports can be viewed on the web site at:

<http://www.hrdc-drhc.gc.ca/arb/publications/books/class90/aete.shtml>

TITLE

American Society for Training and Development: Tools for Benchmarking and Continuous Improvement Survey, 1999

PURPOSE

This study collects information from a variety of organizations on the nature of their employer-provided training expenditures, practices, and outcomes. It is designed to build an extensive database of comparative information from large and small as well as public and private companies.

SPONSORSHIP

Each organization collects their own data and ASTD analyzes it.

DESIGN

The study is actually a service provided by the ASTD, which produces a customized report for organizations. The organizations collect the data themselves through a two-part questionnaire, which, when completed, is sent back to the ASTD. There are two separate questionnaires; Part I, consists of training investments, and Part II is training outcomes. In both cases, data are compared with the other organizations offering similar courses to provide benchmarks of training outcomes and diagnostic feedback.

PERIODICITY

Organizations may conduct data collection at any point; however, to receive a free benchmarking report, completed questionnaires must be submitted by a deadline. The ASTD produces a state of the industry report each year, summarizing the data that were analyzed.

CONTENT

The survey is a two-part questionnaire. Part I looks at training investments and measures the organizations' training and human resource practices and investments. Specifically, sections include questions about training content, learning technologies, use of providers and evaluation, customer service practices, and salaries and functioning of internal training staff. Part II of the survey focuses on training outcomes. This includes an initial evaluation, evaluation questions, and a summary data form. Followup evaluation questions are asked of both the participant and the supervisor.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The ASTD examines only training provided by the employers, which is a narrower focus than the NHES. The sample is self-selected, and is therefore not nationally representative. The unit of analysis in the ASTD is the establishment or workplace, whereas the NHES focus is on the individual.

AVAILABILITY

Questionnaires and information can be found at the web site at:

http://www.astd.org/virtual_community/

For further questions or information, contact:

ASTD Benchmarking Service
1640 King Street, Box 1443
Alexandria, VA 22313-2043
703/838-5841
email: benchservice@astd.org

TITLE

Current Population Survey (CPS), October School Enrollment Supplement

PURPOSE

The purpose of the Current Population Survey is to provide estimates of employment, unemployment, and other characteristics of the labor force, for the population at large and various subgroups of the population. The October School Enrollment Supplement provides specific information on the educational status of individuals in the population by demographic and socioeconomic characteristics.

SPONSORSHIP

The supplement has been jointly sponsored by the Bureau of Labor Statistics and the Bureau of the Census, with data collection conducted by the Census Bureau.

DESIGN

The Current Population Survey (CPS) is designed to be representative of the civilian, noninstitutionalized population of the United States, including Armed Forces personnel living off base or on base with their families. The CPS uses a probability sample based on a multistage stratified sampling scheme. In general, the sample is selected by (a) grouping counties or groups of counties into primary sampling units (PSUs) that are assembled into homogeneous strata within each state; (b) selecting one PSU to represent each strata; and (c) selecting addresses within each PSU for membership in the sample. There is no oversampling of minority or low-income areas.

Each month, interviews are conducted in about 50,000 households. Households are in a rotating sample so that they are interviewed each month for 4 months, followed by an 8-month "rest period," and then interviews for the next 4 months. Interviews are conducted in person during the first and fifth month that households are in the sample; otherwise interviews are conducted by telephone (by a field interviewer or from a centralized telephone interviewing facility). The household respondent must be a knowledgeable household member aged 15 years or older; this respondent provides information for each household member.

PERIODICITY

The supplement has been conducted each October since 1946. Plans include retaining this supplement in the future.

CONTENT

Each October supplement includes basic information on whether adults are enrolled in "regular school" (including high school, college, and professional school) and business or vocational courses. The October 1997 supplement gathered more extensive information about adult education participation, including full-time and/or part-time school enrollment or training program participation in the past year; type(s) of full-time/part-time educational programs in the past year; participation in other types of adult education such as noncredit courses, courses by mail, English as a Second Language (ESL) classes; and instruction in basic skills. Other topics in recent years include tuition and major/degree sought (October 1994); proficiency in English and disability (October 1995); and remeasure of the October 1992 questions on computer ownership and home use (October 1997). Future plans include remeasure in October 1999 of the proficiency in English and disability questions and remeasure in October 2001 of the computer ownership and home usage questions.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

The types of educational activities addressed in this supplement are specific types of organized programs or program-based activities or training. This does not capture other important types of programs or activities such as participation in basic skills, GED, or English as a Second Language classes, workplace training, or personal education courses. The supplement does not regularly contain questions on the various types of participation in adult education covered by the NHES.

AVAILABILITY

Public use microdata files are available from the Bureau of the Census for months in which there is a supplement; these files are usually made available within 6 months to 1 year after data collection.

For further information about the October supplement, contact:

Gladys Martinez
Education and Social Stratification Branch
U.S. Bureau of the Census
Washington, DC 20233-8800
301/457-2464

Information, including the survey questionnaire, can be found on the web at:

<http://www.bls.census.gov/cps/school>

TITLE

Educational Quality of the Workforce (EQW) National Employer Survey

PURPOSE

The National Employer Survey (NES) was created to examine education and workforce issues from the employer's perspective. The survey explores interaction of employer practices, organizational structure, and workforce proficiency. It goes beyond the simple measurement of training incidence and provides a baseline of information that documents the practices and expectations of employers in their search for a skilled and proficient workforce. The NES also relates the educational level of a workforce with establishment productivity.

SPONSORSHIP

The NES was funded by the National Center for Postsecondary Improvement (NCPI) and the Consortium for Policy Research in Education (CPRE).

DESIGN

The NES was administered to more than 4,000 employers in private establishments in 1994 and 1997. It has a sampling frame that includes employers from the manufacturing and the non-manufacturing sectors. The survey oversampled the nation's largest establishments and those in the manufacturing sector. Public-sector employers, nonprofit institutions, establishments with less than 20 employees, and corporate headquarters were excluded from the sample. The sampling frame was drawn from the Bureau's Standard Statistical Establishment Listing (SSEL), the most comprehensive list of U.S. business establishments. Data were collected using computer-assisted telephone interviewing (CATI).

PERIODICITY

Follow-up versions of the NES will be administered in 2000. Also, in early 1998, the National Center on the Educational Quality of the Workforce (EQW) team, in conjunction with the U.S. Bureau of the Census, oversaw the administration of a survey of employees drawn from the sample of establishments participating in the 1997 NES. The new survey links information gained from the NES on establishment practices and productivity with employee perspectives and behaviors.

CONTENT

The NES is designed to capture the practices of employers, the employment outcomes of postsecondary education, and the value and utility that employers, employees, students, and parents attach to training and education. The NES also contains items that measure firm characteristics (i.e., production statistics, machinery, equipment, and technology), workforce characteristics, work organization and design, employee compensation and benefits, recruiting and hiring practices, training activities, and the firm's participation in school-to-work partnership programs and involvement in schools and with students in their communities.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

The NES is a survey of employers about their employees and organization concerning work-related training and education. No questions were asked about participation in credential programs, English as a Second Language (ESL) classes, or personal development courses.

AVAILABILITY

For further information about the National Employer Survey, contact:

Dan Shapiro
National Center on the Educational Quality of the Workforce
University of Pennsylvania
4200 Pine Street, 5A
Philadelphia, PA 19104-4009
215/898-4585

Or call the Center at:

1-800-437-9799
fax: 215-898-9876
email: eqw-requests@irhe.upenn.edu

The web site allows you to download or view on-line the shorter publications, reports, technical publications, questionnaires, and data products.

<http://www.irhe.upenn.edu/eqw/eqw-prog4.html>

TITLE

Integrated Postsecondary Education Data System (IPEDS), Fall Enrollment Survey

PURPOSE

The IPEDS is a comprehensive data collection system that encompasses all identified institutions whose primary purpose is to provide postsecondary education. The purpose of the Fall Enrollment Survey of the IPEDS is to provide annual data on full- and part-time enrollment by racial/ethnic category and sex for undergraduates, first professional, and graduate students. Age distributions by level of enrollment and sex are collected in odd-numbered years and first-time, degree-seeking student enrollments by residence status are collected in even-numbered years.

The Department of Education uses fall enrollment data in program planning and for setting funding allocation standards for legislatively controlled programs such as the College Work-Study Program, State Incentive Grants, Direct Loans to Students, Basic Education Opportunity Grants, and Supplemental Opportunity Grants. The Office of Civil Rights uses the data to perform functions mandated by Title VI and Title IX and assist in the monitoring of desegregation plans. Other Federal and state agencies use enrollment data in policymaking decisions, economic and financial planning, manpower forecasting, and policy formulation.

SPONSORSHIP

The survey is sponsored by the U.S. Department of Education's Office of Educational Research and Improvement, National Center for Education Statistics.

DESIGN

Data are collected from approximately 11,000 postsecondary institutions offering awards at the bachelor's level and above, all 2-year institutions, all public institutions of less than 2 years, and a sample of private less-than-2-year schools. IPEDS has been designed to produce national-, state-, and institutional-level data for most postsecondary institutions. However, prior to 1993, only national-level estimates from a sample of institutions are available for the private, less-than-2-year institutions.

PERIODICITY

The survey started in 1986 and is conducted annually. It is administered in the fall and includes students who have completed programs as of October 15.

CONTENT

The survey collects information on institutional characteristics, fall enrollment, faculty salaries, degree awarded, and financial statistics.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

IPEDS is of limited use for studying adult education participation because the primary focus is on enrollment in 2- and 4-year colleges and universities. While a few questions cover part-time students and enrollment in occupationally specific programs, IPEDS does not collect information on adult basic education, GED preparation classes, English as a Second Language (ESL) classes, apprenticeships, work-related courses, or personal development courses.

AVAILABILITY

The data are currently available for 1997 and earlier by contacting:

Susan G. Broyles
National Center for Education Statistics
Room 408F, Capitol Place
555 New Jersey Avenue, N.W.
Washington, DC 20208-5661
202/219-1359
email: Susan_Broyles@ed.gov

The web site allows you to download or view on-line the shorter publications, reports, technical publications, and data products.

<http://nces.ed.gov/ipeds/>

TITLE

National Adult Literacy Survey (NALS)

PURPOSE

The NALS was designed to measure the nature and extent of literacy skills among U.S. adult population (aged 16 years old and older) and provide policymakers, researchers, and educators with a variety of statistics on the condition of adult literacy in the United States.

SPONSORSHIP

The NALS was sponsored by National Center for Education Statistics of the U.S. Department of Education.

DESIGN

The NALS was administered in the summer of 1992 in person by trained interviewers to a nationally representative sample of about 13,600 individuals aged 16 and older who were living in households. It was also administered to 1,100 adults incarcerated in federal and state prisons. In addition, 11 states (California, Illinois, Indiana, Iowa, Louisiana, New Jersey, New York, Ohio, Pennsylvania, Texas, and Washington) funded sample supplements of 1,000 adults in order to obtain literacy estimates for their state populations. Black and Hispanic households were over-sampled for the survey to ensure accurate estimates of literacy among minorities.

Personal interviews were conducted at the respondent's residence to collect data for the NALS. Data relating to adult literacy, motivating factors to participate in an adult training program, barriers to participation, skills that would improve personal productivity, and level of education were collected. During the visit to the household, the interviewer was responsible for administering an exercise to the sampled respondent. This exercise consisted of a series of literacy tasks that adults would ordinarily encounter in daily life (prose literacy, document literacy, and quantitative literacy).

PERIODICITY

The NALS was conducted in 1992. NCES is beginning to plan for a subsequent literacy assessment of adults, possibly in 2002.

CONTENT

The NALS has two basic components; the background questionnaire and the literacy exercise. The background questionnaire collects information on general and language background, educational background and experiences, political and social participation, labor force participation, literacy activities and collaboration, and demographic information. The second component administered by the interviewer during the household visit is a series of "literacy tasks." The tasks were designed to cover three basic forms of literacy: prose literacy, document literacy, and quantitative literacy. Prose literacy includes knowledge and skills needed to understand and use information from texts, such as editorials, new stories, poems, and works of fiction. Document literacy includes knowledge and skills required to locate and use information contained in such materials as job applications, payroll forms, transportation schedules, maps, tables, and indexes. Finally, quantitative literacy covers knowledge and skills needed to apply arithmetic operations to information contained in printed materials, such as a checkbook, a loan advertisement, or an order form.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

Although the NALS is one of the most comprehensive efforts to measure adult literacy in the nation, the survey did not ask questions concerning participation in the range of adult education activities related to English literacy training, especially basic skills education, GED preparation classes, or English as a Second Language (ESL) classes.

AVAILABILITY

The data are currently available by contacting:

Andrew J. Kolstad
National Center for Education Statistics
Room 406B
555 New Jersey Avenue, N.W.
Washington, DC 20208-5646
202/219-1773
Andrew_Kolstad@ed.gov

The web site allows you to download or view on-line the shorter publications, reports, technical publications, and data products.

<http://nces.ed.gov/nadlits/nall92/>

TITLE

National Center for the Study of Adult Learning and Literacy (NCSALL), Longitudinal Study of Adult Literacy

PURPOSE

The study will create a database consisting of longitudinal information on program participation and nonparticipation of potential adult literacy learners. The study will look at the literacy growth of adult learners in adult basic education, English as a second language (ESL), and secondary programs.

SPONSORSHIP

The study is funded by the National Center for the Study of Adult Learning and Literacy.

DESIGN

The study began with a local demonstration in Portland, Oregon. Data collection began in October, 1998, and will follow the sample for 3 years. The sample consists of one thousand adults ages 18-44 who do not have a high school diploma or equivalent. The sample is divided into two groups; one group that is entering adult education programs at the beginning of the study, and the other group who were not enrolled in any literacy programs at the onset of the study.

Data are currently being collected through in-depth, face-to-face interviews and an assessment of literacy proficiencies once per year over the course of 3 years. Researchers will also collect information from respondents through periodic telephone interviews and the administrative databases. The Portland study will be the basis of a national implementation in the future.

PERIODICITY

The study began in the spring of 1998. Data are continuously collected throughout the life of the study. The Portland study is funded through 2001.

CONTENT

The study collects information on adult learners' participation in multiple programs to assess the contribution of adult education to the growth of literacy and other abilities across time. The Longitudinal Study of Adult Literacy focuses on three areas, which are the growth of adults' literacy skills and other skills and knowledge, the contribution of literacy education programs to the development of literacy abilities, and the relationship between improved literacy and participants' gains in personal, social, and economic aspects.

LIMITATIONS RELATIVE TO THE GOALS OF NHES

The NCSALL is still in the piloting stages before becoming a national study. At this point, it is community based. The population of interest is adults who do not have a high school diploma; findings can not be generalized to all adults as those of the NHES can. The information collected is limited to adult literacy education and English as a Second Language. It does not cover other areas of adult education, such as credential, work-related, or personal development.

AVAILABILITY

Data collection is currently taking place and therefore unavailable at this point. The pilot study will be completed in 2001, at which point the study will be expanded nationally. Information on the study is posted at the National Center for the Study of Adult Learning and Literacy web site:

<http://gseweb.harvard.edu/~ncsall/research.htm>

Questions about the study should be directed to:

Stephen Reder
Portland State University
P.O. Box 751
Portland, OR 97207-0751
503/725-3999
email: ncsall@pdx.edu

TITLE

1995 Survey of Employer-Provided Training (SEPT95)

PURPOSE

The 1995 Survey of Employer-Provided Training includes two major components: (1) a survey of establishments and (2) a survey of randomly selected employees in the surveyed establishments. The SEPT95 provides information on the amount of formal and informal training provided by employers as well as the amount of money employers spent on selected training expenditures. The SEPT95 data are used by government, private industry, and the academic community to determine the major types of training that American workers receive from their employers.

SPONSORSHIP

The SEPT95 was sponsored by the Employment Training Administration of the U.S. Department of Labor and conducted by the Bureau of Labor Statistics (BLS).

DESIGN

Representatives of establishments provided information on the hours and costs of formal training. Randomly selected employees provided information on their hours of both formal and informal training. Over 1,000 employees were surveyed from May through October 1995. Each employee was interviewed in person and provided information on his/her age, sex, race/ethnicity, occupation, education, earnings, and tenure, as well as information on his/her past training and its benefits. In addition to this background information, employees were asked to answer a series of questions on the new skills or information they learned each day over a 10-day period. Information was collected on the nature, length, and type of each learning activity. These learning activities were then categorized by BLS as either formal training, informal training, or self-learning.

The sampling frame for the employee survey was a listing (usually a payroll listing) of employees supplied by the establishment respondent. The total number of employees on the listing was required to match that reported by the establishment respondent.

Experienced field economists in the BLS regional offices requested permission from establishment representatives to randomly sample using a computer-generated random number program based on a simple random selection method and interview two employees. During the interview, field economists administered the employee questionnaire to the respondents using computer-assisted personal interviewing (CAPI).

PERIODICITY

There is no plan for future data collection.

CONTENT

The employee questionnaire focused on employment and demographic characteristics. Questions were included on job, employer and occupational tenure, income, weeks and hours worked, education, sex, age, race and ethnicity, marital status, and number of children. In addition, the employee questionnaire included general questions on the types of training provided by the employer during the employee's tenure and in the last 12 months, and on the benefits of training. Types of training include basic reading, writing, and arithmetic skills training; occupational safety training; employee health and wellness training; orientation training; awareness training; and communications, employee development, and quality training. The employee log collected detailed information on all training and learning activities the employee participated in over a 10-day period. The requested information on the activity included a description, its duration, who was involved, and what type of training medium was used.

LIMITATIONS RELATIVE TO THE GOALS OF THE NHES

The SEPT95 was limited in its scope as far as respondent characteristics and types of adult education activities. It collected information from currently employed adults focusing on workplace training programs provided by private businesses. The SEPT95 did not ask questions about participation in credential programs, English as a Second Language (ESL) classes, or personal development courses.

AVAILABILITY

Reports that provide detailed information and analysis of SEPT95 are available by contacting:

Michael Horrigan
Bureau of Labor Statistics
2 Massachusetts Avenue, N.E.
Washington, DC 20212
202/606-7386

The web site allows you to download or view on-line the shorter publications, reports, technical publications, and data products.

<http://stats.bls.gov/eptover.htm>

FOREIGN SURVEYS RELATED TO ADULT EDUCATION AND LIFELONG LEARNING

A number of foreign surveys (surveys in countries other than the United States) are relevant to the adult education and lifelong learning component (AELL) of the NHES:2001. These surveys measure a variety of topics associated with AELL, such as participation, training, and basic skills. However, because the studies are not representative of the U.S. population, the data collected are not comparable to the NHES. This does not mean that the instruments used by other countries cannot serve as a model to the NHES by providing valuable information on the questions asked in the surveys. While many of the foreign surveys are still in data collection and/or the design phase, the inclusion of them in this report serves the purpose of providing global information on important aspects related to the AELL component of the NHES:2001. The foreign surveys include:

- New Approaches to Lifelong Learning-Survey of Informal Learning (Canada);
- 1998 Canadian Adult Education and Training Survey (Canada);
- International Life Skills Survey (Canada);
- Adult Education Survey 1995 (Finland)
- National Adult Learning Survey (England and Wales), and;
- Swiss Labour Force Survey 1999 (Switzerland)

APPENDIX C

Cognitive Research Report

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COGNITIVE RESEARCH

Cognitive research has been an integral part of the design of the NHES surveys since the NHES Program was established. The purpose of the cognitive research for the NHES:2001 was to obtain in-depth information from participants selected to be similar to those who would be interviewed to help instruct the design of questionnaire items for the ECPP, ASPA, and AELL surveys. Cognitive research was conducted in two rounds: round 1 during the early design phase of the new ASPA survey and round 2 after the development of the first draft of the questionnaires for the three surveys.

Round 1 Methodology—Focus Groups

The first round of cognitive research consisted of two focus groups to gather information for the ASPA survey. Focus groups, generally consisting of 8 to 10 participants, are led by a trained moderator and guided by a predetermined set of topics. They are designed to take advantage of group interaction, and the informal discussion often produces rich and unexpected information. Group members cue each other as they discuss their experiences and attitudes, facilitating recall, motivating participation, and encouraging self-revelation. Focus groups provide an open forum for the expression of information and beliefs that go well beyond what may be captured by a more constrained quantitative survey with closed-ended questions. Focus group research allows observation of answers and provides the opportunity to follow up with probes to amplify or clarify responses. Because information is gathered from several people at one time, focus groups are also an efficient means of collecting qualitative data.

Because the ASPA was a new survey for the NHES, it was determined that focus groups would offer insight into the variety of arrangements used by parents to care for their children during the before- and after-school hours. However, this methodology would have less utility for the ECPP and AELL surveys because they have been the subjects of focus group discussions in cognitive research conducted for past survey administrations.

The focus groups conducted for the ASPA survey aimed to elicit from parents their perspectives on a host of issues regarding the out-of-school arrangements they make for their children. For the NHES:2001, the ASPA survey encompassed several new areas, including access to before- and after-school programs, factors influencing parents' choice of arrangements, and barriers to participation. The ASPA focus groups led to the development of items measuring participation in four types of arrangements, as well as items designed to capture activities arranged by parents to provide supervision

for children. As will be illustrated in the findings and recommendations section of this chapter, the information gathered from parents in the focus groups benefited questionnaire design in a variety of ways. First, parents appeared knowledgeable about many aspects of their children's before- and after-school activities and the focus groups revealed new information from parents' points of view. Second, focus group discussions made apparent what parents do *not* know or are not able to articulate about their children's programs and activities before and after school. This information helped to avoid asking questions that may not have elicited meaningful responses from parents. Third, results suggested clarification of issues and terminology that were significant to both parents and researchers, but not adequately explained in questionnaire items.

Round 2 Methodology—Intensive Interviews

Round 2 of the cognitive research was conducted for all three surveys after draft questionnaires had been developed. This round of research consisted of intensive interviews. This methodology was chosen as the most appropriate to test the flow and wording of the interviews. With intensive interviews, the researcher focuses on one respondent at a time and tailors the cognitive approach to each case. In addition, intensive interviews allow assessment of respondents' willingness to answer, ability to accurately grasp the meaning of the survey questions, easily recall information, and respond with an answer that conforms to the coding categories. Preliminary administration times can also be obtained.

During the interviews, researchers ascertained the respondent's level of comprehension through observation of nonverbal and verbal cues, such as eye rolling and hesitation markers, and also by using probes or "think aloud" techniques during and/or immediately following the interview. For example, respondents were asked to think out loud as they produced a response to a question, voicing the steps in recall or calculation, or to think back and relate how the response was arrived at following completion of the interview. Respondents were specifically instructed in how to engage in this cognitive activity, because thinking out loud is usually suppressed in everyday interactions.

In an alternate technique, concurrent probes ascertained respondents' understanding of survey terms immediately after a question was asked, or probes were used to elicit specific information from the respondent in a debriefing after the entire interview was completed and selected items were returned to for discussion. The purpose of these methods is to better understand the interview experience from the respondent's point of view.

Recruiting Procedures

The participants for the NHES:2001 cognitive research were recruited by Westat. Several sources were used to locate potential participants. First, Westat maintains a list of individuals who have volunteered for cognitive research activities for various projects. Recruiting calls were placed to those persons who did not participate in previous projects and whose information suggested they might be appropriate for this project. Second, flyers were posted in Westat offices, other Rockville and Gaithersburg office buildings, and public places such as grocery stores, public libraries, and recreation centers. Although Westat employees and their immediate families are not eligible, their friends and neighbors are often willing to participate in qualitative research. Also, an advertisement was placed in *The Gazette*, a Montgomery County, Maryland, newspaper, to recruit participants specifically for the AELL intensive interviews.

Interested persons were administered a brief screener to determine if they qualified to participate in NHES cognitive research activities. Persons were selected from among those meeting the recruiting criteria, and potential participants were called and scheduled to attend a focus group or respond to an intensive interview.

Recruiting criteria for focus groups. In most focus groups homogeneity of demographic characteristics among participants is desirable, since commonality of background allows for freer expression of opinions and factual detail. However, focus groups conducted in the past for the NHES have demonstrated that demographic differences are often superceded by a common concern with parenting issues that promotes free discussion, while demographic variety opens the possibility for participants to reveal a wider range of experiences. Therefore, diversity of race and level of education was sought for each focus group. The parents recruited came from households in which the only parent or both parents work at least part time. Past experience indicates that mothers are usually most well-informed about their children's schooling and care arrangements, so there was no effort to balance the groups by gender. However, fathers who volunteered were held to the same recruiting criteria as mothers. An effort was made to include parents of more than one child in the target grade range, of children in different grades, and of children attending different schools. Finally, every attempt was made to have an array of arrangements and programs represented in each group. This purposeful sampling was led by the focus group composition goals.

The specific goals for the composition of each group were as follows:

- Parents employed at least part time;
- Parents of children attending kindergarten through grade 8, preferably with multiple children in those grades;
- At least three participants not to be White;
- An education level of high school diploma or less for at least three participants;
- Participants to represent at least three different school systems; and
- No more than two participants to represent private schools.

All recruiting goals were met.

Recruiting criteria for intensive interviews. Participants for the intensive interviews were recruited from the same pool of cognitive research volunteers from which the focus group participants had been drawn. For the ECPP and ASPA surveys, parents were selected on the basis of demographic differences, such as race, level of education, marital status, and occupational status. Also, parents with different care arrangement types, such as relative care, nonrelative care, and center-based care, as well as parents with children in different grade levels were selected. An attempt was made to recruit at least one parent who had been a welfare recipient within the last year in order to test several questions having to do with welfare-to-work issues. However, despite contacting the director of a Head Start program in Montgomery County Head Start, other day care centers that enroll children with low-income parents, and checking pools of cognitive research participants from other Westat studies that focused on low-income people, a parent receiving welfare or one who had been on welfare in the recent past was not found.

Specific goals for ECPP and ASPA intensive interview respondents, all of which were met, were as follows:

- Parents of children attending kindergarten through grade 8, preferably with multiple children in those grades;
- Parents employed at least part time;
- At least three participants not to be White;
- An education level of high school diploma or less for at least three participants; and
- A variety of nonparental child care/out-of-school arrangements.

The recruiting criteria for the AELL survey also sought diversity in race, education level, and occupation. However, the main recruitment criterion was participation in an adult education activity, especially work-related courses, personal interest courses, and/or degree or credential programs, within the past 12 months. Since adults who ordinarily take work-related courses tend to be more highly educated, there was little variability in the educational background of those recruited for AELL intensive interviews (all had at least a bachelor's degree). On the other hand, demographic variation among those recruited with respect to gender, race/ethnicity, and marital status was sought.

Recruiting goals for the AELL intensive interview participants were as follows:

- Participation in an educational activity within the past 12 months;
- At least half of the participants to have taken work-related courses in the past 12 months;
- At least half of the participants not to be White; and
- Approximately equal numbers of male and female participants.

Approximately one-third of the participants were not White. The other recruiting goals were met.

In order to maximize the information gathered from the cognitive research participants, every attempt was made to recruit participants who could respond to more than one interview. Respondents to ECPP and APSA interviews were administered the interview for the other survey if possible. Also, information was collected on the activities of the adult education participants' children, if any, so that participants could respond to a parent interview; however, only one person who volunteered for the research and met the other criteria for inclusion had a child and was administered an ASPA interview in addition to the AELL interview.

Cognitive Research, Round 1—Focus Groups

For the purpose of the cognitive research, before- and after-school arrangements were conceptualized as falling into two general categories, center-based programs on the one hand, and all other arrangements on the other, including relative care, nonrelative care, self-care, and other adult-supervised activities. Because of this conceptual dichotomy, two focus groups were organized to explore issues related to the ASPA interview. Participants were assigned to the focus group corresponding to the

type of before- and after-school care in which their children participated, either center-based programs or another type of arrangement.

The two focus groups were conducted during the evenings of October 11 and October 13 at Westat’s office in Rockville, Maryland, in a room designed for focus groups. Both groups were videotaped and audiotaped with the permission of the participants. Each participant was paid an honorarium of \$40. The focus groups lasted approximately 2 hours and were led by the NHES project director. The ASPA survey manager and NCES and ESSi staff observed the groups, and the project research assistant took notes.

Focus Group Participants

Ten adults participated in the first focus group and eight in the second. Of the total of 18 participants, 6 were Black, 6 were White, 3 were Hispanic, 2 were Asian, and 1 was Native American. All but two of the participants were female. Four participants had a high school diploma or less, seven had some college, six had a bachelor’s degree or higher, and no educational information was available for one participant. Exhibits C-1 and C-2 present details about the focus group participants.

Exhibit C-1. Characteristics of parents of youth not in center-based programs who participated in focus group discussions

Race/ethnicity and sex	Highest education	Occupation	Spouse’s occupation	Children’s grade levels
Black/female	Some college	Secretary	†	K, grade 3, grade 6
Black/female	Some college	Executive secretary	Parts driver	Grade 4, grade 6
White/female	Some college	Field administrator	†	Grade 2, grade 5
Black/female	H.S. diploma	Credit analysis	†	K, grade 3
White/male	Bachelor’s degree	Govt. property administrator	Teacher	Grade 5
Hispanic/female	H.S. diploma	Purchasing clerk	Salesperson	Kindergarten
Hispanic/female	Bachelor’s degree	YMCA	†	Grade 8
Black/female	Bachelor’s degree	Administration	†	Grade 6
White/female	Some college	Assistant	†	Grade 2
Black/male	Some college	Legal secretary	Recreational counselor	Kindergarten

See notes at end of exhibit.

Exhibit C-1. Characteristics of parents of youth in center-based programs who participated in focus group discussions—Continued

Race/ethnicity and sex	Highest education	Occupation	Spouse's occupation	Children's grade levels
Black/female	H.S. diploma	Student	†	Grade 6, grade 8
Asian/female	Graduate school	Journalist	Journalist	Kindergarten
Asian/female	Bachelor's degree	Broadcaster	†	Grade 1
Hispanic/female	(1)	Self-employed	†	Grade 6
White/female	Master's degree	Housewife	Lawyer	Grade 1, grade 5
White/female	Some college	Consultant	†	Grade 4
White/female	Less than H.S.	Unemployed	†	Grade 6
Native American/female	Some college	Program assistant	International economist	Grade 4, grade 6

† Not applicable.

¹ Education level was not provided by the participant.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 1999.

Protocol and Topics of Discussion

The focus groups were led by a trained moderator and guided by a predetermined set of topics. The moderator's guide consisted of broad, open-ended questions designed to stimulate discussion among participants. Before the discussion began, parents were asked to map their children's activities before and after school during the previous week. This provided a useful backdrop for analyzing the comments made during the discussion.

Topics

Types of current arrangement or program. The discussions began with parents describing the arrangements they had in place at that time using the words and concepts most familiar to them. This part of the discussion also addressed special arrangements that parents might have when children are not in school yet parents are working, such as school holidays, inservice days, or when the child is sick. Parents were encouraged to talk about their particular needs for child care while they are working and the extent to which their current arrangements met those needs. The issues of location of the arrangement and transporting the child to and from the arrangement were included, as were the challenges posed by different arrangements for siblings or multiple arrangements for one child.

To help explore the issues of choice and barriers, parents were asked to describe former before- and after-school arrangements for their children, how long the children participated, and why the arrangements changed. The topics of self-care and sibling care were major discussion points in the group composed of parents with non-center-based arrangements and was touched on in the group of parents with children in center-based programs. The advantages and disadvantages of self- and sibling care as opposed to other arrangements, as well as parental strategies for monitoring children in self- or sibling-care, were explored.

The second focus group incorporated topics pertinent to parents with children in center-based programs. The relative desirability of center-based programs versus other arrangements was explored. Factors such as convenience, cost, and the receipt of private or public subsidies were included in the discussion. Issues associated with program staffing were discussed. Finally, contact between the program and the parents and parent involvement in the program's activities were topics opened for discussion.

Choice of arrangement or program. Information about decision making regarding types of before- and after-school arrangements or programs was elicited. Parents were asked how they learned about the arrangement or program in which their children were participating, what their alternatives were, how they decided on their current type of arrangement, the main reasons for selecting the current arrangement, and how satisfied they were with their choice. The discussion incorporated parents' expectations for the arrangements/programs in which their children participated, for instance, whether academic enrichment or exposure to cultural events or new technologies figured in their choice, and what type of arrangement parents would make for their children if all alternatives were available to them. Information about barriers to participation in center-based programs was invited. Parents were also asked to specify what to them were the indicators of quality in before- and after-school arrangements and to evaluate the cost of their arrangements in light of the benefits to their lives and those of their children. Discussion included reference to the impact on parents' work schedules and responsibilities as related to choice of arrangement. Finally, parents were asked for reports of their children's satisfaction with the current arrangement or program.

Characteristics of arrangements or programs. Because it was unclear how reliable parents would be as reporters of the activities in which their children were engaged during the after-school hours, the next part of the discussion attempted to elicit information about this topic. Differences in activities by type of arrangement and parents' confidence in reporting was noted. Time spent in the arrangements and in different activities was also ascertained.

Focus Group Findings and Recommendations

Notes were taken during both focus group discussions and were analyzed along with the audio-recordings. Analysis focused on issues and points of relevance to the design of new questionnaire items for the ASPA survey. The analysis was designed to capture recurrent patterns and themes among participants, as well as points of agreement, division, strong emphasis, and areas where parents were apparently lacking in information. Findings were compared and contrasted across the two focus groups. Attention was paid in the analysis to parents' choice of words, as well as their reaction to the moderator's choice of words. The analysis detailed in this section includes recommendations for questionnaire design based on the findings. Unless noted otherwise, all recommendations were implemented in the survey instruments (although later field test results might have led to further modifications).

Overall, parents in both focus groups revealed that maintaining arrangements for their children before and after school is a difficult and ongoing process. Almost all of the parents relied on a patchwork of arrangements for their children, as they struggled to ensure that their children were cared for. Parents talked about their efforts to find a balance between cost, logistics, quality, convenience, and their children's wishes. They spoke openly about their expectations, frustrations, and fears, and provided valuable information that was of use in the design of new questionnaire items for the ASPA survey. In the remainder of this section, findings relevant to instrument design will be discussed, followed by specific recommendations.

Findings from Focus Group A (Arrangements Other Than Center-Based)

Types of current arrangement or program. Parents in this focus group spoke candidly about their children's before- and after-school arrangements. The resulting picture was a complicated one, and each family's story was unique. The participants' children were cared for by babysitters, neighbors, or grandmothers, often in combination. A few took care of themselves or were taken care of by older siblings. Some children spent afternoon hours a few times each week in activities such as choir, swimming, soccer, band, and Brownies. Few parents in focus group A reported only one arrangement for their children during out-of-school time. Focus group A participants also made it clear that parents devote considerable effort in making arrangements for their children during before-school hours.

To give an example of the sometimes complex set of arrangements parents devise for their children, one single parent from focus group A took in a roommate and offered free room and board for the purpose of having another adult available to transport and care for her two children between the time

she left for work and the time school began. Her older daughter went to swimming after school and was picked up by her grandmother afterwards, who then took her to day care. She also went to math club after school twice each month and walked to day care afterwards. Her younger daughter attended Brownies after school several days each month and was taken afterwards by the Brownie leader to day care. Both children were then picked up at day care by their mother at 6:00 p.m.

In addition to the hodgepodge of arrangements made for their children during ordinary out-of-school time, parents also tried to plan for backup arrangements during school holidays, inservice days, or days when their children were sick. This was an area of great concern to parents, who confessed to finding themselves struggling to ensure that their children were cared for on these days. Some parents explained that they tried to enlist a babysitter or a relative in advance of school holidays or inservice days. Sometimes they were forced to allow their children to stay home by themselves. Sick days were usually more troublesome, since they were not predictable, and many parents in focus group A said that they were often forced to take time off of work to stay home with their children. One father said that he was usually the one to take off of work, rather than his wife, who worked as a teacher.

Several parents in focus group A allowed their children to care for themselves at least occasionally during out-of-school time. All of these parents said that they monitored their children by telephone, sometimes calling several times a day to check on them. None of the parents said that they allowed their children to spend time with friends during out-of-school hours. With respect to the issue of the sensitivity of the topic of self-care, focus group A participants did not overtly express any negative evaluation of this type of arrangement. On the contrary, when the topic was broached by several parents, other participants seemed supportive and understanding of the necessity of sometimes allowing children to care for themselves during morning or afternoon hours. One parent, whose 5th grade daughter stayed alone for about an hour before school in the morning, went to great lengths to explain for the group why this arrangement was necessary, suggesting that parents may feel that such a condition requires justification.

When asked whether anyone had had to change arrangements during the recent school year, three participants raised their hands. These parents had to change arrangements for a variety of reasons, such as poor quality care, age changes in their children, and relocation. For instance, one parent explained that she had to get rid of a babysitter who insisted on changing her closing hour from 5:30 p.m. to 4:30 p.m. This meant that she had to find an additional babysitter for that hour, which proved to be too difficult. Another parent had to change arrangements because of a carpool change.

Recommendations: *The multiplicity of arrangements reported by parents for their children's out-of-school hours reaffirmed that parents should be asked about all of their arrangements, and not just their primary one. Since the NHES:1999 fielded such questions, Westat recommend that they be retained for the NHES:2001 ASPA survey. In addition, emphasis should be placed on before-school arrangements as well as after-school ones. Some parents in focus group A reported making backup arrangements for their children on school holidays, teacher inservice days, and days when their child is sick. This indicated that the ASPA survey should include question(s) on the nature of these backup arrangements. Also, as an indirect measure of the extent to which mothers and fathers share responsibility for children's out-of-school needs, ASPA survey respondents should be asked which parent is more likely to take off of work to care for a sick child.*

Parents seemed understanding of the necessity for self-care under some conditions, and focus group results indicated that parents would not be adverse to responding to new questionnaire items related to self-care (e.g., on monitoring or child's activities and location). On the other hand, questions must be phrased so as to avoid the impression that the self-care arrangement is stigmatized in any way.

Parents did report making changes in the arrangements that they have for their children and further provided an idiosyncratic array of reasons. Although parents should be asked whether or not they have had to change arrangements within the previous year, it was not recommended that their reasons be elicited in the NHES:2001, since they would probably be too varied to generate an adequate closed-ended question.

Choice of arrangement or program/barriers. Parents were divided on the question of whether they felt many alternative arrangements were available to them. All of them felt that their choices were constrained by factors such as cost and logistics. Asked about their ideal arrangement, there was a unilateral and immediate response: "I would be there!" Asked then about their second ideal choice, the majority of focus group A said "a relative." It was noteworthy that none of the participants mentioned a center-based program, which seems to imply that these parents either did not place a high value on center-based programs, or else were not aware of this possible alternative.

Focus group A participants discussed the many barriers that prevented them from choosing more appealing arrangements for their children. First, transportation was cited as a serious impediment to certain arrangements. Parents described the difficulties of getting their children from one place to the

next, often relying on relatives and neighbors. Some parents told us that some arrangements were impossible because of distance or lack of transportation. Second, cost was a commonly cited factor in limiting parents' options. In describing why she could not enroll her child in a center-based program, one parent said: "I was shot down because of the price and I couldn't afford it." Another parent complained that her child was rejected from an after-school program because she made too much money. Third, several parents said that they were not able to put their children into center-based programs because the hours were not convenient or conflicted with their work schedule. Parents of children with disabilities faced special barriers to finding providers willing to care for their children at a reasonable cost.

In addition, parents discussed other factors that affected their choice of arrangements. Several explained that feeling comfortable with their child's caregiver is an utmost concern. Parents agreed that knowing the caregiver is essential, and that he/she must be reliable, competent, and must have a good relationship with the child. When prompted, everyone agreed that safety was extremely important. This includes safety within day care (protecting children from other children), and safety for children in self-care at home. Several parents said that they prohibited their children from answering the telephone or opening the door when they are at home alone. Parents also discussed their fears for their children's safety outdoors. Finally, another factor in choice of arrangement was the wishes of their children. Some children were strongly opposed to center-based programs, especially older children who felt that activities were not age-appropriate or were too highly structured.

Recommendations: Westat recommended that parents be asked whether they feel that they had more than one choice in selecting their current arrangements, since parents in focus group A varied on this point. This question might provide interesting results with respect to demographic differences (e.g., it seems likely that lower income parents would feel that they have fewer choices available to them).

Parents had clear notions of ideal choice, and so they might be asked which arrangement they would choose if there were no obstacles preventing it. This would provide needed data to researchers and policymakers on what parents really want for their children during out-of-school time. Also, the question might be asked separately for both before-school and after-school hours. Since parents in focus group A did not mention center-based programs as an ideal choice, parents of children not enrolled in center-based programs should be asked whether or not they are aware of center-based programs in their community, and if so, whether they would prefer that their child attend one.

New questions should be devised to address the issue of barriers to participation in various arrangements, such as transportation and cost. Parents in focus group A complained that lack of transportation or distance prevented their children from participating in certain arrangements. No parent in this group seemed immune from the burden of cost, and most parents felt that cost presented an obstacle to more appealing arrangements in one way or another.

Parents should be asked how accommodating the needs of their children during out-of-school time affects their job, since many parents are strained between the competing demands of employment and providing arrangements of sufficient quality for their children.

Parents of children with disabilities described their struggle to procure adequate care for their children during out-of-school time. Retaining questions on disability will allow analysts to focus on this important subgroup.

Characteristics of arrangements or programs. Parents appeared to be knowledgeable about the activities of their children in various arrangements, at least to a certain degree of specificity. They were able to say that their child did homework, watched television, played video games, or else was prohibited from doing some of these things. A few parents spoke about the rules and chores they provided for their children in self-care.

A few parents were able to answer questions about whether or not their day care providers were licensed. However, one parent seemed uncertain when asked. The two participants with children with disabilities remarked about the difficulties obtaining before- and after-school care because day care providers tended to shy away from children with disabilities and the care was likely to be very expensive. Therefore, concern about licensing was not paramount for them. Almost all parents of children in nonrelative and relative care were able to give the approximate number of children at the location, as well as the number of adults.

Recommendations: *Since researchers have an interest in how children are spending their out-of-school time, Westat recommended that several questionnaire items that aim at constructing a picture of what children at different age levels generally do in different arrangements be added. (In the second round of cognitive research, intensive interviews allowed testing and refinement of such questions to determine the extent of parents' knowledge of their children's activities before and after school and how this information is best elicited.)*

Several of the parents with children in home-based day care were able to state that their provider was licensed. This indicated that parents might be able to provide important data about use of licensed providers; however, intensive interviews conducted in phase two of the cognitive research revealed that most parents were unsure whether or not their providers were licensed. Therefore, these questions were not included in the ASPA interview.

Findings from Focus Group B (Center-Based Arrangements)

Types of current arrangement or program. Not all of the parents in this group had children enrolled in a center-based program at the time; some had children who had been in such programs in the past. Although parents in focus group B had experience with children participating in center-based after-school programs, all of them had to contend with many of the same issues as the parents of focus group A – making arrangements for their children before school, during school holidays, inservice days, and days when their children are sick. Also, not all programs were held every day of the week or lasted until the end of parents’ workdays, and so parents also had to make arrangements for days and times after school when their children were not in center-based programs. Several parents in focus group B allowed their children to stay at home alone during times when they were not participating in a program or after-school activities.

Several examples of varieties of arrangements were offered. For instance, one participant explained that during the previous year she had to leave for work at 7:30 a.m., and so her 5th grade son would stay with his live-in grandmother until leaving on foot for school before 9:00 a.m. In the afternoon, her son would remain at school for the “Homework Club” program, which ended each day at 4:05 p.m. He would then return home to stay with his grandmother again until his mother came home from work at 6:00 p.m. Another parent said that she took her lunch hour at 2:30 p.m. so that she could pick up her child from school and transport her to a center-based program at the YMCA.

Just as with focus group A, parents in focus group B were constantly reevaluating and adjusting their arrangements, trying to arrive at solutions that are convenient, affordable, and supportive of their children’s (and their own) well-being. One parent explained that she enrolled her children in a center-based program after trying to leave them alone at home: “I tried the stay at home thing, and it was driving me up the wall....You can’t get anything done because you’re worried about the kids...” Another parent decided to stop working in order to accommodate her children’s before- and after-school needs,

mainly because of transportation problems, but also because of the difficulties in maintaining multiple part-time arrangements, some of which involved incompetent babysitters or else day care providers with too many children. One parent changed her child's after-school program after he was bitten by another child and rushed to a hospital.

Recommendations: *It was recommended that parents of children in center-based programs also be asked whether their children have other arrangements (e.g., for before-school hours, school holidays, sick days, etc.), because few if any children appeared to have a single arrangement for all out-of-school times.*

Parents should be asked whether they have had to change arrangements for any reason within the previous year, and if so, what were their previous arrangements, perhaps providing a picture of tendencies in the direction of change in arrangements made for children at different ages. For instance, such data might tell us the age at which children tend to begin self-care. Data might also indicate whether children tend to move from supervised to unsupervised care or vice versa, an area of interest to researchers.

Some parents felt compelled to stop working in order to accommodate their children's out-of-school needs in various ways. Nonworking parents should be asked whether they would seek work if they could find good out-of-school arrangements for their children outside of the home.

Choice of arrangement or program/barriers. When asked about their ideal after-school arrangement, parents in focus group B agreed that center-based programs are preferable. Several said that children benefited more from experiences gained outside of the home (unlike parents from focus group A, who preferred relative care for their children). Parents with children in center-based programs stated that they would not consider removing their children from such programs in favor of other alternative arrangements.

Parents expressed their concern about leaving their children in self-care, even though there appeared to be little choice available to them. One parent said, "No matter how much you've worked out your signals, you still have bad feelings when they are alone." The same parent was happy that her daughter had become old enough to stay after school for activities such as chorus and drama, thus limiting the number of hours she had to stay home by herself. Parents were equally concerned about the safety of their children going to and from school. One parent said that she had four police officers in her

neighborhood who had agreed to try to watch out for her children when they get off of the bus in the afternoon.

Focus group B parents had strong and clear views about what a quality program should include. Some parents said that there should be a variety of activities available to children, and that the activities should provide opportunities for learning social skills and *interaction*, a word used repeatedly by participants. One parent said, “Interaction between the child and the caregiver is the most important thing.” Some parents said that programs should provide academic and cultural *enrichment* (again, a word brought up by and used by participants). Other parents said that a good program should generally expose children to new experiences, languages, and cultures in a way that is enjoyable, yet full of learning. For instance, one parent said, “It’s better to have after-school programs because they can continue learning... and doing something that they enjoy doing at the same time.” Parents in focus group B also agreed that a higher staff to child ratio is important.

In addition, parents agreed that children were very clear about their like or dislike of a program. “If they don’t like where they are, they will lash out.” Parents felt that they could rely on their children’s reactions to judge the quality of the program.

With respect to barriers, parents mentioned cost and transportation as two factors preventing enrollment of their children in certain programs. None of the focus groups participants received outside financial support to help with center-based care costs. However, one parent stated, “There’s a lot of funding out there that I don’t think a lot of parents know are available.” One parent said that she could not enroll her daughter in a particular after-school program, because it ended at 4:00 p.m. and she could not figure out a way to transport her child afterwards from the school to day care. Several parents said that they preferred programs that were at their children’s schools to avert any potential transportation problems.

A few parents said that they found out about their children’s center-based program by word of mouth, mostly from other parents whose children attended the program. Several parents said that they asked their child’s school about available programs. Another parent found information about center-based programs in a community newspaper and the yellow pages.

Recommendations: *Since parents appeared to have strong and cogent views on what constitutes quality for center-based programs, Westat recommended devising one or more questionnaire items that address this issue.*

Parents in focus group B argued that their children's feelings about their center-based programs were a fair indication of program quality. Parents' perceptions of their children's positive or negative reactions to their programs might serve as one indicator of program quality, among others, and so a question on children's satisfaction with their program should be included in the ASPA interview.

Since parents in focus group B discussed barriers to participation in certain desired programs, such as cost and transportation, questions should be included in the ASPA survey that address these issues.

Characteristics of arrangements or programs. Parents in focus group B were not very certain about who ran their children's programs, and with one exception they were not able to answer the question of whether their children's programs were subject to an external evaluation. However, parents did appear to be knowledgeable about certain features of their children's center-based programs. For instance, parents were able to approximate the number of children and caregivers in their children's program. They could also specify the range of grades of children within those programs.

In addition, parents seemed to learn from their children (especially older ones) about the kinds of activities that took place within programs. A few parents said they learned from visiting the centers themselves. When asked whether the activities in their children's programs were "age-appropriate," parents seemed to grasp this notion and provided an answer (all said yes). Only one parent said that her child's program invited parent involvement, but only to attend special events after program hours.

Recommendations: *Westat recommended that parents should not be asked about who runs their children's programs or whether the programs are evaluated, since parents did not seem to be well-informed on these points. Since researchers are interested in national data on child to staff ratio in center-based programs, and parents appear to be able to provide such information, a question in the ASPA interview should address this issue. In*

addition, parents should be asked about the highest and lowest grades of the children participating in their children's before- or after-school program. However, it was determined after the individual interviews in phase two of the research that a better question addressing this issue would focus on the closeness in age of other children within the same group in the program. Westat also recommended that parents be asked about the kinds of activities their children do in their programs, as well as whether they believe these activities to be age-appropriate.

With respect to parent involvement, it appeared to be the case that working parents were generally not highly involved in their children's programs (which of course conflict with their work schedules), and so it was recommended not to include questions in the ASPA interview that focus on parental involvement in center-based programs.

Household enumeration. It has been observed in previous NHES administrations that parents are often reluctant to provide their children's first names during household enumeration and may even break off the interview when asked. Therefore, as a supplement to both focus group discussions, parents were asked about the NHES practice of eliciting the first names of children from their parents. First, parents were asked if they understood why the first names of children needed to be ascertained. Few parents could provide an accurate answer. After having the purpose of this practice explained, however, parents in both groups varied in their views. One parent took the most extreme position expressed in opposition to providing a child's first name—he stated that he would first require written explanation and justification of the research project from the Department of Education. Another parent expressed her fear that the sensitive information might be exploited for criminal reasons: "...so now you have my name, my address, my phone number, and you're asking me for my child's first name and their age. I would like to know why. What are you going to do, follow them off the bus and say, 'Hey, N., your mom, V., said I should pick you up.'"

On the other hand, after hearing that interviewers do not have any information about the household available to them and that the interview is opened with a statement about the sponsor of the study (the Department of Education), a majority of the parents agreed that their fears would subside and they would provide their children's first names with little reservation. It seemed to be the case that parents would feel more reassured when given more detailed information about the survey. One parent said, "If you explained yourself in the beginning, I wouldn't have any problem giving you the names." She continued to say, "I will do the survey if I feel like I want to help. Like if it's something about child care that I want to make better... So I kind of feel it out to decide if I'm going to do it."

Recommendation: Westat recommended that the NHES:2001 continue to elicit the first names of children, but also include more description of the purpose of the study and emphasize the fact that the study is sponsored by the Department of Education. However, it was later determined that for the sake of brevity in the introduction, no change in wording should be made. Those parents resistant to providing first names after their concerns and questions are addressed by interviewers should be given alternatives to choose from, such as providing initials or relationships and age (e.g., son, age 6).

Summary

The first phase of cognitive research led to recommendations for the design of questionnaire items for the ASPA survey of the NHES:2001. Many of the recommendations supported the addition of new questionnaire items, while others discouraged items on topics for which parents might not be reliable respondents.

Cognitive Research, Round 2—Intensive Interviews

Round 2 of the cognitive research involved testing of the questionnaires through intensive interviews. Intensive interviewing provides valuable feedback from respondents with a variety of background and life experiences. Respondents were administered the questionnaire in a face-to-face format, which allowed the researcher to probe for clarity, test the flow of the instrument, and obtain preliminary administration timings.

As previously described, participants for round 2 of the cognitive research were recruited by Westat from a variety of sources. Westat employees and their immediate families were not eligible to participate in the intensive interviews. However, pretest interviews were administered to some Westat employees who fit the recruitment criteria to test skip patterns and flow of the instruments before conducting interviews with paid respondents. In order to maximize the number of interviews conducted during this phase of the research, some respondents eligible for more than one survey participated in more than one intensive interview. In all, 24 interviews were administered with paid (non-Westat) participants: 6 ECPP, 9 ASPA, and 9 AELL interviews.

The cognitive intensive interviews were conducted between November 29 and December 17, 1999. All interviews were conducted in person, in small conference rooms at Westat's office in

Rockville, Maryland. They were audiotaped with the permission of the participants. Each participant received an honorarium of \$40.

Intensive Interview Participants

Eighteen adults were interviewed about their children's participation in early education programs, before- and after-school programs and activities, their own educational activities, or a combination thereof. Twelve of the participants were White, five were Black, and one was Hispanic. Five participants had a high school diploma or less, three had some college, five had bachelor's degrees, and five had master's degrees. Six ECPP, nine ASPA, and nine AELL interviews were conducted. ECPP interview participants had a variety of child care arrangements, including nonrelative care, center-based care, and one mother who works at a day care center and brings her child to work. Participants receiving the ASPA interview also had a variety of arrangements, including nonrelative care, sports and scouts, relative care, and center-based programs.

The AELL questionnaire was administered to participants with a variety of demographic differences. However, all but one of the nine participants had a high school diploma or higher, which is to be expected because people with higher levels of educational attainment are more likely to participate in work-related courses. Nevertheless, the respondents had participated in a variety of adult education activities. Within the 12 months prior to the research, two participants had taken only work-related courses, one had taken personal interest courses, two were in credential programs, and four had taken both work-related and personal interest classes. See exhibit C-3 for details on characteristics of the intensive interview participants and the types of interviews administered.

Findings and Recommendations from the Early Childhood Program Participation Intensive Interviews

The large majority of items in the ECPP-NHES:2001 questionnaire were fielded in the ECPP-NHES:1995. Thus, these questions had been tested in previous cognitive research activities. However, the 2001 questionnaire included additional topics such as parents' perceptions of the quality of their children's care arrangements, the flexibility of child care arrangements, and the use of child care subsidies while transitioning from welfare to work. These topics were the focus of the ECPP intensive interviews. Findings and recommendations are summarized below. Unless noted otherwise, all recommendations were implemented.

Exhibit C-3. NHES:2001 cognitive interview participant characteristics and types of interview administered

Type of interview			Respondent demographic information					Child information				AELL activities			
ECPP	ASPA	AELL	Sex ¹	Race/ ethnicity ²	Marital status ³	Highest education	Occupation	Age	Arrangement ⁴				Work related	Personal interest	Credential program
									R	NR	CB	A			
		√	M	W	S	Masters	Policy analyst						√		
		√	F	W	W	Masters	Ret./looking for work						√	√	
		√	F	B	S	Some college	Temp. receptionist						√	√	
		√	M	W	D	Masters	Health care sales						√	√	
		√	F	W	D	Masters	Therapist						√		
		√	M	B	S	Some college	Residential counselor								√
		√	M	W	M	Masters	USDA analyst						√	√	
	√	√	F	B	S	Bachelors	Office manager	5		√	√				√
√	√		F	W	M	High school	Part-time day care	4 12 15	√		√				
√	√		F	W	M	Some college	Part-time babysitter	2 5 8							
√			F	W	M	Bachelors	Administrative asst.	9 mo. 2		√ √					
√	√		F	W	M	Bachelors	Writer/editor at home	2 5 7	√	√					
√		√	F	W	M	High school	Gym babysitter	4			√			√	
	√		F	B	S	11th grade	Temp-receptionist	7 9	√ √						
	√		F	H	S	High school	Food service	9	√						
√	√		F	W	M	Bachelors	Dental assistant	2 8			√				
	√		F	B	M	High school	Management analyst	7 12 12	√ √ √						
	√		F	W	M	Bachelors	Membership services	10 16		√	√				

¹ Sex: F=female, M=male

² Race/ethnicity: B=Black, H=Hispanic, W=White

³ Marital Status: D=divorced, M=married, S=single, W=widowed

⁴ Arrangement: R = relative care, NR = nonrelative care, CB = center-based program, A = activities for adult supervision

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Backup arrangements. Parents were able to easily comprehend the questions about backup care arrangements, often reporting that they used more than one backup arrangement. However, parents had difficulty answering whether their care provider still cared for their child when the child is sick. Parents often responded that it depended on whether their child had a fever or was contagious to other children. Parents also had difficulty reporting which backup arrangement they used most, citing that it depended on how sick their child was. Parents also felt it was redundant to ask what backup arrangement they used for every care arrangement, because they usually used the same arrangement or arrangements.

***Recommendations:** Westat recommended that the backup arrangement questions be deleted from the interview in favor of questions focusing on the reliability of the care provider. These questions sometimes took unnecessary time and parents often reported that their use of backup care arrangements and whether the care provider would take their sick child was dependent on the severity of the illness.*

Flexibility of child care arrangements. Parents most often reported that their care provider or center-based program would take care of their child earlier or later than regular hours if needed. When probed on these questions, some parents mentioned that they paid their care provider by the hour, so asking their care provider to keep their child earlier or later was no problem. Another parent remarked that the center-based program her child attends will take her child earlier and keep her later because she pays for her child to attend the program full time, but only uses the program about half time. When probed further on this point, the respondent reported that she pays for full-time care in order to have the flexibility to change her hours.

***Recommendations:** Although this question yielded little variability in the intensive interviews, the literature has shown that parents choose flexible care providers when they have inflexible work schedules and are less likely to need flexible care providers if their work environment is more flexible (Child Care Policy Research Consortium 1999). It was therefore recommended that this question on caregiver flexibility be retained and monitored during the field test to determine if more variable responses are obtained.*

Choices in child care. Each child care arrangement section asks parents if they felt they had more than one option for child care they were willing to consider. Parents were probed on this question to determine if they understood “options that you were willing to consider” in the same way. It appeared that parents were not always answering in the same way. Most talked about options available to them in their area, but these were not always options they had looked into, or were seriously considering. One

mother mentioned that there were several day care centers in her area, but she had not visited them. When asked why they chose their current arrangement over the other options, some parents mentioned characteristics such as convenience, cost, and “overall feel.” Other respondents reported it was the first place they had really looked at. Parents also indicated they felt it was redundant to ask the question for every child care arrangement because their options were the same regardless of child care type.

Recommendations: *Because respondents seemed unable to distinguish between available arrangements and arrangements they would consider for their child, it was recommended that the item on “options that you were willing to consider” be dropped from the interview in favor of item EI2. Item EI2 asks parents how much difficulty they had finding the type of child care they wanted for their child. Although this question asked for a yes or no response, respondents indicated that they would prefer to have a scale. One parent answered, “Well, yes and no, I had trouble finding care, but not as much trouble as others.” Therefore it was also recommended that the response categories be turned into a 4-point scale, “a lot,” “some,” “a little,” and “no difficulty.”*

Perceptions of quality and factors in parental choice. Because this section contained several new questions, think-aloud techniques were used extensively. For item EI1a-o, which asked parents to give characteristics of their primary child care arrangement a grade, A, B, C, D, or F, parents mostly responded with As or Bs. When asked about what it would take to give a grade such as a D or F, one respondent reported that the child would no longer be in that arrangement. Respondents reported that it felt awkward to assign a grade to the arrangement. Respondents were also asked if they could pick one characteristic that was more important to them than the others; most were unable to do so.

Four new items were added to question EI3a-l, which asks how important certain characteristics were in selecting a child care arrangement. Respondents easily comprehended the new items. When probed about which characteristic was most important in selecting a child care arrangement, several parents were unable to choose, but one respondent indicated cost was most important.

The final new item in this section asked respondents if they felt there were good choices for child care where they live. Most respondents reported they felt there were good choices, but one respondent indicated there were a lot of choices, but she did not know how good they were.

Recommendations: *It was recommended that the scale for the items EI1a-o (characteristics of care arrangements) be changed from asking parents to grade each characteristic, A*

through F, to the original 5-point scale proposed by the Child Care Policy Research Consortium (1999), perfect, excellent, good, fair, and poor.

In previous NHES surveys, EI3a-1 (measuring the importance of certain characteristics in selecting an arrangement) contained only items that could be mapped back to questions in the current care arrangement sections. Analysts were able to link the importance of specific characteristics to actual characteristics of the current care arrangements. Thus, it was recommended that only items that can be mapped back to questions in the care arrangement sections be retained.

For items ED15A, EE15A, EF18A, and EG22A (more than one child care option parents were willing to consider), respondents were reporting the types of options they had available to them, rather than options they were willing to consider. Therefore, it was recommended that items ED15A, EE15A, EF18A, and EG22A be deleted and EI4 (good choices for child care where you live) be retained. Also, this item complements item EI2, which asks respondents to report how much difficulty they had finding the type of child care they wanted.

Work-related child care questions and welfare questions. Questions in these sections (PU and PV) appeared to be clearly understood by parents. In addition, parents were able to answer with confidence work-related child care questions on behalf of their spouses. Parents also understood and were able to answer questions on participation in employer-sponsored pre-tax programs and the use of the Child and Dependent Care Tax Credit.

Because neither a current welfare recipient or someone who had transitioned off of welfare in the last 3 years was recruited for the cognitive research, the welfare and child care subsidy questions were not fully tested. It was recommended to monitor them closely during the field test. Additionally, it was noted during the intensive interviews that not all parents were asked the item about receipt of child care subsidies.

Recommendation: It was recommended that the skip pattern in the welfare section be changed to administer to all parents the question regarding child care subsidies from a state government or child care agency.

Other findings and recommendations. Parents were asked what they thought care on a “regular basis” meant. Parents reported weekly and consistent care constituted a “regular basis.”

However, when parents were asked if they thought care received 2 weeks each month was care on a “regular basis,” they also responded yes. It was recommended the term “regular basis” remain undefined, and the NHES:1995 questions about regular care at least once each month be asked, allowing the analyst to define regular care.

Some respondents had difficulty answering how many children are cared for together with their child, and how many adults care for their child in a given arrangement. While respondents were able to give exact numbers, several respondents indicated these numbers could vary. For example, one mother indicated a nonrelative cares for her child alone until her older children come home from school. Another respondent indicated that her center-based program had two care providers in the morning, three providers midday, and then two again in the late afternoon. It was recommended that a probe be added to ask parents to report the number of children present for the majority of time that the child is in care, or the number of adults that care for the child during the majority of the day. Also, one respondent indicated she would like to have seen a question about the reliability of the care provider. This respondent indicated she felt the staff turnover at her daughter’s child care center was too high. It was recommended that a question on the reliability of the care provider be added.

When asked if their child’s care provider has received education or training specifically related to young children, most respondents answered yes. When probed further about the type of training the care provider had received, several respondents mentioned CPR training. It was recommended that this question be dropped from each of the sections because it did not adequately cue the respondent to report only courses related to child education. It was also recommended that the corresponding item be dropped from question EI2, regarding the importance of selected characteristics.

Summary

The intensive interviews for the ECPP questionnaire provided useful information about the length and flow of the questionnaire and about parents’ ability to recall and accurately report on their children’s child care arrangements. Overall, the interview was quite lengthy, about 25 minutes. Respondents indicated that several questions were redundant (e.g., backup care arrangements and options), and these items were suggested for deletion. The cognitive research interviews also revealed problems with skip patterns, particularly in the welfare section where all parents should be asked if they receive child care subsidies, regardless of welfare status. Also, it was discovered that parents were able to report on the quality of their child care arrangements and on the difficulty they had in finding child care.

Parents were less able to report whether their care provider had taken early childhood education classes and whether there had been more than one option for child care that they were willing to consider.

Findings from the Before- and After-School Programs and Activities Intensive Interviews

Some of the questions to be included in the ASPA-NHES:2001 interview were fielded in the Parent-NHES:1999 and ECPP-NHES:1995 and had already been tested. Thus, this round of cognitive research focused mainly on the testing of newer items, specifically those having to do with activities, backup arrangements, self-care, center-based program features, parental perceptions about and factors in choosing arrangements, and the impact of arrangements on parents' working lives. Unless noted otherwise, all recommendations presented below were implemented.

Activities questions. All of the arrangement sections of the ASPA survey contained questions asking parents about their children's activities. Although one parent commented that she could not say for sure what her child did during out-of-school time, all other parents were confident that they could identify the activities of their children. When asked how they know, parents mentioned several sources, including discussions with their children and discussions with their care providers. The parent of a child in self-care said that she was familiar with her child's routine and called him regularly during the out-of-school hours.

As for the adequacy of the response categories to the activities questions in sections SF, SG, SH, SJ, and SI (pertaining to the different types of care), several parents reported activities that could not be subsumed under existing response categories for these questions. These include arts and crafts, getting ready (for before-school), eating/snacking, and reading.

For the question that asks for the specific after-school activities of children, parents also gave responses that could not be coded within the existing categories. These included Cub Scouts, tutoring, and religious education. One parent asked whether the activities were strictly limited to after-school afternoon hours, and another parent asked whether activities during school hours should also be included.

Recommendations: *Westat recommended that questions about children's activities during out-of-school time in various arrangements be retained, with revisions to existing response categories. Categories such as arts and crafts, getting ready, and reading should be added*

to questions asking about activities within arrangements, and categories such as Cub Scouts, tutoring, and religious education should be added to the list of after-school activities in question SI2. However, it was determined that a large sample of activities would provide an empirically sound basis for the creation of a list of response categories, and that the field test would be able to supply such data. Therefore, the activities question was modified to an open-ended format.

Backup arrangements. Parents reported that the questions on whether arrangements continue on irregular school days (such as school holidays or inservice days) were clear and easy to answer. In addition, parents were familiar with the phrase “backup arrangement.” Several parents felt that asking about backup arrangements repeatedly for different arrangements was redundant, because their backup arrangements were generally the same in any event. However, backup arrangements may differ according to whether the need is scheduled or unplanned. One parent noted that her backup arrangements for snow days differed from those for school holidays.

With respect to backup arrangements when children are sick, several parents could not give a simple yes or no response to questions that address whether a relative or nonrelative care provider still provides care when a child is sick. They argued that it depends on how sick the child is, since many care providers (even relatives) will not accept children that are extremely contagious, especially when other children are being cared for.

***Recommendations:** Westat recommended that questions about backup arrangements should be retained in the ASPA interview; however, to avoid redundancy (and shorten the length of the interview), they should be consolidated into several questions that appear once in a later section. Further, it was recommended that backup questions be asked separately for unpredictable divergences from a regular school schedule (such as snow days and sick days) and predictable ones (such as school holidays and inservice days). However, it was determined that questions pertaining to unpredictable days out of school were not of adequate interest to analysts to justify their retention in an already lengthy interview, and those questions were deleted.*

Self-care questions. The one parent whose child was in self-care noted that generally the questions were not too sensitive, although she could imagine that some parents would not want to answer specific questions pertaining to the child’s whereabouts and hours in self-care. Other parents (all of whom were asked SJ1 on whether their child is in self-care) noted that the phrase “care for himself/herself” is potentially ambiguous, since it could mean being “responsible” for himself/herself, or

else “able to perform certain day-to-day functions on his/her own, such as dressing, making breakfast, and so on.” Questions on monitoring and rules were clear and comprehensible to the single parent who responded to this section of the interview (a pretest participant). She noted that she was aware of her son’s activities in self-care because she monitored him during these hours and talked with him daily.

***Recommendations:** Self-care questions appeared to be presented in a way that did not concern parents or lead to suspicion; however, some revision of wording was needed to improve clarity. Specifically, it was recommended that the phrasing of the self-care questions avoid use of the word “care,” which is potentially ambiguous, and also that questions within this section be carefully monitored in the field test.*

Program features. The center-based program section of the ASPA interview contained new questions regarding program features. It became apparent in cognitive interviews that the distinction between center-based programs and after-school activities was not self-evident for parents. For example, two parents reported that their children were in the “Mad Science” program, but one of them treated it as a center-based program and the other as an after-school activity.

Parents were unsure how to answer questions SH18 and SH19 (the lowest and highest grades in child’s program), because they wondered whether this referred to all of the children in the program or rather to only the children in their own child’s group within the program. Similarly, several parents were uncertain how to respond to question SH20 (on how many children are in the same room or group), noting that there may be several groups within a room. The question on whether children did homework at the program was problematic for one parent, who noted that while the program provided time for homework and expected it, her child rarely did it.

As for parent knowledge of program features, parents were able to estimate the number of children in their child’s program, but seemed to feel more comfortable providing a range rather than an exact number. In addition, both of the parents who had children in center-based programs seemed uncertain about whether their child’s program was licensed (one of them responded, “I would presume, but I’m not sure”).

***Recommendations:** Revision was recommended for the introduction to the center-based programs section of the ASPA interview. Specifically, the difference between center-based programs and after-school activities needed clarification. It was recommended that questions SH18 and SH19 (the lowest and highest grades in child’s program) be deleted and that another question be substituted to address the ages of children within the parent*

respondent's child's same group in the program. Question SH20 should ask how many children are in the child's "group" (and not the child's "room or group"). For this same question, parents who are not able to provide an exact number should be instructed by interviewers to give an approximation. Finally, the question about program licensing was recommended for deletion, because parents do not seem knowledgeable on this matter.

Perceptions of quality and factors in parental choice. This section of the ASPA interview contained new items that were tested for the appropriateness of their order, as well as for the meaningfulness, clarity, and completeness of response categories. The questions on what arrangements parents would choose for their children under ideal circumstances both before and after school seemed perplexing to parents, several of whom asked, "Does that include me staying home?" On the other hand, some parents did not appear to consider this possibility.

The question about whether parents feel that there are "good choices" for before- and after-school care where they live led one parent to point out that, whereas there were many choices, it was unclear whether they amounted to "good" choices. When asked about whether they had encountered difficulty finding the type of out-of-school care they wanted for their children, several parents said that a yes or no response was not possible, and they felt more comfortable giving a response such as "somewhat difficult." Question SM7, which asks parents to grade features of their child's primary care arrangement, did not present any problems for parents, but provided little variability in results; parents graded almost all features with an A.

For SM8 (on things parents look for in selecting arrangements), the question referring to a care provider who speaks English to the child led to some confusion and amusement for some native English-speaking parents, who noted that if the care provider spoke any other language, their child would not be able to understand. There was no variability for "a clean and safe environment," with all parents saying that this was very important.

The question about whether parents felt they had more than one option when choosing the current arrangement(s) (which was embedded in each section of the ASPA interview) did not appear to present difficulties for parents, although several of them seemed to feel that the repetition of the question in different sections was unnecessary and redundant. A common response was "didn't you already ask that one?" Parents whose children participated in after-school activities were befuddled by this question in that section of the interview, since they viewed their children as participating by choice and for their own enrichment. Strictly speaking, after-school activities did not seem to be viewed by parents as arrangements for their children's care and supervision.

Recommendations: In order to ensure that parents understand the question on “ideal” arrangements in the same way, Westat suggested that it be made explicit that care by a parent or other guardian should not be considered as a possible response. The question on the degree of difficulty finding an arrangement should provide a graded scale rather than yes/no response options. The question should read “How much difficulty did you have...” and the response options should read “a lot,” “some,” “a little,” and “no difficulty.”

Given the length of the APSA interview, it was recommended that question SM7 (characteristics of care arrangements) be deleted. It appears that this question will result in little variability of response, if any. SM8 (attributes of care arrangements) should be retained, but with revision to questions (a-j). Specifically, questions (f) (a caregiver who speaks English...) and (i) (a clean and safe environment) should both be deleted. Finally, question on whether parents felt they had options in selecting their current arrangements should be removed from the arrangement sections appear once in the “perceptions and factors” section of the interview.

Work-related child care questions and welfare questions. Questions in these sections (PU and PV) appeared to be clearly understood by parents. In addition, parents were able to answer with confidence work-related child care questions on behalf of their spouses. One mother told us that she works at home in order to be able to care for her child. One problem detected in this section as a result of intensive interviews was that self-employed parents would be asked question PU17 (on whether employers have a program that allows employees to put pay into an account (before taxes) to pay for child care costs), but the existing yes/no response categories were not adequate in this case.

Since a current welfare recipient was not among the participants, and none of the parents interviewed had received benefits within the last 3 years, it was not possible to fully test the welfare questions in section PW. These items were monitored during the field test.

Recommendation: Westat recommended that the response categories for questions PU17 and PV16 include a new category that reads (“self-employed”).

Other findings and recommendations. For the “number of days each week” questions in the various arrangements sections, some parents asked if that meant “on average,” or in a typical week. These questions should be retained in their current form to allow comparability to earlier NHES administrations, while including a probe in the questionnaire that instructs interviewers to advise parents

who bring up this point that what is meant is an “average” or “typical” week. In response to SG1 (on whether child receives care from a nonrelative), several parents thought the question should explicitly note that the nonrelative care could be received either in the respondent’s home or in another private home. It was recommended that this change be made.

The first paragraph leading up to question SF1 in the relative care section led to confusion for several parents, who took it as a question in itself. It was recommended that this paragraph be revised. Two parents asked whether general child support constituted “help from a relative” to pay for child’s arrangement. To exclude this possibility, a parenthesized note was suggested as an attachment to the question that modified it to read: “A relative of (child) outside your household who provides money specifically for that arrangement (not including general child support).” Finally, in the after-school activities section (SI), in response to the question about parental satisfaction with the arrangement, one parent asked, “What arrangement (activity) are we talking about?” Since parents might be satisfied with one after-school activity arrangement and not another, this question was recommended for deletion from this section of the interview.

Summary

Information from the intensive interviews revealed that the ASPA instrument presented few problems to respondents. Findings pointed to the need for clarification of some questions and the addition of response categories in several cases. Parents generally had considerable knowledge about aspects of their children’s before- and after-school arrangements, such as their particular activities and the features of their children’s center-based programs. Further, feedback from intensive interviews suggested the need to modify and add response categories to questions that addressed specific activities within different arrangements. Another recommendation to emerge from this round of cognitive research was to remove the backup questions from each section, to be replaced by a single set of backup questions in a later section of the ASPA interview, which would shorten the interview and avoid the redundancy reported by intensive interview respondents. As for results relating to parental perceptions and factors in choosing arrangements for their children, findings suggested the need for considerable revision of question wording and response categories, although in general parents found these questions to be meaningful and answerable.

Findings from the Adult Education and Lifelong Learning Intensive Interviews

Cognitive interviews for the AELL survey focused largely on sections pertaining to college or university programs, work-related courses, personal interest/development courses, and informal learning activities. Although revisions were made in both the ESL and adult basic education sections for the NHES:2001 instrument, most of the items in these sections were fielded in previous NHES administrations. Unless noted otherwise, all recommendations were adopted.

Reasons for taking credential programs. A new item determined whether respondents' participation in credential programs was for work-related reasons or for personal interest. Two respondents reported that they had participated in bachelor's degree programs during the 12 months preceding the cognitive research. One respondent was studying philosophy, and the other respondent was majoring in accounting. Neither experienced difficulty with reporting their reasons for enrolling in the college degree programs. They both reported that it was for personal interest.

Recommendation: *No change was recommended.*

Industry, occupation, or company certificate programs. This is a rapidly growing area of education in which many adults participate. However, there are no "standard" or governing agencies granting these types of certificates. An issue concerning this question was the comprehension of the term "certificate," because not all respondents would necessarily understand it in the same way. Respondents apparently had no problem identifying those courses they took in order to obtain certificates. Some respondents reported that they obtained a certificate of completion after taking certain courses, but they knew that those were not of interest. However, some respondents pointed out that the word "certificate" in the credential participation question was confusing.

Recommendation: *Westat recommended deleting the word "certificate" from the credential participation questions (AD1 and AE1) in order to avoid any confusion.*

Items pertaining to employer support for participation in adult education. The series of items gathering information on employer support had been modified slightly from those fielded in the NHES:1999. During the cognitive interviews, the flow of the interview and respondent comprehension of these new items were examined. Respondents generally had no problem reporting receipt of support from their employer. Two concerns, however, were uncovered. First, even though respondents reported that they worked in the past 12 months, the employer support questions were not appropriate if they were not employed when participating in educational activities. Second, some respondents commented that the

placement of the employer support questions and the education-related questions needed to be reversed. The respondents felt that the NHES survey was more interested in gathering information about employers' support and involvement in adult education than collecting information about the educational experiences of adults.

Recommendation: *The following two recommendations were made concerning the employer support questions. An item asking whether the respondents were employed when taking courses or classes should be added prior to asking the employer support questions. Also, the series of the employer support questions should be asked after the questions pertaining to reasons for participation, instructional providers, total hours of instruction, and personal expenses for participation.*

Personal expenses for participation in adult education. Three separate items asking about personal expenses, including tuition or fees, books or materials, and transportation and child care were asked of respondents during the intensive interviews. Respondents had no difficulty reporting the amount of money they paid for tuition and fees regardless of what types of educational activities they took part in. However, those respondents who reported participating in work-related courses or personal interest courses noted that the cost for books and other course materials was included in the tuition and fees. No separate expenses for books and materials were incurred. The question about the cost for transportation and child care was problematic as well. Most respondents reported that they did not think about reporting transportation expenses since they drove their own vehicles or the transportation fare was a small amount. One respondent also remarked that some courses were only a couple of hours long and the classrooms were very close to her home. She felt that it was not worth reporting the transportation cost for those courses. When the respondents were probed to estimate, they reported between \$15 and \$25 for gas.

Recommendation: *Westat recommended asking two questions on personal expenses for participation in educational activities. The first question would ask about tuition and fees, and the second question about other costs, including books, materials, transportation, and child care. Also, it was suggested that several follow-up questions be asked during the field test to further monitor these two questions. A specific plan was submitted to NCES as part of the NHES:2001 field test plan.*

Roster of courses. A new strategy proposed for the NHES:2001 was to divide non-credential courses into two categories—work-related courses and personal interest courses. Respondents would be asked to report all the courses they took in the past 12 months; then they would be asked about

whether each course was for work-related reasons or for personal interest and total hours attended for each course. During the intensive interviews, probes ascertained whether the respondents recalled all courses they took and whether they had any difficulties determining whether the courses were work-related or personal interest courses.

Most respondents did not report any additional courses after probing; however, several respondents added a few more courses after probing. They mentioned that they had not reported those courses because they were insignificant to them. They felt that they should report only courses that are important to their personal life and their work. The respondents also pointed out that length of the courses was an important factor for them. They tended not to report courses that lasted 2 or 3 hours. Another point uncovered was that some respondents did not report Bible study courses because they were free and part of their religious practice.

Recommendation: Westat recommended adopting the participation questions used in the NHES:1999 Adult Special Study, with some modifications, because additional cues were helpful for respondent recall and reporting courses. The question listing all the courses that the respondents might have taken in the past 12 months would include a statement about the general nature and types of courses for work-related reasons and for personal interest. In addition, two probes for providing examples of course names were recommended. These probes would not only help the respondents recall courses, but also allow them extra moments to think back on their educational activities during the 12-month period. These probes would be read to the respondents if the answer to the first question is no or when the respondents finish reporting course names that they took.

Use of technology. Minor modifications to items from the NHES:1999 were made to the technology questions for the NHES:2001. The list of technology types was examined for adequacy, and probes or think-aloud strategies were used to explore whether respondents could recall the amount of instruction (i.e., all, more than half, about half, or less than half of the instruction) received through technology. Respondents had no problem understanding the questions and reporting percent of instruction through remote technology. However, reading a list of technology types for instruction took longer than desirable.

Recommendation: Westat recommended that two questions be asked: one question about whether the instruction was face-to-face or by remote technology, and the other above what percentage of instruction was taught by using remote technology.

Informal learning. Respondent comprehension of the questions was carefully monitored because informal learning was loosely defined. Also, special attention was paid to whether the respondents were able to easily report total hours spent on informal learning activities. For the most part, the respondents had no difficulty understanding the questions accurately. They reported that “mentoring” and “brown-bag presentation” were critical cues to informal learning. However, some respondents mentioned that the term “less formal” was ambiguous.

These respondents reported that informal kinds of learning activities were often ongoing and spread throughout the 12-month period. They could not report the total hours of informal learning activities. Hours spent on informal learning were very few in some cases and relatively long in others. The respondents also reported that no cost was involved in their informal learning activities, including tuition and fees or other materials.

***Recommendation:** Westat recommended retaining the participation questions for the informal learning activities (AJ1) and dropping all other questions in the section.*

Outcomes of participation in work-related courses. This set of items measuring outcomes of participation in work-related courses had not been tested in previous NHES administrations. Respondents had no problem understanding the questions, which they reported were clear and complete. It was observed, however, that it took about 6 to 7 minutes to administer this series of questions for each course.

***Recommendation:** These items should be considered for deletion from the NHES:2001. They added considerable time to an already lengthy interview. The NHES:2003, which will focus mainly on work-related education, would be a more appropriate survey to measure work-related outcomes.*

Barriers questions. Questions asking about barriers to participation in adult education were tested with one respondent who did not participate in work-related courses in the past 12 months. This respondent did not experience any difficulty or confusion when answering these questions. No additional barriers to participation were elicited by probing.

***Recommendation:** No change was recommended. However, subsequent discussions with NCES led to the deletion of the barriers questions from the NHES:2001 AELL interview.*

Summary

The cognitive research conducted for the AELL survey indicated the need for some limited changes to the interview. For example, respondents had difficulty reporting their transportation costs for participation in AELL activities if they drove their own vehicles to the classroom, and this item was recommended for deletion. However, items asking about other expenses, including tuition or fees and books or materials, did not present any difficulties for respondents, and a recommendation was made to retain them. The cognitive research also revealed that the interview would proceed more efficiently if it was ascertained whether an adult was employed at the time of participation in a particular AELL activity prior to asking questions concerning employer support. Those who did not have a job at the time would skip the employer support questions. Another suggested change that emerged from the cognitive research was dropping the total number of hours for participation in informal learning activities. These types of learning activities are often ongoing and spread throughout the 12-month period, making it very difficult for respondents to give a time estimate. Also, new probes were recommended for interviewers to provide cues for any other courses that the respondent might have taken but did not initially recall.

APPENDIX D

Details About Sample Size Requirements and Development of the Within-Household Sampling Scheme

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Details about Sample Size Requirements and Development of the Within-Household Sampling Scheme

Chapter 3 described the precision requirements for NHES:2001 and presented the plan for within-household sampling. This appendix provides a more detailed discussion of these aspects of the NHES:2001 sample design. Section D-1 contains details about sample size requirements, and section D-2 describes the development of the within-household sampling scheme. It should be noted that throughout this appendix, all discussion of the expected detectable differences based on proposed sample sizes is with regard to the proposed sample sizes under the original sample design.¹

D-1. Sample Size Requirements

Adults

One key objective of the NHES:2001 was to provide estimates of change. The sample requirements for estimating change were more stringent than those for producing cross-sectional estimates. Thus, the sample size requirements for the AELL-NHES:2001 survey were determined by the ability to detect change in adult education participation for key subgroups defined by race/ethnicity and educational attainment. Additionally, since a survey on work-related adult education was planned for the NHES:2003, the ability to detect change in estimates of work-related participation was examined under three scenarios involving different hypothesized sample sizes for the NHES:2003.

As discussed in chapter 3, the general precision requirement for each survey of the NHES:2001 was the ability to detect a 10 to 15 percent relative change for an estimate of between 30 and 60 percent. Power calculations were used to determine the sample sizes required meet this precision requirement for detecting changes between NHES survey estimates. Estimates and standard errors from previous cycles were used in these power calculations. Table D-1 gives the sample size requirements for detecting a 10 percent and a 15 percent relative change in the NHES:1999 estimate for each key indicator in the AELL-NHES:2001 survey. For some characteristics, detection of a 15 percent relative change was not feasible; however, in each such case, the level of the NHES:1999 estimate fell outside the 30 to 60 percent range.

¹ The original sample design involved stratification of telephone numbers based on minority concentration alone. Subsequent to this original design, research was conducted on stratification alternatives aimed at improving the precision of estimates for race/ethnic subgroups, and a revised sample design was prepared. (See chapter 3 for details.)

Table D-1. Sample size requirements to detect 10 percent and 15 percent relative change, in participation rates in adult education activities, by selected characteristics: AELL-NHES:2001 and AE-NHES:1999

Characteristic	AE-NHES:1999		AELL-NHES:2001		
	Estimate (percent)	Standard error (percent)	Change to be detected		Sample size requirement (number of completed interviews)
			Level (percent)	Percent relative change	
Participation in adult education activities					
Overall	46	0.84	4.60	10	880
Overall	46	0.84	6.90	15	360
White, non-Hispanic	46	0.89	4.60	10	896
White, non-Hispanic	46	0.89	6.90	15	363
Black, non-Hispanic.....	49	2.37	4.90	10	6,633
Black, non-Hispanic.....	49	2.37	7.35	15	492
Hispanic	41	2.18	4.10	10	--
Hispanic	41	2.18	6.15	15	827
Less than high school diploma.....	22	1.73	2.20	10	--
Less than high school diploma.....	22	1.73	3.30	15	--
High school diploma or higher.....	51	0.97	5.10	10	714
High school diploma or higher.....	51	0.97	7.65	15	287
Work-related participation:					
projecting to 2003 (n₂₀₀₃=10,000)	23	0.44	1.61	7	6,517
Work-related participation:					
projecting to 2003 (n₂₀₀₃=15,000)	23	0.44	1.38	6	10,312
Work-related participation:					
projecting to 2003 (n₂₀₀₃=20,000)	23	0.44	1.38	6	10,312
Work-related participation	23	0.69	2.30	10	3,545
Work-related participation	23	0.69	3.45	15	1,254
Less than high school diploma.....	4	0.74	0.40	10	--
Less than high school diploma.....	4	0.74	0.60	15	--
High school diploma or higher.....	27	0.81	2.70	10	2,842
High school diploma or higher.....	27	0.81	4.05	15	1,001

See notes at end of table.

Table D-1. Sample size requirements to detect 10 percent and 15 percent relative change in participation rates in adult education activities, by selected characteristics: AELL-NHES:2001 and AE-NHES:1999—Continued

Characteristic	AE-NHES:1999		AELL-NHES:2001		
	Estimate (percent)	Standard error (percent)	Change to be detected		Sample size requirement (number of completed interviews)
			Level (percent)	Percent relative change	
Personal development participation.....	23	0.66	2.30	10	3,393
Personal development participation.....	23	0.66	3.45	15	1,235
Less than high school diploma.....	8	1.21	0.80	10	--
Less than high school diploma.....	8	1.21	1.20	15	--
High school diploma or higher.....	26	0.76	2.60	10	2,919
High school diploma or higher.....	26	0.76	3.90	15	1,047
Credential participation					
Less than high school diploma.....	3	0.82	0.30	10	--
Less than high school diploma.....	3	0.82	0.45	15	--
High school diploma or higher.....	19	0.6	1.90	10	4,819
High school diploma or higher.....	19	0.6	2.85	15	1,645
Basic education participation					
Less than high school diploma.....	9	1.41	0.90	10	--
Less than high school diploma.....	9	1.41	1.35	15	--
High school diploma or higher.....	0.4	0.09	0.04	10	--
High school diploma or higher.....	0.4	0.09	0.06	15	--
ESL participation					
Less than high school diploma.....	11	2.97	1.10	10	--
Less than high school diploma.....	11	2.97	1.65	15	--
High school diploma or higher.....	11	2.21	1.10	10	--
High school diploma or higher.....	11	2.21	1.65	15	--

NOTE: The symbol "--" in the sample size requirement column indicates that the specified relative difference is not detectable with any sample size (because the sample size from the NHES:1999 was not large enough to support detection of the given relative difference). For subgroup estimates, the sample size requirement given here is the number of completed interviews required for the subgroup.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001, Adult Education (AE) Survey of the NHES, 1999.

The sample sizes needed for producing estimates for Blacks and Hispanics were examined. The October 1997 CPS estimates 9.9 percent of the adult civilian, noninstitutionalized population were Hispanic and 11.3 percent were Black. Therefore, the sample requirement for Hispanics was a key determinant of the overall sample size requirement for adults in the NHES:2001. In order to sample 1,100 Hispanics (without taking into account the oversampling of minorities), a total of 11,111 [=1,100/0.099] adults was needed. A target sample size of about 18,750 adults was established for NHES:2001. This sample was sufficient to support precise estimates of change in overall participation for Blacks and Hispanics, as well as for other key subgroups discussed below.

Other key indicators for NHES:2001 were estimates of participation in adult education by type of adult education by educational attainment (less than high school, high school or higher). Estimates from the NHES:1999 suggested that about 46 percent of adults participated in adult education activities. However, only 37 percent of adults enumerated in the NHES:1999 were reported to participate in adult education; thus, this estimate was used in designing the sample.² In order to attain greater precision in the estimates of characteristics of participants, all participants, regardless of educational attainment, were oversampled. Additionally, adults with less than a high school diploma were oversampled. Unit response rates and participant/nonparticipant switching rates were also taken into account when determining the final sample sizes.

Table D-2 presents the expected detectable differences based on the expected sample sizes for the AELL-NHES:2001 survey under the original sample design. As shown, the precision requirement to detect a 10-15 percent relative change for an estimate of between 30 and 60 percent could be met with the proposed sample sizes for most of the key indicators. All race/ethnicity subgroups for overall participation, as well as the subgroup containing adults with a high school diploma or higher for types of education participation of interest, met the specified precision requirements. However, for all types of participation for adults with less than a high school diploma, meeting this requirement was not feasible when comparing to the NHES:1999. This was partly due to small sample sizes and small estimates (considerably smaller than 30 percent).

Sample sizes for the Adult Education interview were considerably larger in the NHES:1995 than in the NHES:1999. Thus, for adults with less than a high school diploma, the ability to detect changes in participation rates by type of adult education using estimates from the NHES:1995 was also examined. For this subgroup, the detection of a 15 percent relative change in these estimates was not possible. Table D-3 shows the expected detectable differences for this subgroup when comparing to the

² Further discussion of participant/nonparticipant switching rates and their effects is given in chapter 3.

AE-NHES:1995 estimates, based on the expected sample sizes for the AELL-NHES:2001 survey under the original sample design.

As described in the discussion of the within-household sampling scheme in chapter 3, differential sampling rates were used for participants and nonparticipants and for adults with less than a high school diploma or a high school diploma or higher. Therefore, the design effects resulting from this differential sampling were a concern. After considering various alternatives, it was found that a sample of about 1,650 participants with less than a high school diploma, 1,560 non-participants with less than a high school diploma, 6,700 participants with a high school diploma or higher, and 5,250 nonparticipants with a high school diploma or higher was feasible without great reductions in efficiency. The overall expected design effect due to the differential sampling of adults was 1.4. These sample sizes were expected to provide adequate precision for estimates of characteristics of adult education participants and characteristics of adults with educational attainment of less than a high school diploma. Additionally, if barrier items³ were to be included in the NHES:2001 AELL interview, the sample of non-participants was adequate to support estimates of barriers.

In the NHES, estimates of participation in adult education by income level were of interest. Therefore, one alternative that was considered for the NHES:2001 was differential sampling of adults based on income. In order to sample based on income level, income items would need to appear early in the Screener. Because income is a sensitive item and asking about income may induce nonresponse to future interviews in the household, previous NHES administrations have asked about income at the end of the first completed extended interview. Asking about income early in the Screener would likely jeopardize unit response rates. Furthermore, income items have been shown to be quite unreliable due to measurement error; therefore, there is a high risk of misclassification when sampling based on income. In light of these concerns, sampling adults based on income was ruled out for the NHES:2001. However, the use of income was considered in the development of the weighting methodology in order to reduce coverage bias due to highly differential telephone coverage rates among income subgroups.

³ “Barrier items” are questionnaire items aimed at assessing impediments to participation in adult education, such as cost, time, family obligations, and transportation issues.

Table D-2. Detectable differences based on proposed sample sizes for adults in the NHES:2001 under the original sample design, by selected characteristics: Comparison to the AE-NHES:1999: AELL-NHES:2001 and AE-NHES:1999

Characteristic	AE-NHES:1999		AELL-NHES:2001		
	Estimate (percent)	Standard error (percent)	Change to be detected		Sample size requirement (number of completed interviews)
			Level (percent)	Percent relative change	
Participation in adult education activities					
Overall	46	0.84	2.30	5	6,285
White, non-Hispanic	46	0.89	2.30	5	7,215
Black, non-Hispanic.....	49	2.37	5.88	12	1,237
Hispanic	41	2.18	5.74	14	1,100
Less than high school diploma.....	22	1.73	3.96	18	2,982
High school diploma or higher.....	51	0.97	2.55	5	5,592
Work-related participation					
Less than high school diploma.....	4	0.74	1.80	45	3,122
High school diploma or higher.....	27	0.81	2.16	8	6,252
Personal development participation					
Less than high school diploma.....	8	1.21	2.80	35	2,823
High school diploma or higher.....	26	0.76	1.82	7	11,922
Credential participation					
Less than high school diploma.....	3	0.82	1.89	63	3,053
High school diploma or higher.....	19	0.60	1.52	8	11,417
Basic education participation					
Less than high school diploma.....	9	1.41	3.15	35	3,033
High school diploma or higher.....	0.4	0.09	0.26	65	11,667
ESL participation					
Less than high school diploma.....	11	2.97	6.16	56	2,274
High school diploma or higher.....	11	2.21	4.51	41	5,394

NOTE: For subgroup estimates, the sample size requirement given here is the number of completed interviews required for the subgroup.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; Adult Education (AE) Survey of the NHES, 1999.

Table D-3. Detectable differences based on proposed sample sizes for adults without a high school diploma in the AELL-NHES:2001 under the original sample design: Comparison to the AE-NHES:1995: AELL-NHES:2001 and AE-NHES:1995

Characteristic	AE-NHES:1995		AELL-NHES:2001		
	Estimate (percent)	Standard error (percent)	Change to be detected		Sample size requirement (number of completed interviews)
			Level (percent)	Percent relative change	
Work-related participation					
Less than high school diploma	4	0.39	0.40	10	--
Less than high school diploma	4	0.39	0.60	15	--
Less than high school diploma	4	0.39	1.28	32	3,080
Personal development participation					
Less than high school diploma	7	0.76	0.70	10	--
Less than high school diploma	7	0.76	1.05	15	--
Less than high school diploma	7	0.76	2.03	29	2,804
Credential participation					
Less than high school diploma	0.5	0.12	0.05	10	--
Less than high school diploma	0.5	0.12	0.08	15	--
Less than high school diploma	0.5	0.12	0.51	102	3,170
Basic skills participation					
Less than high school diploma	5	0.41	0.50	10	--
Less than high school diploma	5	0.41	0.75	15	--
Less than high school diploma	5	0.41	1.40	28	2,959
ESL participation					
Less than high school diploma	1	0.21	0.10	10	--
Less than high school diploma	1	0.21	0.15	15	--
Less than high school diploma	1	0.21	0.72	72	3,145

NOTE: The symbol "--" in the sample size requirement column indicates that the specified relative difference is not detectable with any sample size (because the sample size from the NHES:1995 was not large enough to support detection of the given relative difference). For subgroup estimates, the sample size requirement given here is the number of completed interviews required for the subgroup.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001; Adult Education (AE) Survey of the NHES, 1995.

Table D-4 presents the expected number of completed interviews for each of the key subgroups in the AELL-NHES:2001 survey under the original sample design. Overall, the expected number of completed interviews for the AELL-NHES:2001 survey under the original sample design was 15,176. Under the revised sample design, the expected number of completed interviews was 15,573.

Table D-4. Expected number of completed interviews under the original sample design for AELL key subgroups: AELL-NHES:2001

Characteristic	Expected number of completed interviews
Total	15,176
Race/ethnicity subgroup	
White, non-Hispanic	11,321
Black, non-Hispanic	1,715
Hispanic.....	1,502
Educational attainment subgroup	
Less than high school diploma.....	3,218
High school diploma or higher	11,958

NOTE: The race/ethnicity subgroup counts do not sum to the total because 638 interviews are expected to be completed with adults of races/ethnicities other than those given in the table.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Adult Education and Lifelong Learning (AELL) Survey of the National Household Education Surveys Program (NHES), 2001.

Children

The sample requirements for children for the ECPP-NHES:2001 and ASPA-NHES:2001 surveys were based on the precision needed for estimates of type of care arrangement by age/grade groupings and by race/ethnicity. As discussed in chapter 3, the general precision requirement for each survey of the NHES:2001 was the ability to detect a 10 to 15 percent relative change for an estimate of between 30 and 60 percent. Power calculations were used to determine the sample sizes required to meet this precision requirement for detecting changes between NHES survey estimates. Estimates and standard errors from the Parent-NHES:1999 survey were used in these power calculations. Tables D-5 and D-6 give the sample size requirements for detecting a 10 percent and a 15 percent relative change for each key indicator in the ECPP-NHES:2001 and ASPA-NHES:2001 surveys, respectively. For some characteristics, detection of a 15 percent relative change was not feasible; however, in each such case, the level of the NHES:1999 estimate fell outside the 30 to 60 percent range.

For several of the ECPP estimates, the ability to detect change using estimates from the NHES:1995 was also examined. For the ASPA estimates, the NHES:1999 estimates and the proposed NHES:2001 sample sizes were used to examine the ability to detect change in the future, since the ASPA was a new survey to the NHES. Based on these requirements, target sample sizes of 10,138 and 12,813 children were established for the ECPP-NHES:2001 and ASPA-NHES:2001 surveys, respectively. As in the adult sample, expected unit response rates were taken into account in determining the sample size.

Table D-5. Sample size requirements to detect 10 percent and 15 percent relative change, by selected characteristics: ECPP-NHES:2001 and Parent-NHES:1999

Characteristic	Parent-NHES:1999		ECPP-NHES:2001		Sample size requirement (number of completed interviews)
	Estimate (percent)	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Overall nonparental care	62	0.74	6.20	10	387
Overall nonparental care	62	0.74	9.30	15	157
Relative care	24	0.69	2.40	10	3,209
Relative care	24	0.69	3.60	15	1,165
Infants (0-2 years)	25	0.94	2.50	10	4,533
Infants (0-2 years)	25	0.94	3.75	15	1,247
Preschoolers (3 – not yet in K).....	23	0.85	2.30	10	4,880
Preschoolers (3 – not yet in K).....	23	0.85	3.45	15	1,384
White, non-Hispanic	20	0.79	2.00	10	6,952
White, non-Hispanic	20	0.79	3.00	15	1,741
Black, non-Hispanic.....	37	2.25	3.70	10	--
Black, non-Hispanic.....	37	2.25	5.55	15	1,398
Hispanic	26	1.63	2.60	10	--
Hispanic	26	1.63	3.90	15	2,720
Nonrelative care	17	0.54	1.70	10	5,577
Nonrelative care	17	0.54	2.55	15	1,897
Infants (0-2 years)	17	0.72	1.70	10	10,985
Infants (0-2 years)	17	0.72	2.55	15	2,264
Preschoolers (3 – not yet in K).....	16	0.67	1.60	10	11,269
Preschoolers (3 – not yet in K).....	16	0.67	2.40	15	2,416
White, non-Hispanic	19	0.77	1.90	10	8,056
White, non-Hispanic	19	0.77	2.85	15	1,897
Black, non-Hispanic.....	14	1.32	1.40	10	--
Black, non-Hispanic.....	14	1.32	2.10	15	--
Hispanic	12	0.96	1.20	10	--
Hispanic	12	0.96	1.80	15	--

See notes at end of table.

Table D-5. Sample size requirements to detect 10 percent and 15 percent relative change, by selected characteristics: ECPP-NHES:2001 and Parent-NHES:1999—Continued

Characteristic	Parent-NHES:1999		ECPP-NHES:2001		Sample size requirement (number of completed interviews)
	Estimate (percent)	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Center-based care, not incl. Head Start	29	0.51	2.90	10	1,903
Center-based care, not incl. Head Start	29	0.51	4.35	15	805
Infants (0-2 years)	14	0.65	1.40	10	25,105
Infants (0-2 years)	14	0.65	2.10	15	3,147
Preschoolers (3 – not yet in K)	49	0.80	4.90	10	749
Preschoolers (3 – not yet in K)	49	0.80	7.35	15	310
White, non-Hispanic	32	0.61	3.20	10	1,681
White, non-Hispanic	32	0.61	4.80	15	699
Black, non-Hispanic	30	1.95	3.00	10	--
Black, non-Hispanic	30	1.95	4.50	15	2,600
Hispanic	15	0.93	1.50	10	--
Hispanic	15	0.93	2.25	15	5,326
Center-based care, incl. Head Start	34	0.52	3.40	10	1,445
Center-based care, incl. Head Start	34	0.52	5.10	15	619
Infants (0-2 years)	16	0.69	1.60	10	12,880
Infants (0-2 years)	16	0.69	2.40	15	2,480
Preschoolers (3 – not yet in K)	59	0.71	5.90	10	450
Preschoolers (3 – not yet in K)	59	0.71	8.85	15	185
White, non-Hispanic	35	0.70	3.50	10	1,483
White, non-Hispanic	35	0.70	5.25	15	608
Black, non-Hispanic	42	2.02	4.20	10	8,213
Black, non-Hispanic	42	2.02	6.30	15	675
Hispanic	23	1.12	2.30	10	26,045
Hispanic	23	1.12	3.45	15	1,783
Head Start	6	0.34	0.60	10	--
Head Start	6	0.34	0.90	15	11,398
Infants (0-2 years)	2	0.27	0.20	10	--
Infants (0-2 years)	2	0.27	0.30	15	--
Preschoolers (3 – not yet in K)	12	0.62	1.20	10	--
Preschoolers (3 – not yet in K)	12	0.62	1.80	15	4,380
White, non-Hispanic	4	0.39	0.40	10	--
White, non-Hispanic	4	0.39	0.60	15	--
Black, non-Hispanic	15	1.50	1.50	10	--
Black, non-Hispanic	15	1.50	2.25	15	--
Hispanic	8	0.95	0.80	10	--
Hispanic	8	0.95	1.20	15	--

NOTE: The symbol "--" in the sample size requirement column indicates that the specified relative difference is not detectable with any sample size (because the sample size from the NHES:1999 was not large enough to support detection of the given relative difference). For subgroup estimates, the sample size requirement given here is the number of completed interviews required for the subgroup.

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), 2001; Parent Survey of the NHES, 1999.

Table D-6. Sample size requirements to detect 10 percent and 15 percent relative change, by selected characteristics: ASPA-NHES:2001 and Parent-NHES:1999

Characteristic	Parent-NHES:1999		ASPA-NHES:2001		Sample size requirement (number of completed interviews)
	Estimate (percent)	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Relative/sibling care	19	0.54	1.90	10	4,311
Relative/sibling care	19	0.54	2.85	15	1,583
Elementary schooler (kindergarten-grade 2)	22	0.84	2.20	10	5,593
Elementary schooler (kindergarten-grade 2)	22	0.84	3.30	15	1,500
Elementary schooler (grades 3-5)	21	0.82	2.10	10	6,313
Elementary schooler (grades 3-5)	21	0.82	3.15	15	1,620
Middle schooler (grades 6-8)	15	0.69	1.50	10	21,246
Middle schooler (grades 6-8)	15	0.69	2.25	15	2,866
White, non-Hispanic	16	0.54	1.60	10	6,539
White, non-Hispanic	16	0.54	2.40	15	2,101
Black, non-Hispanic.....	29	1.53	2.90	10	--
Black, non-Hispanic.....	29	1.53	4.35	15	1,453
Hispanic	22	1.12	2.20	10	564,499
Hispanic	22	1.12	3.30	15	2,021
Relative w/o sibling care	15	0.43	1.50	10	5,809
Relative w/o sibling care	15	0.43	2.25	15	2,129
Elementary schooler (kindergarten-grade 2)	18	0.79	1.80	10	12,237
Elementary schooler (kindergarten-grade 2)	18	0.79	2.70	15	2,178
Elementary schooler (grades 3-5)	15	0.67	1.50	10	17,021
Elementary schooler (grades 3-5)	15	0.67	2.25	15	2,776
Middle schooler (grades 6-8)	10	0.56	1.00	10	--
Middle schooler (grades 6-8)	10	0.56	1.50	15	6,321
White, non-Hispanic	11	0.49	1.10	10	24,007
White, non-Hispanic	11	0.49	1.65	15	3,985
Black, non-Hispanic.....	24	1.33	2.40	10	--
Black, non-Hispanic.....	24	1.33	3.60	15	2,104

See notes at end of table.

Table D-6. Sample size requirements to detect 10 percent and 15 percent relative change, by selected characteristics: ASPA-NHES:2001 and Parent-NHES:1999—Continued

Characteristic	Parent-NHES:1999		ASPA-NHES:2001		Sample size requirement (number of completed interviews)
	Estimate (percent)	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Relative w/o sibling care (Continued)					
Hispanic	17	0.93	1.70	10	--
Hispanic	17	0.93	2.55	15	3,211
Nonrelative care	7	0.33	0.70	10	64,399
Nonrelative care	7	0.33	1.05	15	7,024
Elementary schooler (kindergarten-grade 2)	11	0.58	1.10	10	--
Elementary schooler (kindergarten-grade 2)	11	0.58	1.65	15	5,016
Elementary schooler (grades 3-5)	8	0.59	0.80	10	--
Elementary schooler (grades 3-5)	8	0.59	1.20	15	52,788
Middle schooler (grades 6-8)	3	0.35	0.30	10	--
Middle schooler (grades 6-8)	3	0.35	0.45	15	--
White, non-Hispanic	8	0.42	0.80	10	--
White, non-Hispanic	8	0.42	1.20	15	7,114
Black, non-Hispanic.....	7	0.83	0.70	10	--
Black, non-Hispanic.....	7	0.83	1.05	15	--
Hispanic	7	0.68	0.70	10	--
Hispanic	7	0.68	1.05	15	--
Center-based care	18	0.45	1.80	10	4,187
Center-based care	18	0.45	2.70	15	1,637
Elementary schooler (kindergarten-grade 2)	20	0.77	2.00	10	6,468
Elementary schooler (kindergarten-grade 2)	20	0.77	3.00	15	1,710
Elementary schooler (grades 3-5)	21	0.93	2.10	10	10,606
Elementary schooler (grades 3-5)	21	0.93	3.15	15	1,802
Middle schooler (grades 6-8)	15	0.71	1.50	10	28,537
Middle schooler (grades 6-8)	15	0.71	2.25	15	2,965

See notes at end of table.

Table D-6. Sample size requirements to detect 10 percent and 15 percent relative change, by selected characteristics: ASPA-NHES:2001 and Parent-NHES:1999—Continued

Characteristic	Parent-NHES:1999		ASPA-NHES:2001		Sample size requirement (number of completed interviews)
	Estimate (percent)	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Center based care (Continued)					
White, non-Hispanic	16	0.57	1.60	10	7,177
White, non-Hispanic	16	0.57	2.40	15	2,160
Black, non-Hispanic.....	28	1.80	2.80	10	--
Black, non-Hispanic.....	28	1.80	4.20	15	2,729
Hispanic	16	0.89	1.60	10	--
Hispanic	16	0.89	2.40	15	3,588
Self/parent care	25	0.55	2.50	10	2,544
Self/parent care	25	0.55	3.75	15	1,031
Elementary schooler (kindergarten-grade 2)	16	0.72	2.40	15	2,587
Elementary schooler (kindergarten-grade 2)	16	0.72	1.60	10	16,561
Elementary schooler (grades 3-5)	23	0.98	2.30	10	7,666
Elementary schooler (grades 3-5)	23	0.98	3.45	15	1,538
Middle schooler (grades 6-8)	37	1.05	3.70	10	1,657
Middle schooler (grades 6-8)	37	1.05	5.55	15	597
White, non-Hispanic	26	0.63	2.60	10	2,532
White, non-Hispanic	26	0.63	3.90	15	994
Black, non-Hispanic.....	25	1.25	3.75	15	1,650
Black, non-Hispanic.....	25	1.25	2.50	10	52,299
Hispanic	20	1.16	2.00	10	--
Hispanic	20	1.16	3.00	15	3,001
Self/sibling/parent care	28	0.59	2.80	10	2,128
Self/sibling/parent care	28	0.59	4.20	15	869
Elementary schooler (kindergarten-grade 2)	19	0.73	1.90	10	6,868
Elementary schooler (kindergarten-grade 2)	19	0.73	2.85	15	1,825

See notes at end of table.

Table D-6. Sample size requirements to detect 10 percent and 15 percent relative change, by selected characteristics: ASPA-NHES:2001 and Parent-NHES:1999—Continued

Characteristic	Parent-NHES:1999		ASPA-NHES:2001		Sample size requirement (number of completed interviews)
	Estimate (percent)	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Self/sibling/parent care (Continued)					
Elementary schooler (grades 3-5)	27	0.95	2.70	10	3,546
Elementary schooler (grades 3-5)	27	0.95	4.05	15	1,075
Middle schooler (grades 6-8)	40	1.12	4.00	10	1,431
Middle schooler (grades 6-8)	40	1.12	6.00	15	517
White, non-Hispanic	29	0.66	2.90	10	2,094
White, non-Hispanic	29	0.66	4.35	15	837
Black, non-Hispanic.....	29	1.26	2.90	10	6,103
Black, non-Hispanic.....	29	1.26	4.35	15	1,125
Hispanic	24	1.16	2.40	10	21,354
Hispanic	24	1.16	3.60	15	1,665
Self/sibling care	16	0.45	1.60	10	5,283
Self/sibling care	16	0.45	2.40	15	1,957
Elementary schooler (kindergarten-grade 2)	5	0.47	0.50	10	--
Elementary schooler (kindergarten-grade 2)	5	0.47	0.75	15	--
Elementary schooler (grades 3-5)	13	0.56	1.30	10	16,396
Elementary schooler (grades 3-5)	13	0.56	1.95	15	3,178
Middle schooler (grades 6-8)	30	1.02	3.00	10	2,869
Middle schooler (grades 6-8)	30	1.02	4.50	15	903
White, non-Hispanic	16	0.57	1.60	10	7,177
White, non-Hispanic	16	0.57	2.40	15	2,160
Black, non-Hispanic.....	16	1.13	1.60	10	--
Black, non-Hispanic.....	16	1.13	2.40	15	11,405
Hispanic	14	0.92	1.40	10	--
Hispanic	14	0.92	2.10	15	7,570

NOTE: The symbol "--" in the sample size requirement column indicates that the specified relative difference is not detectable with any sample size (because the sample size from the NHES:1999 was not large enough to support detection of the given relative difference). For subgroup estimates, the sample size requirement given here is the number of completed interviews required for the subgroup.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; and Parent Survey of the NHES, 1999.

Tables D-7 and D-8 present the expected detectable differences in estimates of type of care for children, by path and race/ethnicity, based on the expected sample sizes for the ECPP-NHES:2001 and ASPA-NHES:2001 surveys, respectively, under the original sample design. It is shown in tables D-7 and D-8 that the precision requirement of the ability to detect a 10-15 percent relative change for an estimate of between 30 and 60 percent could be met with the proposed sample sizes for most of the key indicators. The only exceptions were the estimates of relative care and center-based care for Black, non-Hispanics in the ECPP survey; for these estimates, relative changes of 16 and 17 percent, respectively, were expected to be detectable. All other key indicators for which a relative change of 10-15 percent were not expected to be detectable fell outside the 30 to 60 percent range. In the ECPP survey, both age subgroups as well as White non-Hispanics meet the precision requirement for all types of care except Head Start. In the ASPA survey, elementary schoolers and White non-Hispanics meet the precision requirement for all types of care except for nonrelative. However, in the ECPP survey for Blacks and Hispanics in nonrelative care, for Hispanics in center-based care, and for Head Start in general, meeting this requirement was not feasible when comparing to the NHES:1999. This was partly due to small sample sizes and small estimates in the NHES:1999. For these key indicators, the ability to detect change from the NHES:1995 was examined (see table D-9). None of the detectable relative changes were markedly better than those from comparisons with the NHES:1999.

Table D-7. Detectable differences in percentages of children who participated in various care arrangements in the ECPP-NHES:2001 based on proposed sample sizes for children in the NHES:2001 under the original sample design, by selected child characteristics: Comparison to the NHES:1999: ECPP-NHES:2001 and Parent-NHES:1999

Characteristic	Parent-NHES:1999		ECPP-NHES:2001		Sample size requirement (number of completed interviews)
	Percent who participated	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Relative care					
Infants (0-2 years)	25	0.94	2.50	10	4,533
Preschoolers (3 – not in kindergarten)	23	0.85	2.53	11	3,405
White, non-Hispanic	20	0.79	2.20	11	4,591
Black, non-Hispanic	37	2.25	5.92	16	1,020
Hispanic	26	1.63	4.42	17	1,473
Nonrelative care					
Infants (0-2 years)	17	0.72	2.04	12	4,612
Preschoolers (3 – not in kindergarten)	16	0.67	2.08	13	3,696
White, non-Hispanic	19	0.77	2.09	11	5,169
Black, non-Hispanic	14	1.32	3.78	27	1,250
Hispanic	12	0.96	3.00	25	1,516
Center-based care					
Infants (0-2 years)	14	0.65	1.96	14	3,925
Preschoolers (3 – not in kindergarten)	49	0.80	2.94	6	2,620
White, non-Hispanic	32	0.61	2.24	7	4,074
Black, non-Hispanic	30	1.95	5.10	17	1,297
Hispanic	15	0.93	3.15	21	1,461
Head Start					
Infants (0-2 years)	2	0.27	0.80	40	4,909
Preschoolers (3 – not in kindergarten)	12	0.62	1.92	16	3,521
White, non-Hispanic	4	0.39	1.08	27	5,378
Black, non-Hispanic	15	1.50	4.05	27	1,290
Hispanic	8	0.95	2.80	35	1,430

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), 2001; Parent Survey of the NHES, 1999.

Table D-8. Detectable differences in percentages of children who participated in various care arrangements in the ASPA-NHES:2001 based on proposed sample sizes for children in the NHES:2001 under the original sample design, by selected child characteristics: Comparison to the NHES:1999: ASPA-NHES:2001 and Parent-NHES:1999

Characteristic	Parent-NHES:1999		ASPA-NHES:2001		Sample size requirement (number of completed interviews)
	Percent who participated	Standard error (percent)	Change to be detected		
			Level (percent)	Percent relative change	
Relative/sibling care					
Elementary schooler (kindergarten-grade 2)	22	0.84	2.64	12	2,831
Elementary schooler (grades 3-5)	21	0.82	2.73	13	2,413
Middle schooler (grades 6-8)	15	0.69	1.95	13	4,631
White, non-Hispanic	16	0.54	1.60	10	6,539
Black, non-Hispanic.....	29	1.53	4.35	15	1,453
Hispanic	22	1.12	3.74	17	1,353
Relative w/o sibling care					
Elementary schooler (kindergarten-grade 2)	18	0.79	2.52	14	2,679
Elementary schooler (grades 3-5)	15	0.67	2.25	15	2,776
Middle schooler (grades 6-8)	10	0.56	1.60	16	4,912
White, non-Hispanic	11	0.49	1.43	13	6,295
Black, non-Hispanic.....	24	1.33	3.84	16	1,641
Hispanic	17	0.93	3.23	19	1,473
Nonrelative care					
Elementary schooler (kindergarten-grade 2)	11	0.58	1.98	18	2,790
Elementary schooler (grades 3-5)	8	0.59	1.84	23	2,812
Middle schooler (grades 6-8)	3	0.35	0.99	33	4,881
White, non-Hispanic	8	0.42	1.20	15	7,114
Black, non-Hispanic.....	7	0.83	2.38	34	1,829
Hispanic	7	0.68	2.31	33	1,540
Center based care					
Elementary schooler (kindergarten-grade 2)	20	0.77	2.60	13	2,534
Elementary schooler (grades 3-5)	21	0.93	2.73	13	2,845
Middle schooler (grades 6-8)	15	0.71	1.95	13	4,898
White, non-Hispanic	16	0.57	1.60	10	7,177
Black, non-Hispanic.....	28	1.80	4.76	17	1,401
Hispanic	16	0.89	3.04	19	1,614
Self/parent care					
Elementary schooler (kindergarten-grade 2)	16	0.72	2.40	15	2,587
Elementary schooler (grades 3-5)	23	0.98	2.99	13	2,378
Middle schooler (grades 6-8)	37	1.05	2.96	8	3,441
White, non-Hispanic	26	0.63	1.82	7	7,293
Black, non-Hispanic.....	25	1.25	3.75	15	1,650
Hispanic	20	1.16	3.60	18	1,503
Self/sibling/parent care					
Elementary schooler (kindergarten-grade 2)	19	0.73	2.47	13	2,700
Elementary schooler (grades 3-5)	27	0.95	2.97	11	2,545
Middle schooler (grades 6-8)	40	1.12	2.80	7	5,261
White, non-Hispanic	29	0.66	2.03	7	5,677
Black, non-Hispanic.....	29	1.26	3.77	13	1,763
Hispanic	24	1.16	3.84	16	1,362

SOURCE: U.S. Department of Education, National Center for Education Statistics, Before- and After-School Programs and Activities (ASPA) Survey of the National Household Education Surveys Program (NHES), 2001; and Parent Survey of the NHES, 1999.

Table D-9. Detectable differences in percentages of children who participated in various care arrangements in the ECPP-NHES:2001 based on proposed sample sizes for children in the NHES:2001 under the original sample design: Comparison to the NHES:1995: ECPP-NHES:2001 and ECPP-NHES:1995

Characteristic	ECPP-NHES:1995		ECPP-NHES:2001		
	Percent who participated	Standard error (percent)	Change to be detected		Sample size requirement (number of completed interviews)
			Level (percent)	Percent relative change	
Nonrelative care					
Black, non-Hispanic.....	12	1.2	1.20	10	--
Black, non-Hispanic.....	12	1.2	1.80	15	--
Black, non-Hispanic.....	12	1.2	3.48	29	1,291
Hispanic	12	1.0	1.20	10	--
Hispanic	12	1.0	1.80	15	--
Hispanic	12	1.0	3.12	26	1,414
Center-based care, not including Head Start					
Hispanic	17	1.1	1.70	10	--
Hispanic	17	1.1	2.55	15	5,507
Hispanic	17	1.1	3.40	20	1,525

NOTE: The symbol "--" in the sample size requirement column indicates that the specified relative difference is not detectable with any sample size (because the sample size from the NHES:1995 was not large enough to support detection of the given relative difference).

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), 2001; ECPP of the NHES, 1995.

Table D-10 shows the expected number of completed interviews for each of these key subgroups in the ECPP and ASPA surveys under the original sample design. Overall, the expected numbers of completed interviews under the original sample design were 9,124 for the ECPP survey and 11,532 for the ASPA survey. Under the revised sample design, the expected numbers of completed interviews were 9,426 for the ECPP survey and 11,914 for the ASPA survey.

Table D-10. Expected numbers of completed interviews under the original sample design for ECPP and ASPA key subgroups: NHES:2001

Characteristic	Expected number of completed interviews
ECPP total	9,124
Race/ethnicity subgroup.....	
White, non-Hispanic	5,703
Black, non-Hispanic	1,396
Hispanic	1,578
Age/grade subgroup	
Infants (0-2 years old)	4,973
Preschoolers (3 – not in kindergarten).....	4,152
ASPA total	11,532
Race/ethnicity subgroup.....	
White, non-Hispanic	7,450
Black, non-Hispanic	1,857
Hispanic	1,626
Age/grade subgroup	
Elementary schoolers (kindergarten – grade 5).....	6,077
Middle schoolers (grades 6-8).....	5,455

NOTE: The race/ethnicity subgroup counts do not sum to the totals because 447 ECPP interviews and 599 ASPA interviews are expected to be completed with parents of children of races/ethnicities other than those given in the table. Other subdomain counts may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

D-2. Development of the Within-Household Sampling Scheme

As discussed in chapter 3, the following primary goals and features of the sampling scheme for within-household sampling were established:

- Sample no more than three persons per household.
- Because sample requirements were most stringent for middle schoolers and preschoolers, sample one middle schooler and one preschooler in every household that has such children.
- Because the numbers of adults, elementary schoolers, and infants identified in all screened households were exceed the sample requirements, sample at most two of an adult, an elementary schooler, or an infant in any given household; that is, there were no households in which an elementary schooler, an infant, and an adult were all sampled.
- Because adults with less than a high school diploma who participated in adult education were of particular interest, they were sampled at a higher rate than other adults.

- In a subsample of households without children, two adults with an educational attainment of less than a high school diploma could be sampled.

These goals and design features were established in order to control respondent burden by limiting the number and types of interviews per household, while minimizing the amount of screening required but retaining sample efficiency. As alternative sampling schemes were considered and evaluated, key factors included the amount of screening required, the expected sample yield and distributions, and the expected design effect.

Different sampling schemes for sampling children were studied, with consideration for the operational complexity of alternative schemes. The sampling scheme described in chapter 3 was determined to best suit the requirements of the survey. Table D-11 shows the expected sample yield for children and overall sampling rates by household composition under the original sample design (with an expected 60,000 completed screeners).

Having determined the sampling plan for selecting children, the next step was to examine options for oversampling adults with less than a high school diploma and adult education participants. A general sampling scheme was considered that involved:

- Using an overall sampling rate (r) for identifying households in which adults were enumerated and eligible to be sampled. This rate is such that the rate for subsampling households with children was two-thirds that for households without children. After various alternatives had been considered, a rate of $r = 0.75$ was selected. Thus, in 25 percent of households without children, no enumeration was required. As a result, it was expected that about 10,300 households would be screened out.
- Using differential rates for sampling adults based on educational attainment (less than high school diploma, high school diploma or higher) and adult education participation status. In general, under the proposed scheme, adults without a high school diploma were sampled at rates of about 3 times the rates for adults with a high school diploma or higher. For adults without a high school diploma, adult education participants were sampled at a rate of about 3.5 times that for adult education nonparticipants; for adults with a high school diploma, the rate for participants was about 1.8 times that for nonparticipants.
- Sampling two adults without a high school diploma in households without children that have two or more adults, all of whom have educational attainment of less than a high school diploma.

The expected sample yield and overall sampling rates for adults under the original sample design (with an expected 60,000 completed screeners) based on this sampling scheme are given in table D-12.

Table D-11. Calculation of expected sample yield for children based on the sampling scheme for within-household sampling: CPS:1997

Number of eligible children in household				Total number of households in U.S.	Expected number of screened households with given composition	Number of children to be selected in household				Total number of children coming from household with the given composition				Overall sampling rate			
Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)			Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (Age 3-6, not yet in K)	Infants (0-2 yrs.)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)
0	0	0	0	70,582,912	41,198	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	†	†	†	†
0	0	0	1	3,918,460	2,287	0.0	0.0	0.0	1.0	0.0	0.0	0.0	2287.1	†	†	†	1.0000
0	0	0	2	599,381	350	0.0	0.0	0.0	1.0	0.0	0.0	0.0	349.8	†	†	†	0.5000
0	0	0	3	25,601	15	0.0	0.0	0.0	1.0	0.0	0.0	0.0	14.9	†	†	†	0.3333
0	0	1	0	1,771,334	1,034	0.0	0.0	1.0	0.0	0.0	0.0	1033.9	0.0	†	†	1.0000	†
0	0	1	1	1,482,667	865	0.0	0.0	1.0	1.0	0.0	0.0	865.4	865.4	†	†	1.0000	1.0000
0	0	1	2	144,735	84	0.0	0.0	1.0	1.0	0.0	0.0	84.5	84.5	†	†	1.0000	0.5000
0	0	1	3	563	0	0.0	0.0	1.0	1.0	0.0	0.0	0.3	0.3	†	†	1.0000	0.3333
0	0	2	0	237,905	139	0.0	0.0	1.0	0.0	0.0	0.0	138.9	0.0	†	†	0.5000	†
0	0	2	1	92,877	54	0.0	0.0	1.0	1.0	0.0	0.0	54.2	54.2	†	†	0.5000	1.0000
0	0	2	2	26,623	16	0.0	0.0	1.0	1.0	0.0	0.0	15.5	15.5	†	†	0.5000	0.5000
0	0	3	0	14,138	8	0.0	0.0	1.0	0.0	0.0	0.0	8.3	0.0	†	†	0.3333	†
0	0	3	1	2,243	1	0.0	0.0	1.0	1.0	0.0	0.0	1.3	1.3	†	†	0.3333	1.0000
0	0	4	1	3,417	2	0.0	0.0	1.0	1.0	0.0	0.0	2.0	2.0	†	†	0.2500	1.0000
0	1	0	0	2,752,854	1,607	0.0	0.7	0.0	0.0	0.0	0.0	1124.7	0.0	†	0.7000	†	†
0	1	0	0	2,375,117	1,386	0.0	0.7	0.0	0.0	0.0	0.0	970.4	0.0	†	0.7000	†	†
0	1	0	1	381,066	222	0.0	0.5	0.0	1.0	0.0	0.0	111.2	0.0	†	0.5000	†	1.0000
0	1	0	1	1,060,429	619	0.0	0.5	0.0	1.0	0.0	0.0	309.5	0.0	†	0.5000	†	1.0000
0	1	0	2	19,482	11	0.0	0.5	0.0	1.0	0.0	0.0	5.7	0.0	†	0.5000	†	0.5000
0	1	0	2	79,617	46	0.0	0.5	0.0	1.0	0.0	0.0	23.2	0.0	†	0.5000	†	0.5000
0	1	0	3	12,388	7	0.0	0.5	0.0	1.0	0.0	0.0	3.6	0.0	†	0.5000	†	0.3333
0	1	1	0	511,302	298	0.0	0.5	1.0	0.0	0.0	0.0	149.2	298.4	†	0.5000	1.0000	†
0	1	1	0	1,174,367	685	0.0	0.5	1.0	0.0	0.0	0.0	342.7	685.4	†	0.5000	1.0000	†
0	1	1	1	97,280	57	0.0	0.5	1.0	0.5	0.0	0.0	28.4	56.8	†	0.5000	1.0000	0.5000
0	1	1	1	350,291	204	0.0	0.5	1.0	0.5	0.0	0.0	102.2	204.5	†	0.5000	1.0000	0.5000
0	1	1	2	10,188	6	0.0	0.5	1.0	0.5	0.0	0.0	3.0	5.9	†	0.5000	1.0000	0.2500
0	1	1	2	63,928	37	0.0	0.5	1.0	0.5	0.0	0.0	18.7	37.3	†	0.5000	1.0000	0.2500
0	1	1	3	6,663	4	0.0	0.5	1.0	0.5	0.0	0.0	1.9	3.9	†	0.5000	1.0000	0.1667
0	1	2	0	37,675	22	0.0	0.5	1.0	0.0	0.0	0.0	11.0	22.0	†	0.5000	0.5000	†
0	1	2	0	82,836	48	0.0	0.5	1.0	0.0	0.0	0.0	24.2	48.3	†	0.5000	0.5000	†
0	1	2	1	3,544	2	0.0	0.5	1.0	0.5	0.0	0.0	1.0	2.1	†	0.5000	0.5000	0.5000
0	1	2	1	22,530	13	0.0	0.5	1.0	0.5	0.0	0.0	6.6	13.2	†	0.5000	0.5000	0.5000
0	1	2	2	2,648	2	0.0	0.5	1.0	0.5	0.0	0.0	0.8	1.5	†	0.5000	0.5000	0.2500

See notes at end of table.

Table D-11. Calculation of expected sample yield for children based on the sampling scheme for within-household sampling: CPS:1997—Continued

Number of eligible children in household				Total number of households in U.S.	Expected number of screened households with given composition	Number of children to be selected in household				Total number of children coming from households with the given composition				Overall sampling rate			
Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)			Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (Age 3-6, not yet in K)	Infants (0-2 yrs.)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)
0	1	3	0	780	0	0.0	0.5	1.0	0.0	0.0	0.2	0.5	0.0	†	0.5000	0.3333	†
0	1	3	0	2,523	1	0.0	0.5	1.0	0.0	0.0	0.7	1.5	0.0	†	0.5000	0.3333	†
0	2	0	0	450,524	263	0.0	1.0	0.0	0.0	0.0	263.0	0.0	0.0	†	0.5000	†	†
0	2	0	0	1,642,490	959	0.0	1.0	0.0	0.0	0.0	958.7	0.0	0.0	†	0.5000	†	†
0	2	0	0	516,188	301	0.0	1.0	0.0	0.0	0.0	301.3	0.0	0.0	†	0.5000	†	†
0	2	0	1	57,601	34	0.0	0.5	0.0	1.0	0.0	16.8	0.0	33.6	†	0.2500	†	1.0000
0	2	0	1	275,145	161	0.0	0.5	0.0	1.0	0.0	80.3	0.0	160.6	†	0.2500	†	1.0000
0	2	0	1	109,847	64	0.0	0.5	0.0	1.0	0.0	32.1	0.0	64.1	†	0.2500	†	1.0000
0	2	0	2	4,870	3	0.0	0.5	0.0	1.0	0.0	1.4	0.0	2.8	†	0.2500	†	0.5000
0	2	0	2	11,540	7	0.0	0.5	0.0	1.0	0.0	3.4	0.0	6.7	†	0.2500	†	0.5000
0	2	0	2	15,293	9	0.0	0.5	0.0	1.0	0.0	4.5	0.0	8.9	†	0.2500	†	0.5000
0	2	1	0	68,092	40	0.0	0.5	1.0	0.0	0.0	19.9	39.7	0.0	†	0.2500	1.0000	†
0	2	1	0	295,348	172	0.0	0.5	1.0	0.0	0.0	86.2	172.4	0.0	†	0.2500	1.0000	†
0	2	1	0	93,910	55	0.0	0.5	1.0	0.0	0.0	27.4	54.8	0.0	†	0.2500	1.0000	†
0	2	1	1	10,741	6	0.0	0.5	1.0	0.5	0.0	3.1	6.3	3.1	†	0.2500	1.0000	0.5000
0	2	1	1	99,518	58	0.0	0.5	1.0	0.5	0.0	29.0	58.1	29.0	†	0.2500	1.0000	0.5000
0	2	1	1	39,510	23	0.0	0.5	1.0	0.5	0.0	11.5	23.1	11.5	†	0.2500	1.0000	0.5000
0	2	1	2	2,448	1	0.0	0.5	1.0	0.5	0.0	0.7	1.4	0.7	†	0.2500	1.0000	0.2500
0	2	1	2	4,105	2	0.0	0.5	1.0	0.5	0.0	1.2	2.4	1.2	†	0.2500	1.0000	0.2500
0	2	1	2	622	0	0.0	0.5	1.0	0.5	0.0	0.2	0.4	0.2	†	0.2500	1.0000	0.2500
0	2	1	3	1,954	1	0.0	0.5	1.0	0.5	0.0	0.6	1.1	0.6	†	0.2500	1.0000	0.1667
0	2	2	0	4,790	3	0.0	0.5	1.0	0.0	0.0	1.4	2.8	0.0	†	0.2500	0.5000	†
0	2	2	0	8,645	5	0.0	0.5	1.0	0.0	0.0	2.5	5.0	0.0	†	0.2500	0.5000	†
0	2	2	0	5,458	3	0.0	0.5	1.0	0.0	0.0	1.6	3.2	0.0	†	0.2500	0.5000	†
0	2	2	1	5,501	3	0.0	0.5	1.0	0.5	0.0	1.6	3.2	1.6	†	0.2500	0.5000	0.5000
0	2	2	1	5,306	3	0.0	0.5	1.0	0.5	0.0	1.5	3.1	1.5	†	0.2500	0.5000	0.5000
0	3	0	0	19,503	11	0.0	1.0	0.0	0.0	0.0	11.4	0.0	0.0	†	0.3333	†	†
0	3	0	0	190,097	111	0.0	1.0	0.0	0.0	0.0	111.0	0.0	0.0	†	0.3333	†	†
0	3	0	0	163,027	95	0.0	1.0	0.0	0.0	0.0	95.2	0.0	0.0	†	0.3333	†	†
0	3	0	0	41,468	24	0.0	1.0	0.0	0.0	0.0	24.2	0.0	0.0	†	0.3333	†	†
0	3	0	1	13,378	8	0.0	0.5	0.0	1.0	0.0	3.9	0.0	7.8	†	0.1667	†	1.0000
0	3	0	1	31,483	18	0.0	0.5	0.0	1.0	0.0	9.2	0.0	18.4	†	0.1667	†	1.0000
0	3	0	1	8,116	5	0.0	0.5	0.0	1.0	0.0	2.4	0.0	4.7	†	0.1667	†	1.0000

See notes at end of table.

Table D-11. Calculation of expected sample yield for children based on the sampling scheme for within-household sampling: CPS:1997—Continued

Number of eligible children in household				Total number of households in U.S.	Expected number of screened households with given composition	Number of children to be selected in household				Total number of children coming from households with the given composition				Overall sampling rate			
Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)			Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (Age 3-6, not yet in K)	Infants (0-2 yrs.)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)
0	3	0	2	5,018	3	0.0	0.5	0.0	1.0	0.0	1.5	0.0	2.9	†	0.1667	†	0.5000
0	3	0	2	4,062	2	0.0	0.5	0.0	1.0	0.0	1.2	0.0	2.4	†	0.1667	†	0.5000
0	3	1	0	11,679	7	0.0	0.5	1.0	0.0	0.0	3.4	6.8	0.0	†	0.1667	1.0000	†
0	3	1	0	41,078	24	0.0	0.5	1.0	0.0	0.0	12.0	24.0	0.0	†	0.1667	1.0000	†
0	3	1	0	33,046	19	0.0	0.5	1.0	0.0	0.0	9.6	19.3	0.0	†	0.1667	1.0000	†
0	3	1	0	22,726	13	0.0	0.5	1.0	0.0	0.0	6.6	13.3	0.0	†	0.1667	1.0000	†
0	3	1	1	2,660	2	0.0	0.5	1.0	0.5	0.0	0.8	1.6	0.8	†	0.1667	1.0000	0.5000
0	3	1	1	5,732	3	0.0	0.5	1.0	0.5	0.0	1.7	3.3	1.7	†	0.1667	1.0000	0.5000
0	3	1	1	13,923	8	0.0	0.5	1.0	0.5	0.0	4.1	8.1	4.1	†	0.1667	1.0000	0.5000
0	3	1	1	9,361	5	0.0	0.5	1.0	0.5	0.0	2.7	5.5	2.7	†	0.1667	1.0000	0.5000
0	3	1	2	2,102	1	0.0	0.5	1.0	0.5	0.0	0.6	1.2	0.6	†	0.1667	1.0000	0.2500
0	3	1	3	2,028	1	0.0	0.5	1.0	0.5	0.0	0.6	1.2	0.6	†	0.1667	1.0000	0.1667
0	3	2	0	2,351	1	0.0	0.5	1.0	0.0	0.0	0.7	1.4	0.0	†	0.1667	0.5000	†
0	3	2	0	3,272	2	0.0	0.5	1.0	0.0	0.0	1.0	1.9	0.0	†	0.1667	0.5000	†
0	3	2	0	294	0	0.0	0.5	1.0	0.0	0.0	0.1	0.2	0.0	†	0.1667	0.5000	†
0	3	2	1	1,981	1	0.0	0.5	1.0	0.5	0.0	0.6	1.2	0.6	†	0.1667	0.5000	0.5000
0	3	2	2	3,405	2	0.0	0.5	1.0	0.5	0.0	1.0	2.0	1.0	†	0.1667	0.5000	0.2500
0	3	3	0	2,265	1	0.0	0.5	1.0	0.0	0.0	0.7	1.3	0.0	†	0.1667	0.3333	†
0	4	0	0	3,434	2	0.0	0.5	0.0	0.0	0.0	1.0	0.0	0.0	†	0.1250	†	†
0	4	0	0	16,918	10	0.0	1.0	0.0	0.0	0.0	9.9	0.0	0.0	†	0.2500	†	†
0	4	0	0	29,907	17	0.0	1.0	0.0	0.0	0.0	17.5	0.0	0.0	†	0.2500	†	†
0	4	0	0	8,495	5	0.0	1.0	0.0	0.0	0.0	5.0	0.0	0.0	†	0.2500	†	†
0	4	0	1	2,484	1	0.0	0.5	0.0	1.0	0.0	0.7	0.0	1.4	†	0.1250	†	1.0000
0	4	0	1	4,990	3	0.0	0.5	0.0	1.0	0.0	1.5	0.0	2.9	†	0.1250	†	1.0000
0	4	1	0	6,512	4	0.0	0.5	1.0	0.0	0.0	1.9	3.8	0.0	†	0.1250	1.0000	†
0	4	1	0	678	0	0.0	0.5	1.0	0.0	0.0	0.2	0.4	0.0	†	0.1250	1.0000	†
0	4	1	0	2,160	1	0.0	0.5	1.0	0.0	0.0	0.6	1.3	0.0	†	0.1250	1.0000	†
0	4	2	1	3,707	2	0.0	0.5	1.0	0.5	0.0	1.1	2.2	1.1	†	0.1250	0.5000	0.5000
0	5	0	0	5,581	3	0.0	1.0	0.0	0.0	0.0	3.3	0.0	0.0	†	0.2000	†	†
0	5	0	0	4,232	2	0.0	1.0	0.0	0.0	0.0	2.5	0.0	0.0	†	0.2000	†	†
0	5	0	0	2,510	1	0.0	1.0	0.0	0.0	0.0	1.5	0.0	0.0	†	0.2000	†	†
0	5	0	1	1,932	1	0.0	0.5	0.0	1.0	0.0	0.6	0.0	1.1	†	0.1000	†	1.0000
0	6	1	0	3,524	2	0.0	0.5	1.0	0.0	0.0	1.0	2.1	0.0	†	0.0833	1.0000	†

See notes at end of table.

Table D-11. Calculation of expected sample yield for children based on the sampling scheme for within-household sampling: CPS:1997—Continued

Number of eligible children in household				Total number of households in U.S.	Expected number of screened households with given composition	Number of children to be selected in household				Total number of children coming from households with the given composition				Overall sampling rate			
Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)			Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (Age 3-6, not yet in K)	Infants (0-2 yrs.)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)
0	6	1	0	2,379	1	0.0	0.5	1.0	0.0	0.0	0.7	1.4	0.0	0.0833	1.0000	†	
1	0	0	0	4,218,724	2,462	1.0	0.0	0.0	0.0	2462.4	0.0	0.0	0.0	1.0000	†	†	
1	0	0	1	255,208	149	1.0	0.0	0.0	1.0	149.0	0.0	0.0	149.0	1.0000	†	1.0000	
1	0	0	2	26,004	15	1.0	0.0	0.0	1.0	15.2	0.0	0.0	15.2	1.0000	†	0.5000	
1	0	1	0	291,074	170	1.0	0.0	1.0	0.0	169.9	0.0	169.9	0.0	1.0000	†	1.0000	
1	0	1	1	54,408	32	1.0	0.0	1.0	0.5	31.8	0.0	31.8	15.9	1.0000	†	0.5000	
1	0	1	2	5,859	3	1.0	0.0	1.0	0.5	3.4	0.0	3.4	1.7	1.0000	†	0.2500	
1	0	2	0	14,779	9	1.0	0.0	1.0	0.0	8.6	0.0	8.6	0.0	1.0000	†	0.5000	
1	1	0	0	1,763,014	1,029	1.0	0.5	0.0	0.0	1029.0	514.5	0.0	0.0	1.0000	0.5000	†	
1	1	0	0	764,450	446	1.0	0.5	0.0	0.0	446.2	223.1	0.0	0.0	1.0000	0.5000	†	
1	1	0	1	101,602	59	1.0	0.3	0.0	0.8	59.3	14.8	0.0	44.5	1.0000	0.2500	†	
1	1	0	1	97,147	57	1.0	0.3	0.0	0.8	56.7	14.2	0.0	42.5	1.0000	0.2500	†	
1	1	0	2	11,541	7	1.0	0.3	0.0	0.8	6.7	1.7	0.0	5.1	1.0000	0.2500	†	
1	1	0	2	10,775	6	1.0	0.3	0.0	0.8	6.3	1.6	0.0	4.7	1.0000	0.2500	†	
1	1	1	0	123,976	72	1.0	0.5	1.0	0.0	72.4	36.2	72.4	0.0	1.0000	0.5000	1.0000	
1	1	1	0	106,896	62	1.0	0.5	1.0	0.0	62.4	31.2	62.4	0.0	1.0000	0.5000	1.0000	
1	1	1	1	13,836	8	1.0	0.3	1.0	0.3	8.1	2.0	8.1	2.0	1.0000	0.2500	1.0000	
1	1	1	1	24,516	14	1.0	0.3	1.0	0.3	14.3	3.6	14.3	3.6	1.0000	0.2500	1.0000	
1	1	1	2	2,024	1	1.0	0.3	1.0	0.3	1.2	0.3	1.2	0.3	1.0000	0.2500	1.0000	
1	1	2	0	4,070	2	1.0	0.5	1.0	0.0	2.4	1.2	2.4	0.0	1.0000	0.5000	0.5000	
1	1	2	0	2,520	1	1.0	0.5	1.0	0.0	1.5	0.7	1.5	0.0	1.0000	0.5000	0.5000	
1	1	2	1	1,998	1	1.0	0.3	1.0	0.3	1.2	0.3	1.2	0.3	1.0000	0.2500	0.5000	
1	1	2	1	5,154	3	1.0	0.3	1.0	0.3	3.0	0.8	3.0	0.8	1.0000	0.2500	0.5000	
1	2	0	0	188,391	110	1.0	0.5	0.0	0.0	110.0	55.0	0.0	0.0	1.0000	0.2500	†	
1	2	0	0	446,665	261	1.0	0.5	0.0	0.0	260.7	130.4	0.0	0.0	1.0000	0.2500	†	
1	2	0	0	87,184	51	1.0	0.5	0.0	0.0	50.9	25.4	0.0	0.0	1.0000	0.2500	†	
1	2	0	1	3,436	2	1.0	0.3	0.0	0.8	2.0	0.5	0.0	1.5	1.0000	0.1250	†	
1	2	0	1	46,075	27	1.0	0.3	0.0	0.8	26.9	6.7	0.0	20.2	1.0000	0.1250	†	
1	2	0	1	14,657	9	1.0	0.3	0.0	0.8	8.6	2.1	0.0	6.4	1.0000	0.1250	†	
1	2	0	2	4,801	3	1.0	0.3	0.0	0.8	2.8	0.7	0.0	2.1	1.0000	0.1250	†	
1	2	0	2	9,432	6	1.0	0.3	0.0	0.8	5.5	1.4	0.0	4.1	1.0000	0.1250	†	
1	2	1	0	10,605	6	1.0	0.5	1.0	0.0	6.2	3.1	6.2	0.0	1.0000	0.2500	1.0000	
1	2	1	0	56,629	33	1.0	0.5	1.0	0.0	33.1	16.5	33.1	0.0	1.0000	0.2500	1.0000	

See notes at end of table.

**Table D-11. Calculation of expected sample yield for children based on the sampling scheme for within-household sampling:
CPS:1997—Continued**

Number of eligible children in household				Total number of households in U.S.	Expected number of screened households with given composition	Number of children to be selected in household				Total number of children coming from households with the given composition				Overall sampling rate			
Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)			Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (Age 3-6, not yet in K)	Infants (0-2 yrs.)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)
1	2	1	0	9,033	5	1.0	0.5	1.0	0.0	5.3	2.6	5.3	0.0	1.0000	0.2500	1.0000	†
1	2	1	1	4,935	3	1.0	0.3	1.0	0.3	2.9	0.7	2.9	0.7	1.0000	0.1250	1.0000	0.2500
1	2	1	1	13,310	8	1.0	0.3	1.0	0.3	7.8	1.9	7.8	1.9	1.0000	0.1250	1.0000	0.2500
1	2	1	1	2,763	2	1.0	0.3	1.0	0.3	1.6	0.4	1.6	0.4	1.0000	0.1250	1.0000	0.2500
1	2	1	2	2,648	2	1.0	0.3	1.0	0.3	1.5	0.4	1.5	0.4	1.0000	0.1250	1.0000	0.1250
1	2	1	2	2,295	1	1.0	0.3	1.0	0.3	1.3	0.3	1.3	0.3	1.0000	0.1250	1.0000	0.1250
1	2	2	0	7,346	4	1.0	0.5	1.0	0.0	4.3	2.1	4.3	0.0	1.0000	0.2500	0.5000	†
1	2	2	0	2,758	2	1.0	0.5	1.0	0.0	1.6	0.8	1.6	0.0	1.0000	0.2500	0.5000	†
1	2	2	1	3,548	2	1.0	0.3	1.0	0.3	2.1	0.5	2.1	0.5	1.0000	0.1250	0.5000	0.2500
1	3	0	0	25,320	15	1.0	0.5	0.0	0.0	14.8	7.4	0.0	0.0	1.0000	0.1667	†	†
1	3	0	0	32,518	19	1.0	0.5	0.0	0.0	19.0	9.5	0.0	0.0	1.0000	0.1667	†	†
1	3	0	0	45,755	27	1.0	0.5	0.0	0.0	26.7	13.4	0.0	0.0	1.0000	0.1667	†	†
1	3	0	0	6,149	4	1.0	0.5	0.0	0.0	3.6	1.8	0.0	0.0	1.0000	0.1667	†	†
1	3	0	1	12,142	7	1.0	0.3	0.0	0.8	7.1	1.8	0.0	5.3	1.0000	0.0833	†	0.7500
1	3	0	1	10,490	6	1.0	0.3	0.0	0.8	6.1	1.5	0.0	4.6	1.0000	0.0833	†	0.7500
1	3	0	2	956	1	1.0	0.3	0.0	0.8	0.6	0.1	0.0	0.4	1.0000	0.0833	†	0.3750
1	3	0	2	11,814	7	1.0	0.3	0.0	0.8	6.9	1.7	0.0	5.2	1.0000	0.0833	†	0.3750
1	3	1	0	8,088	5	1.0	0.5	1.0	0.0	4.7	2.4	4.7	0.0	1.0000	0.1667	1.0000	†
1	3	1	0	11,373	7	1.0	0.5	1.0	0.0	6.6	3.3	6.6	0.0	1.0000	0.1667	1.0000	†
1	3	1	0	6,548	4	1.0	0.5	1.0	0.0	3.8	1.9	3.8	0.0	1.0000	0.1667	1.0000	†
1	3	1	1	6,834	4	1.0	0.3	1.0	0.3	4.0	1.0	4.0	1.0	1.0000	0.0833	1.0000	0.2500
1	3	1	1	2,061	1	1.0	0.3	1.0	0.3	1.2	0.3	1.2	0.3	1.0000	0.0833	1.0000	0.2500
1	3	1	2	2,309	1	1.0	0.3	1.0	0.3	1.3	0.3	1.3	0.3	1.0000	0.0833	1.0000	0.1250
1	3	2	0	2,734	2	1.0	0.5	1.0	0.0	1.6	0.8	1.6	0.0	1.0000	0.1667	0.5000	†
1	3	2	0	2,337	1	1.0	0.5	1.0	0.0	1.4	0.7	1.4	0.0	1.0000	0.1667	0.5000	†
1	3	2	0	3,268	2	1.0	0.5	1.0	0.0	1.9	1.0	1.9	0.0	1.0000	0.1667	0.5000	†
1	3	2	2	316	0	1.0	0.3	1.0	0.3	0.2	0.0	0.2	0.0	1.0000	0.0833	0.5000	0.1250
1	4	0	0	6,654	4	1.0	0.5	0.0	0.0	3.9	1.9	0.0	0.0	1.0000	0.1250	†	†
1	4	0	0	6,525	4	1.0	0.5	0.0	0.0	3.8	1.9	0.0	0.0	1.0000	0.1250	†	†
1	4	0	0	2,736	2	1.0	0.5	0.0	0.0	1.6	0.8	0.0	0.0	1.0000	0.1250	†	†
1	4	0	0	3,618	2	1.0	0.5	0.0	0.0	2.1	1.1	0.0	0.0	1.0000	0.1250	†	†
1	4	1	0	1,804	1	1.0	0.5	1.0	0.0	1.1	0.5	1.1	0.0	1.0000	0.1250	1.0000	†
1	4	1	0	3,120	2	1.0	0.5	1.0	0.0	1.8	0.9	1.8	0.0	1.0000	0.1250	1.0000	†

See notes at end of table.

**Table D-11. Calculation of expected sample yield for children based on the sampling scheme for within-household sampling:
CPS:1997—Continued**

Number of eligible children in household				Total number of households in U.S.	Expected number of screened households with given composition	Number of children to be selected in household				Total number of children coming from households with the given composition				Overall sampling rate			
Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)			Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (Age 3-6, not yet in K)	Infants (0-2 yrs.)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)
1	4	2	0	2,321	1	1.0	0.5	1.0	0.0	1.4	0.7	1.4	0.0	1.0000	0.1250	0.5000	†
1	5	0	0	745	0	1.0	0.5	0.0	0.0	0.4	0.2	0.0	0.0	1.0000	0.1000	†	†
1	5	2	1	3,655	2	1.0	0.3	1.0	0.3	2.1	0.5	2.1	0.5	1.0000	0.0500	0.5000	0.2500
2	0	0	0	660,488	386	1.0	0.0	0.0	0.0	385.5	0.0	0.0	0.0	0.5000	†	†	†
2	0	0	1	48,276	28	1.0	0.0	0.0	1.0	28.2	0.0	0.0	28.2	0.5000	†	†	1.0000
2	0	0	2	1,760	1	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.5000	†	†	0.5000
2	0	1	0	21,678	13	1.0	0.0	1.0	0.0	12.7	0.0	12.7	0.0	0.5000	†	1.0000	†
2	0	1	1	2,902	2	1.0	0.0	1.0	0.5	1.7	0.0	1.7	0.8	0.5000	†	1.0000	0.5000
2	0	2	0	3,104	2	1.0	0.0	1.0	0.0	1.8	0.0	1.8	0.0	0.5000	†	0.5000	†
2	1	0	0	200,173	117	1.0	0.5	0.0	0.0	116.8	58.4	0.0	0.0	0.5000	0.5000	†	†
2	1	0	0	98,247	57	1.0	0.5	0.0	0.0	57.3	28.7	0.0	0.0	0.5000	0.5000	†	†
2	1	0	1	14,387	8	1.0	0.3	0.0	0.8	8.4	2.1	0.0	6.3	0.5000	0.2500	†	0.7500
2	1	0	1	17,656	10	1.0	0.3	0.0	0.8	10.3	2.6	0.0	7.7	0.5000	0.2500	†	0.7500
2	1	0	2	2,316	1	1.0	0.3	0.0	0.8	1.4	0.3	0.0	1.0	0.5000	0.2500	†	0.3750
2	1	1	0	9,778	6	1.0	0.5	1.0	0.0	5.7	2.9	5.7	0.0	0.5000	0.5000	1.0000	†
2	1	1	0	21,317	12	1.0	0.5	1.0	0.0	12.4	6.2	12.4	0.0	0.5000	0.5000	1.0000	†
2	1	1	1	6,351	4	1.0	0.3	1.0	0.3	3.7	0.9	3.7	0.9	0.5000	0.2500	1.0000	0.2500
2	1	1	1	4,292	3	1.0	0.3	1.0	0.3	2.5	0.6	2.5	0.6	0.5000	0.2500	1.0000	0.2500
2	1	1	2	2,077	1	1.0	0.3	1.0	0.3	1.2	0.3	1.2	0.3	0.5000	0.2500	1.0000	0.1250
2	1	2	0	1,910	1	1.0	0.5	1.0	0.0	1.1	0.6	1.1	0.0	0.5000	0.5000	0.5000	†
2	1	2	0	574	0	1.0	0.5	1.0	0.0	0.3	0.2	0.3	0.0	0.5000	0.5000	0.5000	†
2	2	0	0	26,855	16	1.0	0.5	0.0	0.0	15.7	7.8	0.0	0.0	0.5000	0.2500	†	†
2	2	0	0	49,030	29	1.0	0.5	0.0	0.0	28.6	14.3	0.0	0.0	0.5000	0.2500	†	†
2	2	0	0	15,151	9	1.0	0.5	0.0	0.0	8.8	4.4	0.0	0.0	0.5000	0.2500	†	†
2	2	0	1	910	1	1.0	0.3	0.0	0.8	0.5	0.1	0.0	0.4	0.5000	0.1250	†	0.7500
2	2	1	0	1,786	1	1.0	0.5	1.0	0.0	1.0	0.5	1.0	0.0	0.5000	0.2500	1.0000	†
2	2	1	0	9,075	5	1.0	0.5	1.0	0.0	5.3	2.6	5.3	0.0	0.5000	0.2500	1.0000	†
2	2	1	0	2,646	2	1.0	0.5	1.0	0.0	1.5	0.8	1.5	0.0	0.5000	0.2500	1.0000	†
2	2	1	1	5,268	3	1.0	0.3	1.0	0.3	3.1	0.8	3.1	0.8	0.5000	0.1250	1.0000	0.2500
2	2	1	2	2,165	1	1.0	0.3	1.0	0.3	1.3	0.3	1.3	0.3	0.5000	0.1250	1.0000	0.1250
2	2	2	0	1,099	1	1.0	0.5	1.0	0.0	0.6	0.3	0.6	0.0	0.5000	0.2500	0.5000	†
2	2	2	1	3,670	2	1.0	0.3	1.0	0.3	2.1	0.5	2.1	0.5	0.5000	0.1250	0.5000	0.2500

See notes at end of table.

Table D-11. Calculation of expected sample yield for children based on the sampling scheme for within-household sampling: CPS:1997—Continued

Number of eligible children in household				Total number of households in U.S.	Expected number of screened households with given composition	Number of children to be selected in household				Total number of children coming from households with the given composition				Overall sampling rate			
Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)			Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (Age 3-6, not yet in K)	Infants (0-2 yrs.)	Middle schoolers (grades 6-8)	Elementary schoolers (grades K-5)	Preschoolers (3 – not yet in K)	Infants (0-2 years)
2	3	0	0	2,199	1	1.0	0.5	0.0	0.0	1.3	0.6	0.0	0.0	0.5000	0.1667	†	†
2	3	0	0	12,992	8	1.0	0.5	0.0	0.0	7.6	3.8	0.0	0.0	0.5000	0.1667	†	†
2	3	0	0	2,514	1	1.0	0.5	0.0	0.0	1.5	0.7	0.0	0.0	0.5000	0.1667	†	†
2	3	0	1	3,702	2	1.0	0.3	0.0	0.8	2.2	0.5	0.0	1.6	0.5000	0.0833	†	0.7500
2	3	1	0	4,360	3	1.0	0.5	1.0	0.0	2.5	1.3	2.5	0.0	0.5000	0.1667	1.0000	†
2	3	1	1	1,111	1	1.0	0.3	1.0	0.3	0.6	0.2	0.6	0.2	0.5000	0.0833	1.0000	0.2500
2	4	0	0	6,354	4	1.0	0.5	0.0	0.0	3.7	1.9	0.0	0.0	0.5000	0.1250	†	†
2	4	1	1	1,211	1	1.0	0.3	1.0	0.3	0.7	0.2	0.7	0.2	0.5000	0.0625	1.0000	0.2500
2	5	1	2	3,492	2	1.0	0.3	1.0	0.3	2.0	0.5	2.0	0.5	0.5000	0.0500	1.0000	0.1250
3	0	0	0	34,941	20	1.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.3333	†	†	†
3	0	0	1	4,439	3	1.0	0.0	0.0	1.0	2.6	0.0	0.0	2.6	0.3333	†	†	1.0000
3	0	0	2	3,661	2	1.0	0.0	0.0	1.0	2.1	0.0	0.0	2.1	0.3333	†	†	0.5000
3	0	1	0	2,576	2	1.0	0.0	1.0	0.0	1.5	0.0	1.5	0.0	0.3333	†	1.0000	†
3	1	0	0	11,729	7	1.0	0.5	0.0	0.0	6.8	3.4	0.0	0.0	0.3333	0.5000	†	†
3	1	0	0	767	0	1.0	0.5	0.0	0.0	0.4	0.2	0.0	0.0	0.3333	0.5000	†	†
3	2	0	0	4,612	3	1.0	0.5	0.0	0.0	2.7	1.3	0.0	0.0	0.3333	0.2500	†	†
3	3	1	0	564	0	1.0	0.5	1.0	0.0	0.3	0.2	0.3	0.0	0.3333	0.1667	1.0000	†
3	4	0	1	3,080	2	1.0	0.3	0.0	0.8	1.8	0.4	0.0	1.3	0.3333	0.0625	†	0.7500
4	1	0	0	3,861	2	1.0	0.5	0.0	0.0	2.3	1.1	0.0	0.0	0.2500	0.5000	†	†
4	3	1	0	1,026	1	1.0	0.5	1.0	0.0	0.6	0.3	0.6	0.0	0.2500	0.1667	1.0000	†
5	2	0	0	462	0	1.0	0.5	0.0	0.0	0.3	0.1	0.0	0.0	0.2000	0.2500	†	†
5	3	0	0	596	0	1.0	0.5	0.0	0.0	0.3	0.2	0.0	0.0	0.2000	0.1667	†	†
				102,796,766	60,000					6061.0	6752.0	4613.0	5525.0				

† Not applicable.

NOTE: The figures in this table are based on the original sample design for NHES:2001.

SOURCE: Tabulations of data from the October 1997 Current Population Survey (CPS), with sampling rates under the proposed sample design.

Table D-12. Calculation of expected sample yield for adults based on the sampling scheme for within-household sampling: CPS:1997

Household composition			Total number of households in U.S.	Expected number of screened households with given composition	Total expected number of adults to be selected in households with the given composition				Overall sampling rate			
Eligible child in household?	Number of adults in household				Adult education participant, < high school diploma	Adult education non-participant, < high school diploma	Adult education participant, high school diploma or higher	Adult education non-participant, high school diploma or higher	Adult education participant, < high school diploma	Adult education non-participant, < high school diploma	Adult education participant, high school diploma or higher	Adult education non-participant, high school diploma or higher
	Adults with less than a high school diploma	Adults with a high school diploma or higher										
No	0	0	56,389	33	0	0	0	0	†	†	†	†
No	0	1	22,082,314	12,889	0	0	2,224	2,150	†	†	0.4209	0.2827
No	0	2	24,892,275	14,529	0	0	2,507	2,423	†	†	0.2104	0.1414
No	0	3	5,124,001	2,991	0	0	516	499	†	†	0.1403	0.0942
No	0	4	1,398,983	817	0	0	141	136	†	†	0.1052	0.0707
No	0	5	201,348	118	0	0	20	20	†	†	0.0842	0.0565
No	0	6	28,492	17	0	0	3	3	†	†	0.0701	0.0471
No	0	7	3,695	2	0	0	0	0	†	†	0.0601	0.0404
No	0	8	812	0	0	0	0	0	†	†	0.0526	0.0353
No	1	0	5,662,283	3,305	446	585	0	0	0.7500	0.2157	†	†
No	1	1	5,241,662	3,059	310	406	198	191	0.5625	0.1618	0.1578	0.1060
No	1	2	1,305,594	762	77	101	49	48	0.5625	0.1618	0.0789	0.0530
No	1	3	356,918	208	21	28	13	13	0.5625	0.1618	0.0526	0.0353
No	1	4	76,787	45	5	6	3	3	0.5625	0.1618	0.0395	0.0265
No	1	5	7,392	4	0	1	0	0	0.5625	0.1618	0.0316	0.0212
No	1	6	2,105	1	0	0	0	0	0.5625	0.1618	0.0263	0.0177
No	1	8	1,664	1	0	0	0	0	0.5625	0.1618	0.0197	0.0133
No	2	0	2,738,864	1,599	432	566	0	0	0.7500	0.2157	†	†
No	2	1	625,120	365	37	48	24	23	0.2813	0.0809	0.1578	0.1060
No	2	2	192,512	112	11	15	7	7	0.2813	0.0809	0.0789	0.0530
No	2	3	51,001	30	3	4	2	2	0.2813	0.0809	0.0526	0.0353
No	2	4	2,601	2	0	0	0	0	0.2813	0.0809	0.0395	0.0265
No	2	5	2,956	2	0	0	0	0	0.2813	0.0809	0.0316	0.0212
No	3	0	323,199	189	51	67	0	0	0.5000	0.1438	†	†
No	3	1	68,038	40	4	5	3	2	0.1875	0.0539	0.1578	0.1060
No	3	2	21,814	13	1	2	1	1	0.1875	0.0539	0.0789	0.0530
No	3	3	4,781	3	0	0	0	0	0.1875	0.0539	0.0526	0.0353
No	4	0	64,797	38	10	13	0	0	0.3750	0.1079	†	†

See notes at end of table.

**Table D-12. Calculation of expected sample yield for adults based on the sampling scheme for within-household sampling: CPS:1997—
Continued**

Household composition			Total number of households in U.S.	Expected number of screened households with given composition	Total expected number of adults to be selected in households with the given composition				Overall sampling rate			
Eligible child in household?	Number of adults in household				Adult education participant, part, < high school diploma	Adult education non-participant, < high school diploma	Adult education participant, high school diploma or higher	Adult education non-participant, high school diploma or higher	Adult education participant, < high school diploma	Adult education non-participant, < high school diploma	Adult education participant, high school diploma or higher	Adult education non-participant, high school diploma or higher
	Adults with less than a high school diploma	Adults with a high school diploma or higher										
No	4	1	20,110	12	1	2	1	1	0.1406	0.0405	0.1578	0.1060
No	5	0	13,341	8	2	3	0	0	0.3000	0.0863	†	†
No	5	1	4,150	2	0	0	0	0	0.1125	0.0324	0.1578	0.1060
No	5	3	3,990	2	0	0	0	0	0.1125	0.0324	0.0526	0.0353
No	8	0	2,923	2	0	1	0	0	0.1875	0.0539	†	†
Yes	0	0	69,000	40	0	0	0	0	†	†	†	†
Yes	0	1	4,915,026	2,869	0	0	330	319	†	†	0.2806	0.1885
Yes	0	2	17,802,415	10,391	0	0	1,195	1,155	†	†	0.1403	0.0942
Yes	0	3	1,809,435	1,056	0	0	121	117	†	†	0.0935	0.0628
Yes	0	4	429,241	251	0	0	29	28	†	†	0.0701	0.0471
Yes	0	5	93,151	54	0	0	6	6	†	†	0.0561	0.0377
Yes	0	6	12,328	7	0	0	1	1	†	†	0.0468	0.0314
Yes	1	0	1,091,649	637	57	75	0	0	0.5000	0.1438	†	†
Yes	1	1	2,501,051	1,460	99	129	63	61	0.3750	0.1079	0.1052	0.0707
Yes	1	2	628,283	367	25	32	16	15	0.3750	0.1079	0.0526	0.0353
Yes	1	3	175,620	103	7	9	4	4	0.3750	0.1079	0.0351	0.0236
Yes	1	4	59,744	35	2	3	2	1	0.3750	0.1079	0.0263	0.0177
Yes	1	5	6,889	4	0	0	0	0	0.3750	0.1079	0.0210	0.0141
Yes	2	0	1,523,312	889	80	105	0	0	0.2500	0.0719	†	†
Yes	2	1	392,704	229	15	20	10	10	0.1875	0.0539	0.1052	0.0707
Yes	2	2	160,937	94	6	8	4	4	0.1875	0.0539	0.0526	0.0353
Yes	2	3	50,425	29	2	3	1	1	0.1875	0.0539	0.0351	0.0236
Yes	2	4	6,573	4	0	0	0	0	0.1875	0.0539	0.0263	0.0177
Yes	2	6	2,583	2	0	0	0	0	0.1875	0.0539	0.0175	0.0118
Yes	3	0	219,470	128	12	15	0	0	0.1667	0.0479	†	†
Yes	3	1	83,098	49	3	4	2	2	0.1250	0.0360	0.1052	0.0707
Yes	3	2	23,532	14	1	1	1	1	0.1250	0.0360	0.0526	0.0353
Yes	3	3	7,013	4	0	0	0	0	0.1250	0.0360	0.0351	0.0236

See notes at end of table.

**Table D-12. Calculation of expected sample yield for adults based on the sampling scheme for within-household sampling: CPS:1997—
Continued**

Household composition			Total number of households in U.S.	Expected number of screened households with given composition	Total expected number of adults to be selected in households with the given composition				Overall sampling rate			
Eligible child in household?	Number of adults in household				Adult education participant, part, < high school diploma	Adult education non-participant, < high school diploma	Adult education participant, high school diploma or higher	Adult education non-participant, high school diploma or higher	Adult education participant, < high school diploma	Adult education non-participant, < high school diploma	Adult education participant, high school diploma or higher	Adult education non-participant, high school diploma or higher
	Adults with less than a high school diploma	Adults with a high school diploma or higher										
Yes	3	4	3,874	2	0	0	0	0	0.1250	0.0360	0.0263	0.0177
Yes	4	0	80,368	47	4	6	0	0	0.1250	0.0360	†	†
Yes	4	1	21,961	13	1	1	1	1	0.0938	0.0270	0.1052	0.0707
Yes	4	2	2,609	2	0	0	0	0	0.0938	0.0270	0.0526	0.0353
Yes	4	3	1,783	1	0	0	0	0	0.0938	0.0270	0.0351	0.0236
Yes	5	0	18,606	11	1	1	0	0	0.1000	0.0288	†	†
Yes	5	1	1,213	1	0	0	0	0	0.0750	0.0216	0.1052	0.0707
Yes	5	2	3,025	2	0	0	0	0	0.0750	0.0216	0.0526	0.0353
Yes	5	3	2,656	2	0	0	0	0	0.0750	0.0216	0.0351	0.0236
Yes	6	0	7,163	4	0	0	0	0	0.0833	0.0240	†	†
Yes	7	0	4,813	3	0	0	0	0	0.0714	0.0205	†	†
Yes	7	1	2,307	1	0	0	0	0	0.0536	0.0154	0.1052	0.0707
			102,796,766	60,000	1,731	2,269	7,500	7,250				

† Not applicable.

NOTE: The figures in this table are based on the original sample design for NHES:2001.

SOURCE: Tabulations of data from the October 1997 Current Population Survey (CPS), with sampling rates under the proposed sample design.

APPENDIX E

Interviewer Training Agendas

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Attachment 1

NHES:2001 INTERVIEWER TRAINING AGENDA

NEW INTERVIEWERS

Activity	Time in Minutes	Topic
1	15	Introduction <ul style="list-style-type: none">▪ Background and purpose of the NHES▪ Overview of the 2001 NHES
2	30	Demonstration and critique: The effective interviewer <ul style="list-style-type: none">▪ Demonstration of an ECPP interview (I path, parental care)▪ Critique of interviewing techniques▪ Implications for response rate
3	120	Screener Interactives (includes 15 min. break) <ul style="list-style-type: none">▪ Explanation of information already on the screen▪ Eligibility requirements▪ The matrices<ul style="list-style-type: none">▪ Enumerate ALL household members▪ Enumerate children only▪ Empty matrix▪ Refused names or initials in matrix▪ Explanation of Result Codes▪ Explanation of Call Back Screens▪ Selecting respondents<ul style="list-style-type: none">▪ NOCHOICE screen▪ HHSELECT screen▪ Review of key concepts
4	45	Contact procedures (Part 1) <ul style="list-style-type: none">▪ RNA (ring no answer)▪ NW (non-working)▪ Business▪ Probable Business/Callback▪ Mail out request▪ AM (answering machine)▪ Problem (NIRF)▪ Teen Phone (Messages)▪ Language Problem (NIRF)
5	30	Exercise on Screener and contact procedures

Activity	Time in Minutes	Topic
6	75	Contact Procedures (Part 2) <ul style="list-style-type: none"> ▪ Refusal (in matrix/NIRF) ▪ Restart at the extended <ul style="list-style-type: none"> ▪ Selecting the appropriate interview ▪ Deletion of household members
7	60	Interactive 1: AELL Interview <ul style="list-style-type: none"> ▪ Full household enumeration ▪ Sample adult and child ▪ Change from Screener respondent to sampled adult ▪ Eligible for Basic Skills/GED ▪ Participant in a vocational diploma program, a work-related course, and an informal learning activity
8	15	AELL Exercise <ul style="list-style-type: none"> • Recording course information
9	90	Contact Role Plays (includes 15 min. break) <ul style="list-style-type: none"> ▪ Ring no answer ▪ Non-working at the screener ▪ Problem ▪ Empty matrix ▪ Answering machine (residential) ▪ Mailout ▪ Non-working at the extended ▪ Probable business ▪ Refusal ▪ Refused names in matrix ▪ Answering machine (movie theater) ▪ Order of selection ▪ Busy ▪ Answering machine (business) ▪ Callback beyond matrix ▪ Language problem

Activity	Time in Minutes	Topic
10	60	Interactive 2: ECPP (N Path) <ul style="list-style-type: none"> ▪ Restart at HHSELECT <ul style="list-style-type: none"> ▪ Add household member at PA7 ▪ Center-based program ▪ Relative care
11	60	Interactive 3: ASPA <ul style="list-style-type: none"> ▪ Same HH and respondent as interactive 2 ▪ Center-based program
12	15	Exercise on care providers <ul style="list-style-type: none"> ▪ Identifying nonparental care providers
	10	Break
13	50	Interactive 4: ECPP (I Path) <ul style="list-style-type: none"> ▪ Screener: HH sampled for AELL ▪ Nonrelative care ▪ Breakoff at Parent/Guardian Characteristics ▪ Change respondents
14	45	Interactive 5: AELL <ul style="list-style-type: none"> ▪ Same HH as interactive 4; new respondent ▪ Personal development courses
15	30	Exercise on extended interview
16	75	Strategies for gaining cooperation <ul style="list-style-type: none"> ▪ Includes review of Q&A card
17	15	Problem Sheet review
	10	Break
18	45	Interactive 6: ASPA <ul style="list-style-type: none"> ▪ Restart at Before/After School Arrangements ▪ After school activities and self care
19	65	Interactive 7: Special Items <ul style="list-style-type: none"> ▪ Explanation of challenging questions and paths

Activity	Time in Minutes	Topic
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20

120

Role Plays

(includes 15 min. break)

- ECPP Interview
 - Parental care (I path)
 - Center-based care (N path)
 - Relative care and center-based care (N path)
 - Nonrelative care (N path)
- ASPA Interview
 - Activities and parental care
 - Center-based program
 - Nonrelative care
 - Activities and self care
- AELL Interview
 - Credential and personal development
 - Work related and personal development
 - Credential

NHES:2001 INTERVIEWER TRAINING AGENDA (CONTINUED)

EXPERIENCED INTERVIEWERS

Activity	Time in Minutes	Topic
1	15	Introduction <ul style="list-style-type: none"> ▪ Background and purpose of the NHES ▪ Overview of the 2001 NHES
2	30	Demonstration and critique: The effective interviewer <ul style="list-style-type: none"> ▪ Demonstration of a Parent interview (I path, parental care) ▪ Critique of interviewing techniques ▪ Implications for response rate
3	105	 Screener Interactives (includes 15 min. break) <ul style="list-style-type: none"> ▪ Explanation of information already on the screen ▪ Eligibility requirements ▪ The matrices <ul style="list-style-type: none"> ▪ Enumerate ALL household members ▪ Enumerate children only ▪ Empty matrix ▪ Refused names or initials in matrix ▪ Explanation of Result Codes ▪ Explanation of Call Back Screens ▪ Selecting respondents <ul style="list-style-type: none"> ▪ NOCHOICE screen ▪ HHSELECT screen ▪ Review of key concepts
4	15	Contact procedures (Part 1) <ul style="list-style-type: none"> ▪ RNA (ring no answer) ▪ NW (non-working) ▪ Business ▪ Probable Business/Callback ▪ Mail out request ▪ AM (answering machine) ▪ Problem (NIRF) ▪ Teen Phone (Messages) ▪ Language Problem (NIRF)
5	15	Exercise on Screener and contact procedures
6	60	Contact Procedures (Part 2) <ul style="list-style-type: none"> ▪ Refusal (in matrix/NIRF) ▪ Restart at the extended <ul style="list-style-type: none"> ▪ Selecting the appropriate interview ▪ Deletion of household members

Activity	Time in Minutes	Topic
7	50	Interactive 1: AELL Interview <ul style="list-style-type: none"> ▪ Full household enumeration ▪ Sample adult and child ▪ Change from Screener respondent to sampled adult ▪ Eligible for Basic Skills/GED ▪ Participant in a vocational diploma program, a work-related activity, and an informal learning activity
8	15	AELL Exercise <ul style="list-style-type: none"> ▪ Recording course information
9	75	Contact Role Plays (includes 15 min. break) <ul style="list-style-type: none"> ▪ Ring no answer ▪ Non-working at the screener ▪ Problem ▪ Empty matrix ▪ Answering machine (residential) ▪ Mailout ▪ Non-working at the extended ▪ Probable business ▪ Refusal ▪ Refused names in matrix ▪ Answering machine (movie theater) ▪ Order of selection ▪ Busy ▪ Answering machine (business) ▪ Callback beyond matrix ▪ Language problem ▪ Emancipated minor-no adult household members
10	50	Interactive 2: ECPP Interview <ul style="list-style-type: none"> ▪ Restart at HHSELECT <ul style="list-style-type: none"> ▪ Add HH member at PA7 ▪ Center-based program ▪ Relative care
11	50	Interactive 3: ASPA Interview <ul style="list-style-type: none"> ▪ Same respondent as interactive 2 ▪ Center-based program

Activity	Time in Minutes	Topic
12	40	Interactive 4: ECPP Interview (I Path) <ul style="list-style-type: none"> ▪ Screener: HH sampled for AELL ▪ Nonrelative care ▪ Breakoff at Parent/Guardian Characteristics ▪ Change respondents
13	40	Interactive 5: AELL Interview <ul style="list-style-type: none"> ▪ Same HH as interactive 4; new respondent ▪ Personal development courses
	10	Break
14	20	Exercise on recording course names
15	15	Exercise on care providers
16	30	Strategies for gaining cooperation <ul style="list-style-type: none"> ▪ Includes review of Q&A card
17	5	Problem Sheet review
18	30	Interactive 6: ASPA Interview <ul style="list-style-type: none"> ▪ Restart at Before/After School Arrangements ▪ After-school activities and self care
19	50	Interactive 7: Special Items <ul style="list-style-type: none"> ▪ Explanation of challenging questions and paths

Activity	Time in Minutes	Topic
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20

120

Role Plays

(includes 15 min. break)

- ECPP Interview
 - Parental care (I path)
 - Center-based care (N path)
 - Relative care and center-based care (N path)
 - Nonrelative care (N path)

- ASPA Interview
 - Activities and parental care
 - Center-based program
 - Nonrelative care
 - Activities and self care

- AELL Interview
 - Credential and personal development
 - Work related and personal development

APPENDIX F

Letters and Postcard to Potential Respondents

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Advance Information Letter



U.S. DEPARTMENT OF EDUCATION
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

December 2000

Dear Sir or Madam:

The National Center for Education Statistics, part of the United States Department of Education, needs your help with an important education research study. The National Household Education Survey (NHES) will be conducted in households all over the country to learn about educational experiences of both adults and children, important issues we can only learn about by speaking with people like you.

The NHES was conducted five times in the 1990s and provided valuable data for education policy makers, researchers, and educators. Your participation in our next study will help us learn about

- Preschool programs and learning activities at home for young children;
- Activities and programs that school-age children may participate in after school;
- Types of educational activities, including training at work, that adults may take part in.

Your telephone number was selected for the study as part of a scientific and random sample of all households in the nation, and another telephone number cannot be substituted for yours. You represent thousands of other households. Even if there are no children or adults who have taken part in educational activities in your household, it is important that we talk to you so that the survey results can accurately reflect the experiences of all children and adults across the nation.

Please be assured that all information you give is completely confidential and will never be linked with your name. More details about the interviews, how your household was selected, and how to obtain reports from previous surveys are provided on the back of this letter.

Westat, a social science research firm, will conduct this study. An interviewer will call you sometime between January 2 and April 1, 2001. A few initial questions will determine if someone in your household is selected for an interview. If we happen to call at an inconvenient time, please suggest a time that is better for you. If you would like to set a time before we call, contact Westat toll free at 1-888-594-8692 and give your telephone number and the date and time you would like to be called.

Please help us in our efforts to better understand education in the United States. We recognize that you have many demands on your time, and we thank you in advance for your cooperation in this important research.

Sincerely,

A handwritten signature in cursive script that reads "Christopher Chapman".

Christopher Chapman
Project Officer
2001 National Household Education Survey

Some Frequently Asked Questions about the National Household Education Survey (NHES)

Q. How will the study results be used? What will you do with this information?

A. The information we collect will be used to better understand educational experiences and needs. Findings will be published in U.S. Department of Education reports. Reports from NHES surveys are available online at <http://nces.ed.gov/nhes> or by writing to the National Center for Education Statistics. The NHES reports, which do not reveal individual answers but rather grouped data for large numbers of people, are widely distributed to educators, researchers, news organizations, and the general public.

Q. How did you get my (unlisted) phone number?

A. Your number was randomly selected from among all of the possible telephone numbers in the nation. It was selected using scientific sampling methods. We do not use telephone directories to select telephone numbers. If your number was unlisted, it still is.

Q. How did you get my address?

A. An independent organization matched a list of published addresses to the randomly selected list of phone numbers. This letter was sent to every address that was matched with a telephone number. Interviewers do not have the names or addresses for any telephone numbers. Address information is kept confidential will be destroyed as soon as the data collection is completed.

Q. Will you keep my information confidential?

A. All information you give to the interviewer will be kept completely confidential. Employees of the U.S. Department of Education and Westat who are working on this study are required by law to protect the confidentiality of respondents. Also, individual responses are never published in reports; they are combined with the responses of others and are published as grouped data only.

Q. How long will the survey take?

A. First, there are a few short questions to see if any members of your household qualify for the study. They take about 4 minutes. In about half of all households, no one is selected for an interview. If someone is chosen for an interview, it will take approximately 10 to 20 minutes depending on the interview.

Q. What is the authority for conducting this survey?

A. 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 Christopher Chapman, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9020, Washington, DC 20006-5650.

Letter providing information



U.S. DEPARTMENT OF EDUCATION OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

Dear Sir or Madam,

Recently you were called and asked to participate in the 2001 National Household Education Survey (NHES). I am pleased to provide you with more information about this important study, which is sponsored by the National Center for Education Statistics of the United States Department of Education.

The purpose of the study is to learn about various educational experiences of both adults and children. We can only learn about these issues by speaking to families like yours. The NHES was conducted five times in the 1990s and has provided valuable data for educational policy makers, educators, and researchers. Your participation in the 2001 NHES will help us learn about:

- Preschool programs and learning activities at home for young children;
- Activities and programs that school-age children may participate in after school;
- Types of educational activities, including training at work, that adults may take part in.

Your telephone number was selected for the study as part of a scientific and random sample of all households in the nation, and another telephone number cannot be substituted for yours. You represent thousands of other households. Even if there are no children or adults who have taken part in educational activities in your household, it is important that we talk to you so that the survey results can accurately reflect the experiences of all children and adults across the nation. Please be assured that the information you give is completely confidential and will never be linked with your name.

Westat, a social science research firm, is conducting this study. If you have not yet completed an interview and would like to set an appointment before we call, please contact Westat at their toll-free number, 1-888-594-8692, and give your telephone number and your preferred appointment time.

More information about the NHES, including its Web site address, is provided on the back of this letter. If you have additional questions, you may contact me at 202-502-7327; however, this is not a toll-free number. We recognize that you have many demands on your time, and we thank you in advance for your cooperation in this vital research effort to better understand education in the United States.

Sincerely,

Christopher Chapman
Project Officer
National Household Education Surveys Program

Some Frequently Asked Questions about the National Household Education Surveys Program (NHES)

Q. How will the study results be used? What will you do with this information?

A. The information we collect will be used to better understand educational experiences and needs. Findings will be published in U.S. Department of Education reports. Reports from NHES surveys are available online at <http://nces.ed.gov/nhes> or by writing to the National Center for Education Statistics at the address shown at the bottom of this page. The NHES reports, which do not reveal individual answers but rather grouped data for large numbers of people, are widely distributed to educators, researchers, news organizations, and the general public.

Q. How did you get my (unlisted) phone number?

A. Your number was randomly selected from among all of the possible telephone numbers in the nation. It was selected using scientific sampling methods. We do not use telephone directories to select telephone numbers. If your number was unlisted, it still is.

Q. How did you get my address?

A. An independent organization matched a list of published addresses to the randomly selected list of phone numbers. This letter was sent to every address that was matched with a telephone number. Interviewers do not have the names or addresses for any telephone numbers. Address information is kept confidential and will be destroyed as soon as the data collection is completed.

Q. Will you keep my information confidential?

A. All information you give to the interviewer will be kept completely confidential. Employees of the U.S. Department of Education and Westat who are working on this study are required by law to protect the confidentiality of respondents. Also, individual responses are never published in reports; they are combined with the responses of others and are published as grouped data only.

Q. How long will the survey take?

A. First, there are a few short questions to see if any members of your household qualify for the study. They take about 4 minutes. In about half of all households, no one is selected for an interview. If someone is chosen for an interview, it will take approximately 10 to 20 minutes depending on the interview.

Q. What is the authority for conducting this survey?

A. 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 Christopher Chapman, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9020, Washington, DC 20006-5650. You may send e-mail to nhes@ed.gov.

Letter for refusal, answering machine, and maximum call cases



U.S. DEPARTMENT OF EDUCATION
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

January 2001

Dear Sir or Madam:

Recently, a professional telephone interviewer from Westat, a social science research firm, called your household about a national study about educational experiences of children and adults. This study, the 2001 National Household Education Survey (NHES), is sponsored by the National Center for Education Statistics of the United States Department of Education. As of the date we mailed this letter, we had not completed an interview with your household. I am writing to give you more information about the NHES. (Additional information, including the NHES Web site address, is provided on the reverse side.) This letter has been sent by Federal Express at the special low rate available to the U.S. Government, so that it would come to your immediate attention. I hope that after reading it you will take part in this important research effort.

The purpose of the study is to learn about various educational experiences of both adults and children. We can only learn about these issues by speaking to families like yours. The NHES was conducted five times in the 1990s and has provided valuable data for educational policy makers, educators, and researchers. Your participation in the 2001 NHES will help us learn about:

- Preschool programs and learning activities at home for young children;
- Activities and programs that school-age children may participate in after school;
- Types of educational activities, including training at work, that adults may take part in.

Your telephone number was selected for the study as part of a scientific and random sample of all households in the nation, and another telephone number cannot be substituted for yours. You represent thousands of other households. Even if there are no children or adults who have taken part in educational activities in your household, it is important that we talk to you so that the survey results can accurately reflect the experiences of all children and adults across the nation. Please be assured that the information you give is completely confidential and will never be linked with your name.

In the next week or two, a Westat interviewer will call your household again. If we happen to call at an inconvenient time, please suggest a time that is better for you. If you would like to set an appointment before we call, contact Westat at their toll-free number (1-888-594-8692), give your telephone number, and your preferred appointment time.

We recognize that you have many demands on your time, and we thank you in advance for your cooperation in this vital research effort to better understand education in the United States.

Sincerely,

A handwritten signature in cursive script that reads "Christopher Chapman".

Christopher Chapman
Project Officer
National Household Education Surveys Program

Some Frequently Asked Questions about the National Household Education Surveys Program (NHES)

Q. How will the study results be used? What will you do with this information?

A. The information we collect will be used to better understand educational experiences and needs. Findings will be published in U.S. Department of Education reports. Reports from NHES surveys are available online at <http://nces.ed.gov/nhes> or by writing to the National Center for Education Statistics at the address shown at the bottom of this page. The NHES reports, which do not reveal individual answers but rather grouped data for large numbers of people, are widely distributed to educators, researchers, news organizations, and the general public.

Q. How did you get my (unlisted) phone number?

A. Your number was randomly selected from among all of the possible telephone numbers in the nation. It was selected using scientific sampling methods. We do not use telephone directories to select telephone numbers. If your number was unlisted, it still is.

Q. How did you get my address?

A. An independent organization matched a list of published addresses to the randomly selected list of phone numbers. This letter was sent to every address that was matched with a telephone number. Interviewers do not have the names or addresses for any telephone numbers. Address information is kept confidential and will be destroyed as soon as the data collection is completed.

Q. Will you keep my information confidential?

A. All information you give to the interviewer will be kept completely confidential. Employees of the U.S. Department of Education and Westat who are working on this study are required by law to protect the confidentiality of respondents. Also, individual responses are never published in reports; they are combined with the responses of others and are published as grouped data only.

Q. How long will the survey take?

A. First, there are a few short questions to see if any members of your household qualify for the study. They take about 4 minutes. In about half of all households, no one is selected for an interview. If someone is chosen for an interview, it will take approximately 10 to 20 minutes depending on the interview.

Q. What is the authority for conducting this survey?

A. 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 Christopher Chapman, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9020, Washington, DC 20006-5650. You may send e-mail to nhes@ed.gov.

Letter for extended interview maximum call cases



U.S. DEPARTMENT OF EDUCATION
OFFICE OF EDUCATIONAL RESEARCH AND IMPROVEMENT

NATIONAL CENTER FOR EDUCATION STATISTICS

March 2001

Dear Sir or Madam:

Recently, a professional telephone interviewer from Westat, a social science research firm, called your household for a national research study about educational experiences of children and adults. This study, the 2001 National Household Education Survey (NHES), is sponsored by the National Center for Education Statistics of the United States Department of Education. As of the date we mailed this letter, we had not completed one or more interviews we would like to do with members of your household. I am writing to give you more information about the NHES. (Additional information, including the NHES Web site address, is provided on the reverse side.) This letter has been sent by Federal Express at the special low rate available to the U.S. Government, so that it would come to your immediate attention. I hope that after reading it you will take part in this important research effort.

The purpose of the study is to learn about various educational experiences of both adults and children. We can only learn about these issues by speaking to families like yours. The NHES was conducted five times in the 1990s and has provided valuable data for educational policy makers, educators, and researchers. Your participation in the 2001 NHES will help us learn about:

- Preschool programs and learning activities at home for young children;
- Activities and programs that school-age children may participate in after school;
- Types of educational activities, including training at work, that adults may take part in.

Your telephone number was selected for the study as part of a scientific and random sample of all households in the nation, and another telephone number cannot be substituted for yours. You represent thousands of other households. Even if there are no children or adults who have taken part in educational activities in your household, it is important that we talk to you so that the survey results can accurately reflect the experiences of all children and adults across the nation. Please be assured that the information you give is completely confidential and will never be linked with your name.

In the next week or two, a Westat interviewer will call your household again. If we happen to call at an inconvenient time, please suggest a time that is better for you. If you would like to set an appointment before we call, contact Westat at their toll-free number (1-888-594-8692), give your telephone number, and your preferred appointment time.

We recognize that you have many demands on your time, and we thank you in advance for your cooperation in this vital research effort to better understand education in the United States.

Sincerely,

Christopher Chapman
Project Officer
National Household Education Surveys Program

Some Frequently Asked Questions about the National Household Education Surveys Program (NHES)

Q. How will the study results be used? What will you do with this information?

A. The information we collect will be used to better understand educational experiences and needs. Findings will be published in U.S. Department of Education reports. Reports from NHES surveys are available online at <http://nces.ed.gov/nhes> or by writing to the National Center for Education Statistics at the address shown at the bottom of this page. The NHES reports, which do not reveal individual answers but rather grouped data for large numbers of people, are widely distributed to educators, researchers, news organizations, and the general public.

Q. How did you get my (unlisted) phone number?

A. Your number was randomly selected from among all of the possible telephone numbers in the nation. It was selected using scientific sampling methods. We do not use telephone directories to select telephone numbers. If your number was unlisted, it still is.

Q. How did you get my address?

A. An independent organization matched a list of published addresses to the randomly selected list of phone numbers. This letter was sent to every address that was matched with a telephone number. Interviewers do not have the names or addresses for any telephone numbers. Address information is kept confidential and will be destroyed as soon as the data collection is completed.

Q. Will you keep my information confidential?

A. All information you give to the interviewer will be kept completely confidential. Employees of the U.S. Department of Education and Westat who are working on this study are required by law to protect the confidentiality of respondents. Also, individual responses are never published in reports; they are combined with the responses of others and are published as grouped data only.

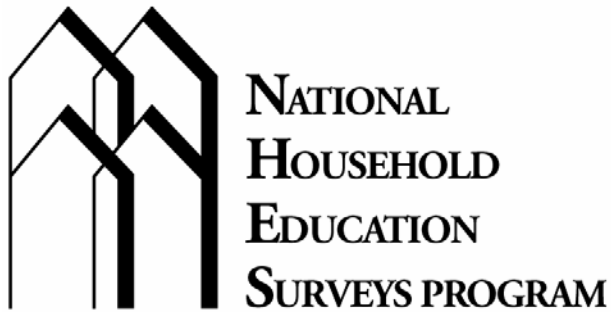
Q. How long will the survey take?

A. First, there are a few short questions to see if any members of your household qualify for the study. They take about 4 minutes. In about half of all households, no one is selected for an interview. If someone is chosen for an interview, it will take approximately 10 to 20 minutes depending on the interview.

Q. What is the authority for conducting this survey?

A. 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 Christopher Chapman, National Center for Education Statistics, U.S. Department of Education, 1990 K Street NW, Room 9020, Washington, DC 20006-5650. You may send e-mail to nhes@ed.gov.

Postcard



**U.S. Department of Education
National Center for Education Statistics
<http://nces.ed.gov/nhes>**

**Your help is needed for
an important research study!**

The U.S. Department of Education is sponsoring a **confidential** national study about the educational experiences of children and adults, and we need to interview someone in your household. We will be calling again soon. Please help us complete this important research!

For more information about the National Household Education Survey or to set a time to be called, please call toll-free 1-888-594-8692. You may also visit our web site, shown on the front of this card. Thank you in advance for your help.

Christopher Chapman
National Center for Education Statistics
U.S. Department of Education

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APPENDIX G

Result Codes

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NHES:2001 RESULT CODES

	Code	Label	Description	Screener /extended
INTERIM	-1	New Work	Work that has yet to receive an attempt	S/E
	1	RNA	The call attempt resulted in a ring, no answer	S/E
	2	Initial Ref.	Respondent refuses to do the interview or refuses to continue with the interview.	S/E
	3	Busy	Call results in “regular” busy signal.	S/E
	41	Appoint. General	Respondent requests a callback to complete the interview at a general time, e.g., day, evening or weekend.	S/E
	42	Appoint. Exact	Respondent requests a callback to complete the interview at a specific date and time.	S/E
	5	Answer Machine	Telephone is answered by an answering machine.	S/E
	61	Initial Lang. Problem Hear/Speech	Initial hearing or speech problem	S/E
	62	Initial Lang. Problem Other Lang.	Initial language problem, language other than English	S/E
	7	Questionable Ring	Code used anytime the call results in a sound that cannot be identified. Examples include dead air, “fast” busy signals, possible modem or fax tones.	S/E
	8	Problem	All other situations that are not included in other interim codes. If initial TRC supervisory review does not resolve the “problem”, questionnaires may be coded 81, 82 or 83.	S/E
	9	Mailout needed	Respondent requested a mailout describing the study before completing. The case will be “aged” before being made available for callback.	S/E

NHES:2001 RESULT CODES

	Code	Label	Description	Screener /extended
FINAL Response	C0	Complete Interview	Complete Screener with no extended Interviews.	S
	C1	Complete Interview	Complete Screener with ECPP Interview(s) only.	S
	C2	Complete Interview	Complete Screener with ASPA Interview(s) only.	S
	C3	Complete Interview	Complete Screener with ECPP and ASPA Interviews..	S
	C4	Complete Interview	Complete Screener with AELL Interview(s) only.	S
	C5	Complete Interview	Complete Screener with AELL and ECPP Interviews.	S
	C6	Complete Interview	Complete Screener with AELL and ASPA Interviews.	S
	C7	Complete Interview	Complete Screener with ECPP, ASPA and AELL Interviews.	S
	CS	Complete Interview	Complete ASPA Interview for a school-age child.	E
	CH	Complete Interview	Complete ASPA Interview for a home schooler.	E
	CI	Complete Interview	Complete ECPP Interview for an infant/toddler	E
	CN	Complete Interview	Complete ECPP Interview for a preschooler.	E
	CP	Complete Interview	Complete AELL Interview; sampled as participant, completed as participant.	E
	CU	Complete Interview	Complete AELL Interview; sampled as non-participant, completed as non-participant.	E
	CX	Complete Interview	Complete AELL Interview; sampled as participant, completed as non-participant.	E
	CZ	Complete Interview	Complete AELL Interview; sampled as non-participant, completed as participant.	E
	IA	Ineligible Interview	Ineligible AELL Interview. Adult is in military or living in another private home/apartment.	E
IP	Ineligible Interview	Ineligible ECPP or ASPA Interview; sampled child has AGE2000 > 15 or is enrolled in above eighth grade in extended.	E	

NHES:2001 RESULT CODES

	Code	Label	Description	Screener/extended
FINAL Non-Response	LH	Final Language Problem - Hearing/Speech	Two calls to this respondent resulted in a hearing or speech communication problem.	S/E
	LM	Max Call Language	Questionnaire had an additional language problem and has reached the maximum calling algorithm.	S/E
	LP	Final Language Problem	Two calls to this respondent resulted in a non-English communication problem.	S/E
	MC	Max Call	The calling algorithm has been fulfilled. At least one "human" contact has been made at the number and there are no refusals or language problems in the call history for the household.	S/E
	ML	Max call Lang	The calling algorithm has been fulfilled. An attempt to contact <i>someone else</i> in the HH resulted in an interim language problem, but this particular questionnaire has had no interim language problem in its call history.	E
	MP	Max Phones	The maximum number of phone numbers has been tried and the respondent can not be found.	E
	MR	Max call Ref	The calling algorithm has been fulfilled. An attempt to contact <i>someone else</i> in the HH resulted in an interim refusal, but this particular questionnaire has had no refusal in its call history.	E
	NA	No Answer	The calling algorithm has been fulfilled with no "human" or answering machine contact.	S
	NM	No Answer: Answering Machine	The calling algorithm has been fulfilled for a telephone number and only answering machine contact was made.	S
	NO	Other non-response	Non-response: other. Questionnaire for which no other final result code is applicable.	S/E
	NS	Subject Sick	Non-response: subject physically or mentally incapable of completing interview	S/E
	NZ	Deleted Subject	Deleted subject was a household member on SCRNDATE.	E
	RB	Final refusal	Refusal - On at least two calls, the respondent refused to be interviewed or broke off during the interview and refused to continue.	S/E
	R3	Final refusal for Re-Released RBs	A Re-Released Final Refusal (RB) has received an additional refusal.	S/E
	RM	Max Call Refusal	Questionnaire had an additional refusal code and has reached the maximum calling algorithm.	S/E
RX	Max Call Re-Released RBs	A Re-Released Final Refusal (RB), has reached the maximum calling algorithm.	S/E	

NHES:2001 RESULT CODES

	Code	Label	Description	Screener/ extended
FINAL Out of Scope	OE	Enumeration Error	Enumeration error - The respondent enumerated in the screener and selected for the extended interview is not a member of the household.	E
	OZ	Out of scope	Deleted subject was NOT a household member on SCRNDATE.	E
	NR	Non-Residential	The number called was not a residential number. Included are businesses, institutions, agencies, modems, public facilities, vacation homes, group quarters. (Only considered out of scope for cluster or screener questionnaires; non-response for extended.)	S/E
	NB	Non-residential, Business purge	Identified as non-residential during business purge preprocessing prior to Cheshire load.	S
	NW	Non-Working	On three call attempts, the call was coded a non-working number. Included are temporary and permanent disconnects, fast busy's, and "dead" air. (Only considered out of scope for cluster or screener questionnaires; non-response for extended.)	S/E
	NT	Non-working, Tritone match	Identified as non-working during Tritone match preprocessing prior to Cheshire load.	S

APPENDIX H

Answering Machine Messages

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Answering machine message for interviews in the initial and language problem strategies:

Hello, this is {INTERVIEWER NAME} and I'm calling for the U.S. Department of Education from Westat, a social science research firm. We are conducting a study about the educational experiences of adults and children. We'll call back another time. If you have questions or would like to schedule an appointment, please call our toll-free number, 1-888-594-8692. Thank you.

Buenos dias/Buenas tardes, me llamo {interviewer name} y estoy llamando de parte del Departamento de Educacion de Estados Unidos, desde Westat, una compania que hace estudios de ciencias sociales. Estamos llevando a cabo un estudio acerca de la experiencias educativas de adultos y ninos. Llamaremos de nuevo en otro momento. Si usted tiene preguntas o le gustaria hacer una cita, por favor llame al 1-888-594-8692. Muchas gracias.

Answering machine message for Screeners in the refusal strategy:

Hello, this is {INTERVIEWER NAME} and I'm calling for the U.S. Department of Education from Westat, a social science research firm. We are conducting a study about the educational experiences of adults and children. Your phone number was selected as part of a scientific random sample. Your participation is important so our study can accurately represent all households in the nation. Initial questions only take about 4 minutes, and your answers will be kept confidential. We'll call back another time. If you have questions or would like to schedule an appointment, please call our toll-free number, 1-888-594-8692. Thank you.

Buenos dias/Buenas tardes, me llamo {interviewer name} y estoy llamando de parte del Departamento de Educacion de los Estados Unidos, desde Westat, una compania de investigacion de ciencias sociales. Estamos llevando a cabo un estudio acerca de las experiencias educativas de adultos y ninos. Su numero telefonico fue seleccionado como parte de una muestra cientifica aleatoria. Su participacion es importante para que nuestro estudio pueda representar con exactitud a todos los hogares en el pais. Las preguntas iniciales solo toman como 4 minutos y sus respuestas se mantendran confidenciales. Llamaremos de nuevo en otro momento. Si usted tiene preguntas o quisiera hacer una cita, por favor llame al 1-888-594-8692. Muchas gracias.

Answering machine message for extended interviews in the refusal strategy:

Hello, this is {INTERVIEWER NAME} and I'm calling for the U.S. Department of Education from Westat, a social science research firm. I'm calling to complete an interview with a member of your household who was scientifically selected for our study about the educational experiences of adults and children. Your participation is important so our study can accurately represent the experiences of people throughout the nation. We'll call back another time. If you have questions or would like to schedule an appointment, please call our toll-free number, 1-888-594-8692. Thank you.

Buenos días/Buenas tardes, me llamo {interviewer name} y estoy llamando del departamento de Educación de los Estados Unidos, desde Westat, una compañía de investigación de ciencias sociales. Estoy llamando para completar una entrevista con un miembro de su hogar que fue seleccionado científicamente para nuestro estudio, acerca de las experiencias educativas de adultos y niños. Su participación es importante para que nuestro estudio pueda representar con precisión las experiencias de personas en todo el país. Llamaremos de nuevo en otro momento. Si usted tiene preguntas o quisiera hacer una cita, por favor llame al 1-888-594-8692. Muchas gracias.

Appendix I

TRC Monitoring Form

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COACHING/MONITORING FORM

Interviewer: _____
NAME

<small>INITIALS</small>					<small>M O</small>		<small>D D</small>		<small>Y R</small>

Reviewer Signature: _____
NAME

TIME			
BEGIN	____:____	AM	END
			____:____
			AM
			PM
BEGIN	____:____	AM	END
			____:____
			AM
			PM

Project: _____
NAME NUMBER

Interviewing Characteristics	Very Successful	Successful	Not Successful	N/A
1. <i>Gaining Cooperation</i>				
2. <i>Conducting the Interview</i>				
3. <i>Refusal Conversion</i>				
4. <i>Teamwork</i>				
5. <i>Productivity</i>				

Special Tasks:

- Language
- Inbound (ACD)
- Tracing
- Other _____



Thank you!

List Areas of Strength:

1. _____
2. _____
3. _____
4. _____
5. _____

List Coaching Tips:

1. _____
2. _____
3. _____
4. _____
5. _____

FEEDBACK GIVEN TO INTERVIEWER : _____ : _____ AM / PM DATE: ____/____/____

APPENDIX J

Range and Logic Edit Specifications

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Range and Logic Edit Specifications

Screeners

- S6.** Age entered at “children only” enumeration matrix
- If SCRN_15 = 1 (household has children) and the household is not designated for adult enumeration, all ages entered at S6 must be ≤ 15 .
- S8C.** Number of hours each week home-schooled child attends school for instruction
- 1–30 (hard range)
1–20 (soft range)
- S9, S15.** Grade or year of school person attending (**Confirmation screen check**)
- If age = 3–4, then grade = -1, N, T, P, K, U, S
If age = 5, then grade = -1, N, T, K, P, 1, U, S
If age = 6, then grade = -1, N, T, K, P, 1, 2, U, S
If age = 7, then grade = -1, N, T, K, P, 1, 2, 3, U, S
If age = 8, then grade = -1, 1, 2, 3, 4, U, S
If age = 9, then grade = -1, 2, 3, 4, 5, U, S
If age = 10, then grade = -1, 3, 4, 5, 6, U, S
If age = 11, then grade = -1, 4, 5, 6, 7, U, S
If age = 12, then grade = -1, 5, 6, 7, 8, U, S
If age = 13, then grade = -1, 6, 7, 8, 9, U, S
If age = 14, then grade = -1, 7, 8, 9, 10, U, S
If age ≥ 15 , then grade = -1, 8, 9, 10, 11, U, S
- S10, S16.** Grade or year equivalent (**Confirmation screen check**)
- If age = 3–4, then grade equivalent = -1, N, T, P, K, U,
If age = 5, then grade equivalent = -1, N, T, K, P, 1, U,
If age = 6, then grade equivalent = -1, N, T, K, P, 1, 2, U,
If age = 7, then grade equivalent = -1, N, T, K, P, 1, 2, 3, U,
If age = 8, then grade equivalent = -1, 1, 2, 3, 4, U,
If age = 9, then grade equivalent = -1, 2, 3, 4, 5, U,
If age = 10, then grade equivalent = -1, 3, 4, 5, 6, U,
If age = 11, then grade equivalent = -1, 4, 5, 6, 7, U,
If age = 12, then grade equivalent = -1, 5, 6, 7, 8, U,
If age = 13, then grade equivalent = -1, 6, 7, 8, 9, U,
If age = 14, then grade equivalent = -1, 7, 8, 9, 10, U,
If age ≥ 15 , then grade equivalent = -1, 8, 9, 10, 11, U,

S12. Relationship between child and most knowledgeable parent/guardian (**Confirmation screen check**)

If S12 = 1, 2, then parent's age \geq (child's age + 12)
If S12 = 5, 6, then grandparent's age \geq (child's age + 24)
If S12 = 1, then parent's gender = F
If S12 = 2, then parent's gender = M
If S12 = 3, then brother's gender = M
If S12 = 4, then sister's gender = F
If S12 = 5, then grandmother's gender = F
If S12 = 6, then grandfather's gender = M
If S12 = 7, then aunt's gender = F
If S12 = 8, then uncle's gender = M

S13. AELL matrix– (if household does not have children and is designated for AELL enumeration)

All ages entered must be > 15 .

S25. Number of additional telephone numbers for home use

0–5 (hard range)
0–3 (soft range)

S27. Number of home use telephone numbers used for computer or fax lines

Cannot be greater than number in S24 (**Until statement edit**)
0–5 (hard range)
0–3 (soft range)

S29. Computer or fax telephone numbers answered for talking

Cannot be greater than number in S27 or S28 (**Until statement edit**)
1–5 (hard range)
1–3 (soft range)

ECPP_ASPA

PA1. Month and year of child's birth

Month: 1–12 (hard range)
Year: 1985–2000 (all entries confirmed in PA2)

PA5OV. Age of child when first moved to US

Years: 0–current age (**Until statement edit**)

PA8. Relationships of household members to child (**Confirmation screen check**)

If PA8 = 1, 2, then parent's age = > (AGE2000 + 12)
If PA8 = 5, 6, then grandparent's age = > (AGE2000 + 24)
If PA8 = 1, then parent's gender = F
If PA8 = 2, then parent's gender = M
If PA8 = 3, then brother's gender = M
If PA8 = 4, then sister's gender = F
If PA8 = 5, then grandmother's gender = F
If PA8 = 6, then grandfather's gender = M
If PA8 = 7, then aunt's gender = F
If PA8 = 8, then uncle's gender = M
For each child, only 1 household member can have PA8 = 1
For each child, only 1 household member can have PA8 = 2

PB5. Number of hours homeschooled child attends school for instruction

1-30 (hard range)
1-20 (soft range)

PB6. Grade or year child is attending (**Confirmation screen check**)

If AGE2000 = 3-4, then grade = -1, N, T, K, P, U, S
If AGE2000 = 5, then grade = -1, N, T, K, P, 1, U, S
If AGE2000 = 6, then grade = -1, N, T, K, P, 1, 2, U, S
If AGE2000 = 7, then grade = -1, T, K, P, 1, 2, 3, U, S
If AGE2000 = 8, then grade = -1, 1, 2, 3, 4, U, S
If AGE2000 = 9, then grade = -1, 2, 3, 4, 5, U, S
If AGE2000 = 10, then grade = -1, 3, 4, 5, 6, U, S
If AGE2000 = 11, then grade = -1, 4, 5, 6, 7, U, S
If AGE2000 = 12, then grade = -1, 5, 6, 7, 8, U, S
If AGE2000 = 13, then grade = -1, 6, 7, 8, 9, U, S
If AGE2000 = 14, then grade = -1, 7, 8, 9, 10, U, S
If AGE2000 = 15, then grade = -1, 8, 9, 10, 11, U, S

PB7. Grade equivalent (**Confirmation screen check**)

If AGE2000 = 3-4, then grade equivalent = -1, N, T, K, P, U
If AGE2000 = 5, then grade equivalent = -1, N, T, K, P, 1, U
If AGE2000 = 6, then grade equivalent = -1, N, T, K, P, 1, 2, U
If AGE2000 = 7, then grade equivalent = -1, T, K, P, 1, 2, 3, U
If AGE2000 = 8, then grade equivalent = -1, 1, 2, 3, 4, U
If AGE2000 = 9, then grade equivalent = -1, 2, 3, 4, 5, U
If AGE2000 = 10, then grade equivalent = -1, 3, 4, 5, 6, U
If AGE2000 = 11, then grade equivalent = -1, 4, 5, 6, 7, U
If AGE2000 = 12, then grade equivalent = -1, 5, 6, 7, 8, U
If AGE2000 = 13, then grade equivalent = -1, 6, 7, 8, 9, U
If AGE2000 = 14, then grade equivalent = -1, 7, 8, 9, 10, U
If AGE2000 = 15, then grade equivalent = -1, 8, 9, 10, 11, U

ECPP

- ED3.** Age of child when first received care on a regular basis
Years: 0–current age (**Until statement edit**)
Months: 0–24 [maximum of current age]
If years > 0, then months must be <12. (**Until statement edit**)
If years = 0, then months must be >=0.
- ED5OV.** Age of relative care provider
10–99 (hard range)
16–80 (soft range)
- ED7.** Relative care provider lives in household
Consistency check on household relationships:
Person with care provider’s relationship to child must be enumerated. (**Until statement edit**).
- ED8.** Length of time from home to relative’s home
Minutes
1–90 (hard range)
1–60 (soft range)
- ED11.** Number of days each week child is cared for by relative
1–7 (hard range)
1–5 (soft range)
- ED12.** Number of hours each week child is cared for by relative
1–72 (hard range)
1–50 (soft range)
- ED13.** Number of weeks each month child is cared for by relative
1–3 (hard range)
1–2 (soft range)
- ED14.** Number of days each week child is cared for by relative
1–7 (hard range)
1–5 (soft range)

ED15. Number of hours each week child is cared for by relative

1–70 (hard range)

1–50 (soft range)

ED16/EE15/EG15.

Hours cannot be > than 14 per day when averaged (**Until statement edit**)

ED17. Number of children cared for together by relative

1–10 (hard range)

1–5 (soft range)

ED18. Number of adults who usually care for child

1–8 (hard range)

1–4 (soft range)

Check on child/staff ratio: (**Confirmation screen check**)

0.5:1 to 8:1 (hard range)

1:1 to 5:1 (soft range)

ED19. Age of child when current relative care arrangement began

Years: 0–current age (**Until statement edit**)

Months: 0–24 [maximum of current age]

If years > 0, then months must be <12. (**Until statement edit**)

If years = 0, then months must be >=0.

Age must be greater than or equal to that in ED3. (**Until statement edit**)

Consistency check:

ED19 must be >= ED3. (**Until statement edit**)

ED23. Number of days per month relative cancels care arrangement

1–30 (hard range)

1–15 (soft range)

Consistency check on days cancelled per month:

If ED9 = 1 then ED24 must be < ED11 * 4 (**Until statement edit**)

Else, if ED10 = 1 then ED24 must be < ED13 * ED14

ED26. Cost of relative care to child's household (**Confirmation screen check**)

per hour:	0.50–12.00 (hard range) 1.00–6.00 (soft range)
per day:	1.00–100.00 (hard range) 1.00–10.00 (soft range)
per week:	5.00–500.00 (hard range) 10.00–100.00 (soft range)
per month:	20.00–800.00 (hard range) 40.00–240.00 (soft range)
per year:	240.00–8,000.00 (hard range) 480.00–2,000.00 (soft range)

Consistency check on cost series:

If ED25 = 1 (there is a fee), and ED26a–d = 2 (no assistance), then ED27 cannot = 0 (no cost to household). (**Until statement edit**)

ED27OV. Number of children cost of relative care applies to

This number cannot exceed the number of children age 15 or younger enumerated in the household. (**Until statement edit**)

2–12 (hard range)
2–6 (soft range)

EE3. Age of child when first received care on a regular basis

Years: 0–current age (**Until statement edit**)
Months: 0 – 24 [maximum of current age]

If years > 0, then months must be <12. (**Until statement edit**)
If years = 0, then months must be >=0.

EE6. Does nonrelative care provider live in child's household

If yes, there must be someone in the HH whose relationship to the child is a nonrelative. (**Until statement edit**)

EE7. Length of time from home to person's home

Minutes
1–90 (hard range)
1–60 (soft range)

EE10. Number of days each week child is cared for by nonrelative

1–7 (hard range)
1–5 (soft range)

EE11. Number of hours each week child is cared for by nonrelative

1–70 (hard range)
1–50 (soft range)

- EE12.** Number of weeks each month child receives nonrelative care
1–3 (hard range)
1–2 (soft range)
- EE13.** Number of days each week child is cared for by nonrelative
1–7 (hard range)
1–5 (soft range)
- EE14.** Number of hours each week child is cared for by nonrelative
1–70 (hard range)
1–50 (soft range)
- EE16.** Number of children cared for together by nonrelative
1–30 (hard range)
1–20 (soft range)
- EE17.** Number of adults who usually care for child
1–8 (hard range)
1–4 (soft range)
- Check on child/staff ratio: **(Confirmation screen check)**
1:1 to 8:1 (hard range)
1:1 to 5:1 (soft range)
- EE18.** Age of child when current nonrelative care arrangement began
Years: 0–current age **(Until statement edit)**
Months: 0–24 [maximum of current age]
If years > 0, then months must be <12. **(Until statement edit)**
If years = 0, then months must be >=0.
Age must be greater than or equal to that in EE3. **(Until statement edit)**
- EE21A.** Age of nonrelative care provider
10–17 (hard range)
13–17 (soft range)
- EE27.** Number of days per month nonrelative cancels care arrangement
1–30 (hard range)
1–15 (soft range)
- Consistency check on days cancelled per month:
If EE8 = 1 then EE26 must be < EE10 * 4 **(Until statement edit)**
Else if EE9 = 1 then EE26 must be < EE12 * EE13 **(Until statement edit)**

EE30. Cost of nonrelative care to child's household (**Confirmation screen check**)

per hour:	1.00–15.00 (hard range) 1.00–6.00 (soft range)
per day:	3.00–200.00 (hard range) 10.00–40.00 (soft range)
per week:	5.00–800.00 (hard range) 30.00–200.00 (soft range)
per month:	30.00–3,000.00 (hard range) 120.00–800.00 (soft range)
per year:	360.00–20,000.00 (hard range) 1,400.00–5,000.00 (soft range)

Consistency check on cost series:

If EE27 = 1 (there is a fee), and EE28a–d = 2 (no assistance), then ED29 cannot = 0 (no cost to household). (**Until statement edit**)

EE31V. Number of children cost of relative care applies to

This number cannot exceed the number of children age 15 or younger enumerated in the household. (**Until statement edit**)

2–12 (hard range)
2–6 (soft range)

EG3. Age of child when first attended a center-based program

Years: 0–current age (**Until statement edit**)
Months: 0–24 [maximum of current age]

If years > 0, then months must be <12. (**Until statement edit**)
If years = 0, then months must be >=0.

EG4. Number of center-based programs child currently goes to

1–4 (hard range)
1–2 (soft range)

EG8. Length of time from home to program

Minutes
1–90 (hard range)
1–60 (soft range)

EG11. Number of days each week child attends center-based program

1–7 (hard range)
1–5 (soft range)

- EG12.** Number of hours each week child attends center-based program
Hours cannot be > than 14 per day when averaged. **(Until statement edit)**
1–70 (hard range)
1–50 (soft range)
- EG13.** Number of weeks each month child attends center-based program
1–3 (hard range)
1–2 (soft range)
- EG14.** Number of days each week child attends center-based program
1–7 (hard range)
1–5 (soft range)
- EG15.** Number of hours each week child attends center-based program
1–70 (hard range)
1–50 (soft range)
- EG17.** Number of children cared for in same room at center-based program
1–50 (hard range)
5–25 (soft range)
- EG18.** Number of adults in room or group at center-based program
1–10 (hard range)
1–5 (soft range)
Check on child/adult ratio: **(Confirmation screen check)**
1:1 to 20:1 (hard range)
3:1 to 12:1 (soft range)
- EG19.** Age of child when current center-based care arrangement began
Years: 0–current age (hard range) **(Until statement edit)**
Months: 0–24 [maximum of current age] (hard range)
If years > 0, then months must be <12. **(Until statement edit)**
If years = 0, then months must be >=0.
Age must be greater than or equal to that in EG3. **(Until statement edit)**

EG30. Cost of center-based care to child's household **(Confirmation screen check)**

per hour:	1.00–20.00 (hard range) 1.00–6.00 (soft range)
per day:	3.00–250.00 (hard range) 10.00–40.00 (soft range)
per week:	5.00–800.00 (hard range) 30.00–200.00 (soft range)
per month:	30.00–3,500.00 (hard range) 120.00–800.00 (soft range)
per year:	360.00–20,000.00 (hard range) 1,400.00–5,000.00 (soft range)

Consistency check on cost series:

If EG29 = 1 (there is a fee), and EG30 a–d = 2 (no assistance), then EG31 cannot = 0 (no cost to household). **(Until statement edit)**

EG31OV. Number of children cost of center-based care applies to

This number cannot exceed the number of children age 15 or younger enumerated in the household. **(Until statement edit)**

2–12 (hard range)
2–6 (soft range)

EH7. Number of care arrangements since past September

1–10 (hard range)
1–5 (soft range)

EH10. Start and end date of previous arrangement

Start dates must be later than child's birth date **(Until statement edit)**

End months must fall within the range September – month of interview **(Until statement edit)**

If end month = September–December, end year must = 2000 **(Until statement edit)**

If end month = January–interview month, end year must = 2001 **(Until statement edit)**

The end date must be later than or equal to the start date. **(Until statement edit)**

EK2. Number of minutes each day family reads to child

1–120 (hard range)
1–30 (soft range)

ASPA

- SD6, SD7.** Lowest/highest grade taught in child's school
- Child's GRADE/GRADEEQ must be \leq highest grade in school (SHIGH) and \geq lowest grade in school (SLOW). **(Until statement edit)**
- SD8.** Number of students in child's school (or grade at school)
- 1-5,000 (hard range)
1-1,200 (soft range)
- SD9.** Time child's school starts
- | | |
|---------|--|
| Hours | 6 am-2 pm (hard range)
7 am-1 pm (soft range) |
| Minutes | 0-59 (hard range) |
- SD9.** Time child's school lets out
- | | |
|---------|--|
| Hours | 10 am-5 pm (hard range)
11 am-4 pm (soft range) |
| Minutes | 0-59 (hard range) |
- SD11/SF6/SF7/SG5/SG6/SH6/SH7** Length of time to go from point A to point B.
- | | |
|---------|--|
| Minutes | 1-90 (hard range)
1-60 (soft range) |
|---------|--|
- SF3OV.** How old is the relative care provider
- 10-100 (hard range)
16-80 (soft range)
- SF5.** Does relative care provider live in child's household
- If SF5 = yes and SF3 = grandparent, there must be a grandparent of the child in the HH
(Until statement edit)
- If SF5 = yes and SF3 = brother or sister, there must be a sibling of the child in the HH
(Until statement edit)
- In all other cases where SF5 = yes, there must be another relative in the HH other than the mother or father who is related to the subject child.
(Until statement edit)

- SF11.** Number of days each week child is cared for by relative
1–5 (hard range)
- SF12.** Number of hours each week child is cared for by relative before school
1–20 (hard range)
1–10 (soft range)
- SF18/SG17/SH18.**
Hours cannot be > than 14 per day when averaged (**Until statement edit**)
- SF13.** Number of hours each week child is cared for by relative after school
1–30 (hard range)
1–20 (soft range)
- SF15.** Number of hours after 6:00 pm each week
0–30 (hard range)
0–10 (soft range)
SF15 must be <= SF13 (**Until statement edit**)
- SF16.** Number of weeks each month child receives care from relative
1–3 (hard range)
1–2 (soft range)
- SF17.** Number of days each week during those weeks
1–5 (hard range)
- SF18.** Number of hours each week during those weeks
1–70 (hard range)
1–50 (soft range)
- SF19.** Number of children cared for together by relative
1–10 (hard range)
1–5 (soft range)
- SF20.** Number of adults who usually help care for child
1–8 (hard range)
1–4 (soft range)
Check on child/adult ratio: 0.5 to 8:1 (hard range) (**Confirmation screen check**)
1:1 to 5:1 (soft range)

SF27. Cost of relative care to child's household (**Confirmation screen check**)

per hour	0.50–12.00 (hard range) 1.00–6.00 (soft range)
per day:	1.00–100.00 (hard range) 1.00–10.00 (soft range)
per week:	5.00–500.00 (hard range) 10.00–100.00 (soft range)
per month:	20.00–800.00 (hard range) 40.00–240.00 (soft range)
per year:	240.00–8,000.00 (hard range) 480.00–2,000.00 (soft range)

Consistency check on cost series:

If SF27 = 1 (there is a fee), and SF28a–d = 2 (no assistance), then SF29 cannot = 0 (no cost to household).

(Until statement edit)

SF28OV. Number of children cost of relative care applies to

This number cannot exceed the number of children age 15 or younger enumerated in the household.

(Until statement edit)

2–12 (hard range)
2–6 (soft range)

SG4. Does nonrelative care provider live in child's household

If yes, there must be someone in the HH whose relationship to the child is a nonrelative.

(Until statement edit)

SG10. Number of days each week child is cared for by nonrelative

1–5 (hard range)

SG11. Number of hours each week child is cared for by nonrelative before school

1–20 (hard range)
1–10 (soft range)

SG12. Number of hours each week child is cared for by nonrelative after school

1–30 (hard range)
1–20 (soft range)

SG14. Number of hours after 6:00 pm each week

0–30 (hard range)
0–10 (soft range)

SG14 must be <= SG12 **(Until statement edit)**

SG15. Number of weeks each month child receives care from nonrelative

1–3 (hard range)

1–2 (soft range)

SG16. Number of days each week during those weeks

1–5 (hard range)

SG17. Number of hours each week during those weeks

1–70 (hard range)

1–50 (soft range)

SG18AOV. Age of nonrelative care provider under 18.

10–17 (hard range)

13–17 (soft range)

SG19. Number of children cared for together by nonrelative

1–30 (hard range)

1–20 (soft range)

SG20. Number of adults who usually help care for child

1–8 (hard range)

1–4 (soft range)

Check on child/adult ratio: 1:1 to 8:1 (hard range) (**Confirmation screen check**)

1:1 to 5:1 (soft range)

SG27. Cost of nonrelative care to child's household (**Confirmation screen check**)

per hour: 1.00–15.00 (hard range)

1.00–6.00 (soft range)

per day: 3.00–200.00 (hard range)

10.00–40.00 (soft range)

per week: 5.00–800.00 (hard range)

30.00–200.00 (soft range)

per month: 30.00–3,000.00 (hard range)

120.00–800.00 (soft range)

per year: 360.00–20,000.00 (hard range)

1,400.00–5,000.00 (soft range)

Consistency check on cost series:

If SG26 = 1 (there is a fee), and SG27a–d = 2 (no assistance), then SG28 cannot = 0 (no cost to household). (**Until statement edit**)

- SG280V.** Number of children cost of nonrelative care applies to
This number cannot exceed the number of children age 15 or younger enumerated in the household.
(Until statement edit)
2–12 (hard range)
2–6 (soft range)
- SH11.** Number of days each week child attends center-based program
1–5 (hard range)
- SH12.** Number of hours each week child attends center-based program before school
1–20 (hard range)
1–10 (soft range)
- SH13.** Number of hours each week child attends center-based program after school
1–30 (hard range)
1–20 (soft range)
- SH15.** Number of hours after 6:00 pm each week
0–30 (hard range)
0–10 (soft range)
SH15 must be <= SH13 (Until statement edit)
- SH16.** Number of weeks each month child attends program
1–3 (hard range)
1–2 (soft range)
- SH17.** Number of days each week during those weeks
1–5 (hard range)
- SH18.** Number of hours each week during those weeks
1–30 (hard range)
1–20 (soft range)
- SH19.** Number of children in center-based program group
1–50 (hard range)
5–25 (soft range)

SH20. Number of adults in center-based program group (**Confirmation screen check**)

1–10 (hard range)
1–5 (soft range)

Check on child/staff ratio: 1:1 to 20:1 (hard range)
3:1 to 12:1 (soft range)

SH35. Cost of attending program to child’s household (**Confirmation screen check**)

per hour:	1.00–20.00 (hard range) 1.00–6.00 (soft range)
per day:	3.00–250.00 (hard range) 10.00–40.00 (soft range)
per week:	5.00–800.00 (hard range) 30.00–200.00 (soft range)
per month:	30.00–3,500.00 (hard range) 120.00–800.00 (soft range)
per year:	360.00–20,000.00 (hard range) 1,400.00–5,000.00 (soft range)

Consistency check on cost series:

If SH35 = 1 (there is a fee), and SH36a–d = 2 (no assistance), then SH37 cannot = 0 (no cost to household). (**Until statement edit**)

SH36OV. Number of children cost of program applies to

This number cannot exceed the number of children age 15 or younger enumerated in the household. (**Until statement edit**)

2–12 (hard range)
2–6 (soft range)

SI2. If all of SI2a–i = 2, then collect ASOTHEOS (ask “What before- or after-school activities does (CHILD) currently participate in?”), set ASOTHER =1, and ask ASSCOTHR.

SI6. Number of weeks each month child participates in activities/lessons after school

1–3 (hard range)

SI7. Number of days each week during those weeks

1–5 (hard range)

SI8. Number of hours each week during those weeks

1–30 (hard range)
1–20 (soft range)

SI10. Number of days each week child participates in activities/lessons after school

1–5 (hard range)

- SI11.** Number of hours each week child participates in activities/lessons before school
1–20 (hard range)
1–10 (soft range)
- SI12.** Number of hours each week child participates in activities/lessons after school
1–30 (hard range)
1–20 (soft range)
- SI14.** Number of hours after 6:00 pm each week
0–30 (hard range)
0–10 (soft range)
- SI12 must be \leq SI10 (**Until statement edit**)
- SJ5.** Number of days each week child cares for self before/after school
1–5 (hard range)
- SJ6.** Number of hours each week child cares for self before school
1–20 (hard range)
1–10 (soft range)
- SJ7.** Number of hours each week child cares for self after school
1–30 (hard range)
1–20 (soft range)
- SJ8.** Number of hours after 6:00 pm each week
0–30 (hard range)
0–10 (soft range)
- SJ8 must be \leq SJ7 (**Until statement edit**)
- SJ9.** Number of weeks each month child is in self-care
1–3 (hard range)
1–2 (soft range)
- SJ10.** Number of days each week during those weeks
1–5 (hard range)
- SJ11.** Number of hours each week during those weeks
1–30 (hard range)
1–20 (soft range)

SK5. Number of other out-of-school arrangements used since beginning of school year.

1–10 (hard range)

1–5 (soft range)

SK8. Start and end date of previous arrangement

Start dates must be later than child’s birth date. **(Until statement edit)**

End months must fall within the range September–month of interview **(Until statement edit)**

If end month = September–December, end year must = 2000 **(Until statement edit)**

If end month = January–interview month, end year must = 2001.

ECPP_ASPA

PT2 Length of time since child saw a medical doctor for routine health care

If child’s age < 2, PT2 does not equal 3. If child’s age <1, PT3 does not equal 2 or 3.

PU3. Age first became mother/stepmother/guardian

The age reported must be less than or equal to the mother’s current age **(Until statement edit)**

12–45 (hard range)

15–40 (soft range)

PU6OV.Age mother first moved to U.S.

The age reported must be less than or equal to the mother’s current age **(Until statement edit)**

1–80 (hard range)

1–40 (soft range)

PU11. Hours per week mother usually works for pay

1–99 (hard range)

1–60 (soft range)

PU12. Number of months mother worked for pay in past 12 months

0–12 (hard range)

Cannot equal 0 if mother was employed last week for pay **(Until statement edit)**

PU14. What have you been doing in the past 4 weeks?

At least one of PU12 must not be 2 **(Until statement edit)**

PU17. Number of hours each week attending school or training

1–50 (hard range)

1–25 (soft range)

PU30. Number of days each week in main arrangement

- 1-7 (hard range)
1-5 (soft range)
- PU31.** Number of hours each week in main arrangement
1-40 (hard range)
1-30 (soft range)
- PU37.** Number of days each week in other arrangement
1-7 (hard range)
1-5 (soft range)
- PU38.** Number of hours each week in other arrangement
1-40 (hard range)
1-30 (soft range)
- PV50V.** Age father first moved to U.S.
The age reported must be less than or equal to the father's current age (**Until statement edit**)
1-80 (hard range)
1-40 (soft range)
- PV10.** Hours per week father usually works for pay
1-99 (hard range)
1-60 (soft range)
- PV13.** What have you been doing in the past 4 weeks?
At least one of PV11 must not be 2. (**Until statement edit**)
- PV16.** Number of hours each week attending school or training
1-50 (hard range)
1-25 (soft range)
- PW4.** Number of additional telephone numbers for home use, not including cell numbers
0-9 (hard range)
0-3 (soft range)
- PW6.** Number of additional telephone numbers for computer or fax lines
0-5 (hard range)
0-3 (soft range)
- PW8.** Number of computer or fax telephone numbers also answered for talking
1-5 (hard range)
1-3 (soft range)

- PW9.** ZIP Code
- Match first three digits to three digit ZIP Code loaded with list-assisted sample from Genesys.
(Until statement edit)
 Edit will allow respondent to verify their response.
 Zip code must be 5 characters in length
(Until statement edit)
- PW12.** Month and year stopped receiving benefits
- Date (month and year) respondent stopped receiving benefits must be within 3 years before interview date.
(Until statement edit)
- PW17.** Household income to the nearest thousand
- Response must fall within the range reported at PW12.
(Until statement edit)

AELL

- AA9.** Number of employers
- 1–10 (hard range)
 1–5 (soft range)
- AB4.** Reasons for taking ESL
- At least one category must be equal to 1 **(Until statement edit)**
- AB10.** Total hours for ESL
- 1–100 (hard range)
 1–75 (soft range)
- AB11.** Number of weeks attended ESL **(Confirmation screen check)**
- Days: 1–365 (hard range)
 1–30 (soft range)
- Weeks: 1–52 (hard range)
 1–20 (soft range)
- Months: 1–12 (hard range)
 Semesters: 1–3 (hard range)
 Quarters: 1–4 (hard range)
- AB12.** Hours for ESL
- 1–100 (hard range)
 1–75 (soft range)

- AB13.** Personal expenses for ESL.
- | | |
|----------------------|--|
| Tuition and fees: | 0–3,000 (hard range)
0–1,000 (soft range) |
| Books and materials: | 0–1,000 (hard range)
0–500 (soft range) |
- AC4.** Reasons for taking ABE/GED
- At least one category must be equal to 1 (**Until statement edit**)
- AC10.** Total hours for ABE/GED
- | |
|--------------------|
| 1–100 (hard range) |
| 1–75 (soft range) |
- AC11.** Number of weeks attended ABE/GED (**Confirmation screen check**)
- | | |
|------------|---|
| Days: | 1–365 (hard range)
1–30 (soft range) |
| Weeks: | 1–52 (hard range)
1–20 (soft range) |
| Months: | 1–12 (hard range) |
| Semesters: | 1–3 (hard range) |
| Quarters: | 1–4 (hard range) |
- AC12.** Hours for ABE/GED
- | |
|--------------------|
| 1–100 (hard range) |
| 1–75 (soft range) |
- AC13.** Personal expenses for ABE/GED
- | | |
|----------------------|--|
| Tuition and fees: | 0–3,000 (hard range)
0–1,000 (soft range) |
| Books and materials: | 0–1,000 (hard range)
0–500 (soft range) |
- AD11.** Month and year started college or university programs
- | | |
|--------|--|
| Month: | 1–12 (hard range) |
| Year: | 1985–2001 (hard range)
1995–2001 (soft range) |
- AD12.** Month and year completed college or university programs
- | | |
|--------|--|
| Month: | 1–12 (hard range) |
| Year: | 1995–2010 (hard range)
2000–2005 (soft range) |
- AD18.** Number of semesters or quarters for college or university programs

Semesters: 1–5 (hard range)
Quarters: 1–6 (hard range)

- AD19.** Number of courses for college or university programs
0–30 (hard range)
0–15 (soft range)
- AD20.** Number of total credit hours for college or university programs
1–70 (hard range)
1–45 (soft range)
- AD21.** Number of classroom hours for college or university programs
0–80 (hard range)
0–60 (soft range)
- AD23.** Number of courses taught by using technology
Must be <= to number of courses at AD14.
- AD24.** Percentage of technology instruction for college or university programs
1–100 (hard range)
- AD25.** Personal expenses for college or university programs
Tuition and fees: 0–50,000 (hard range)
0–20,000 (soft range)
Books and materials: 0–10,000 (hard range)
0–5,000 (soft range)
- AE9.** Month and year starting vocational or technical programs
Month: 1–12 (hard range)
Year: 1985–2001 (hard range)
1995–2001 (soft range)
- AE10.** Month and year completing vocational or technical programs
Month: 1–14 (hard range)
Year: 1995–2010 (hard range)
2000–2005 (soft range)
- AE16.** Number of semesters or quarters for vocational or technical programs
Months: 1–12 (hard range)
Semesters: 1–5 (hard range)
Quarters: 1–6 (hard range)

- AE17.** Number of courses for vocational or technical programs
0–30 (hard range)
0–15 (soft range)
- AE18.** Number of total credit hours for vocational or technical programs
1–70 (hard range)
1–45 (soft range)
- AE19.** Number of classroom hours for vocational or technical programs
0–400 (hard range)
0–200 (soft range)
- AE21.** Number of courses taught by using technology
Must be <= to number of courses at AE14.
- AE22.** Percentage of technology instruction for vocational or technical programs
1–100 (hard range)
- AE23.** Personal expenses for vocational or technical programs
- | | |
|----------------------|--|
| Tuition and fees: | 0–50,000 (hard range)
0–20,000 (soft range) |
| Books and materials: | 0–10,000 (hard range)
0–5,000 (soft range) |
- AF4.** Month and year starting apprenticeship programs
- | | |
|--------|--|
| Month: | 1–12 (hard range) |
| Year: | 1985–2001 (hard range)
1995–2001 (soft range) |
- AF5.** Month and year completing apprenticeship programs
- | | |
|--------|--|
| Month: | 1–13 (hard range) |
| Year: | 1995–2010 (hard range)
2000–2005 (soft range) |
- AF6.** Number of classroom hours for apprenticeship programs
0–100 (hard range)
0–50 (soft range)

- AF9.** Personal expenses for apprenticeship programs
- | | |
|----------------------|--|
| Tuition and fees: | 0–50,000 (hard range)
0–20,000 (soft range) |
| Books and materials: | 0–10,000 (hard range)
0–5,000 (soft range) |
- AG5.** Total hours for formal courses
- 1–500 (hard range)
1–150 (soft range)
- AH2.** Reasons for taking work-related courses
- At least one category must be equal to 1 (**Until statement edit**)
- AH9.** Percentage of technology instruction for work-related courses
- 1–100 (hard range)
- AH11.** Personal expenses for work-related courses
- | | |
|----------------------|---|
| Tuition and fees: | 0–10,000 (hard range)
0–3,000 (soft range) |
| Books and materials: | 0–1,000 (hard range)
0–500 (soft range) |
- AI8.** Percentage of technology instruction for personal interest courses
- 1–100 (hard range)
- AI9.** Personal expenses for personal interest courses
- | | |
|----------------------|---|
| Tuition and fees: | 0–10,000 (hard range)
0–3,000 (soft range) |
| Books and materials: | 0–1,000 (hard range)
0–500 (soft range) |
- AK1.** Month and year born
- | | |
|--------|--|
| Month: | 1–12 (hard range) |
| Year: | 1901–1985 (hard range)
1920–1985 (soft range) |
- AK8OV.** Age when first moved to U.S.
- Age must be less than or equal to current age (**Until statement edit**)
- 1–80 (hard range)
1–40 (soft range)

- AK12.** Number of months worked in past 12 months
1–12 (hard range)
- AK15.** Number of total hours per week work for pay
1–99 (hard range)
1–60 (soft range)
- AK21.** Earnings (**Confirmation screen check**)
- | | |
|---------------|--|
| Per hour: | 1–40 (hard range)
1–25 (soft range) |
| Per day: | 1–350 (hard range)
1–200 (soft range) |
| Per week: | 10–2,000 (hard range)
50–1,000 (soft range) |
| Per biweekly: | 20–4,000 (hard range)
100–2,000 (soft range) |
| Per month: | 40–10,000 (hard range)
200–5,000 (soft range) |
| Per year: | 500–300,000 (hard range)
1,000–100,000 (soft range) |
- AL4.** Number of additional telephone numbers for home use
0–9 (hard range)
0–3 (soft range)
- AL6.** Number of additional lines for computer or fax
0–5 (hard range)
0–3 (soft range)
- AL8.** Number of computer or fax lines for talking
1–5 (hard range)
1–3 (soft range)
- AL9.** ZIP code
Match first three digits to three-digit ZIP code loaded with list-assisted sample from Genesys.
(Until statement edit)
Edit will allow respondent to verify their response
Zip code must be 5 characters in length (**Until statement edit**)
- AL12.** Month and year stopped receiving benefits
Date (month and year) respondent stopped receiving benefits must be within 3 years before interview date.
(Until statement edit)
- AL17.** Household income to the nearest thousand (**Until statement edit**)
Response must fall within the range reported at AL12.

Batch Data Integrity Edit Specifications

Various data integrity edits were run against completed interviews to verify between-item skips and copying of data from one interview to another. These were run by data preparation staff to be sure that updates posted to cases took into account all variable settings that may have been affected by the change. These edits differ from the range and logic edits because they were not done during interview administration. They are different from the structural edits because they did not check the integrity of database records, but the integrity of the relationships between data items. These edits were developed to assist frequency review during data collection and after imputation. There were no changes to these edits after delivery of the final Data Editing Plan.

ECPP/ASPA Interviews

1. Confirmation of HHMOM, HHDAD with FEMGUARD, MALGUARD setting:
 - If HHMOM = 1 then FEMGUARD[MOMNUM] must = 1,2;
 - If HHMOM = 2 then FEMGUARD[MOMNUM] must = 3,4;
 - If HHMOM = 4 then all FEMGUARD array cells must = -1.

 - If HHDAD = 1 then MALGUARD[DADNUM] must = 1,2;
 - If HHDAD = 2 then MALGUARD[DADNUM] must = 3,4;
 - If HHDAD = 4 then all MALGUARD array cells must = -1.

2. Confirmation of PATH:
 - If AGE2000 = 0, 1, 2 then PATH must = I (infants/toddlers).

 - If [(AGE2000 >= 3 and AGE2000 <= 6) and not enrolled in school (ENROLL = 2) and not in home school (HOMESCHL not = 1 or HOMECON not = 1)] or [GRADE/GRADEEQ = N] or [GRADEEQ = U, -7, -8 and AGE2000 = 3 or 4] then PATH must = N (preschool).

 - If [GRADE/GRADEEQ = T, K, P, 1, 2, 3, 4, 5, 6, 7 or 8 and not in home school (HOMESCHL not = 1 or HOMECON not = 1)] or [GRADEEQ = U, -7, -8 and AGE2000 >= 5 and <= 15 and not in home school (HOMESCHL not = 1 or HOMECON not = 1)] then PATH must = S (school-age).

 - If AGE2000 >= 5 and in home school (HOMESCHL = 1 and HOMECON = 1) and GRADEEQ not = N then PATH must = H (home school).

3. SD12 – If two children are sampled for ASPA in the same household (ASPASMP > 1), the respondent for both interviews is the same, neither child has PATH = 'H' and HOMSCFLG not = 1, and it is possible from the responses to GRADE and SGRADE, GRADEEQ and SGRADEQ that the two children go to the same school, SSAME must not = -1.

4. SD1 – SD11 – If two children go to the same school and the respondent is the same for both ASPA Interviews in the household (PARN.SSAME = 1 and ENUM.PARNUM is identical) then SPUBLIC, SCHOICE, SDISRCT, SRELGN, SCATHLIC, SLOW, SHIGH, SNUMSTUD, SNUMGRAD, SSTRTHR, SSTRTMN, SSTRAMP, SENDHR, SENDMN, SENDAMP, and SSCHOMM should be equal (“Same School” common items).

5. SJ1OV – If a school-aged child (PATH = S) has younger siblings in the household (any RELATION = 3,4 and AGE of child is less than sampled child’s AGE2000) then SCRESIB must not = -1.
6. SL1 – If a school-aged child (PATH = S) has no nonparental supervision before or after school (all RCNOW, NCNOW, CPSNOW and SCSELF = 2, -7, -8 and ASCOVER = 2, -7, -8, -1) or no before school arrangements (all RCBFAFT, NCBFAFT, CPBFAFT and SCBFAFT are not = 1,3) then PABHOME must not = -1. Conversely, if the child has before-school supervision or a before-school arrangement, then PABHOME must = -1.
7. SL2 – If a school-aged child (PATH = S) has no nonparental supervision before or after school (all RCNOW, NCNOW, CPSNOW and SCSELF = 2, -7, -8 and ASCOVER = 2, -7, -8, -1) or no after school arrangements (all RCBFAFT, NCBFAFT, CPBFAFT and SCBFAFT are not = 2,3) then PAAHOME must not = -1. Conversely, if the child has after-school supervision or an after-school arrangement, then PAAHOME must = -1.
8. SM7, SM8, SM9 – If multiple school-aged (PATH = S) children are sampled in a household and each child is in an arrangement or the parent/guardian would choose to place each child in an arrangement, then the ASPA variables PPBCHOIC, PPACHOIC and PPHWHLP – PPKNBEF must be equal (ASPA “Perception of Quality” common items).
9. EI6 – If multiple infants/toddlers (PATH = I) or preschoolers (PATH = N) are sampled in a household, then the ECPP variable PPCHOIC must be equal (ECPP “Perception of Quality” common item).
10. EJ1 – If an infant/toddler (PATH = I) and a preschooler (PATH = N) are sampled in a household, then the ECPP variables SFATTGRP and SFATTCLS must be equal (“Training and Support for Families of Preschoolers” common items).
11. EI3/SL5 – If a child has no current nonparental care arrangements (ECPP: RCNOW, NCNOW and CPNNOW all = 2, -7, -8; ASPA: RCNOW, NCNOW, CPSNOW, ASCOVER, SCSELF all = 2, -7, -8, -1) then PACHOOSE must NOT = -1. Conversely, if a child has at least one current nonparental care arrangement, then PACHOOSE must = -1.
12. PU24/PU25 and PV23/PV24 – Child and Dependent Care Tax Credit questions are asked once per household. The responses to MAMA.MOMTCRED/PAPA.DADTCRED and MAMA.MOMTCUSE/PAPA.DADTCUSE must be identical.
13. If the respondent to an ECPP or ASPA Interview was the parent or guardian (no parent in the household) of the sampled child and also completed an AELL Interview, the common items between the ECPP/ASPA and AELL Interviews must contain identical information (“Adult/MAMA/PAPA” common items).
14. If two sampled children in a household have the same mother/female respondent (DEMO.MOMNUM is identical for both), the non-child specific mother items (MOMSTAT, MOMPART, MOMNEW, MOMLANG, MOMLANOS, MOMSPEAK, MOMSPEOS, MOMBORN, MOMTEROS, MOMCONOS, MOMUSAGE, MOMGRADE, MOMGRAD1, MOMGRAD2, MOMVOTEC, MOMDIPL, MOMWORK, MOMLEAVE, MOMHOURS, MOMMTHS, MOMLOOK, MOMPUBL, MOMPRIV, MOMEMPL, MOMREL, MOMANSAD, MOMREAD, MOMOTHER, MOMOTHOS, MOMACTY, MOMACTOS, MOMENROL, MOMENHRS, MOMLVEAS, MOMACCT, MOMACUSE) must be identical.

15. If two sampled children in a household have the same father/male respondent (DEMO.DADNUM is identical for both), the non-child specific father items (DADSTAT, DADPART, DADNEW, DADLANG, DADLANOS, DADSPEAK, DADSPEOS, DADBORN, DADTEROS, DADCONOS, DADUSAGE, DADGRADE, DADGRAD1, DADGRAD2, DADVOTEC, DADDIPL, DADWORK, DADLEAVE, DADHOURS, DADMTHS, DADLOOK, DADPUBL, DADPRIV, DADEMPL, DADREL, DADANSAD, DADREAD, DADOTHER, DADOTHOS, DADACTY, DADACTOS, DADENROL, DADENHRS, DADLVEAS, DADACCT, DADACUSE, DADTCRED, DADTCUSE) must be identical.
16. PV27 – Parent work/stay home preference is asked once per household. The responses to DEMO.PWRKHOME must be identical.

Household Characteristics

1. Number in household (HHNUM) should equal the total number of people enumerated as household members in S6, S13 and/or PA7.
2. If (Number in HH = 2,3 and HINCOME <= 3) or
 (Number in HH = 4 and HINCOME <= 4) or
 (Number in HH = 5,6 and HINCOME <= 5) or
 (Number in HH = 7 and HINCOME <= 6) or
 (Number in HH = 8 and HINCOME <= 7) or
 (Number in HH >= 9 and HINCOME <= 8)
 HINCMEXT must have been asked (HINCMEXT cannot = -1)

Edits for Structural Completeness

The structural edits were run against completed interviews only. . There were no changes to these edits after delivery of the final Data Editing Plan. The completion codes (database variables SCR.N.SCRNRSLT for screener completes and BASM.MAINRSLT for extended completes) were as follows:

Screener (SCR.N.SCRNRSLT)

- C0 Complete screener with no extended interviews
- C1 Complete screener with ECPP Interviews(s) only
- C2 Complete screener with ASPA Interview(s) only
- C3 Complete screener with ECPP and ASPA Interviews
- C4 Complete screener with AELL Interview(s) only
- C5 Complete screener with AELL and ECPP Interviews
- C6 Complete screener with AELL and ASPA Interviews
- C7 Complete screener with ECPP, ASPA and AELL Interviews

ECPP (BASM.MAINRSLT)

- CI Complete ECPP Interview for an infant/toddler
- CN Complete ECPP Interview for a preschooler

ASPA (BASM.MAINRSLT)

- CE Complete ASPA Interview for a school-age child
- CH Complete ASPA Interview for a home schooler

AELL (BASM.MAINRSLT)

- CP Complete AELL Interview; sampled as participant, completed as participant
- CU Complete AELL Interview; sampled as nonparticipant, completed as nonparticipant
- CX Complete AELL Interview; sampled as participant, completed as nonparticipant
- CZ Complete AELL Interview; sampled as nonparticipant, completed as participant

The structural edits were grouped into four categories as described below.

A. Interview Completeness

These edits confirmed the completeness of the database. In other words, if there was a completed interview, all of the appropriate data records associated with that type of interview must exist.

- A1. Screeners completed with ECPP Interview(s) only (SCRN.SCRNRSLT = C1) must have ECPP extended(s) only (SELECTEX = EC for the BASM record(s)).
- A2. Screeners completed with ASPA Interview(s) only (SCRN.SCRNRSLT = C2) must have ASPA extended(s) only (SELECTEX = AS for the BASM record(s)).
- A3. Screeners completed with ECPP and ASPA Interviews (SCRN.SCRNRSLT = C3) must have at least one ECPP extended (SELECTEX = EC) and at least one ASPA extended (SELECTEX = AS).
- A4. Screeners completed with AELL Interview(s) only (SCRN.SCRNRSLT = C4) must have AELL extended(s) only (SELECTEX = HP, HU, LP, LU for the BASM record(s)).
- A5. Screeners completed with AELL and ECPP Interviews (SCRN.SCRNRSLT = C5) must have at least one AELL extended (SELECTEX = HP, HU, LP, LU) and at least one ECPP extended (SELECTEX = EC).
- A6. Screeners completed with AELL and ASPA Interviews (SCRN.SCRNRSLT = C6) must have at least one AELL extended (SELECTEX = HP, HU, LP, LU) and at least one ASPA extended (SELECTEX = AS).
- A7. Screeners completed with ECPP, ASPA and AELL Interviews (SCRN.SCRNRSLT = C7) must have at least one ECPP extended (SELECTEX = EC), one ASPA extended (SELECTEX = AS) and one AELL extended (SELECTEX = HP, HU, LP, LU).
- A8. Screeners completed with no sampled interviews (SCRN.SCRNRSLT = C0) must have no extendeds (BASM records).
- A9. Screeners completed with no extended interviews (SCRN.SCRNRSLT = C0) must have one and only one HOME record.
- A10. Each household in which there is a completed or ineligible extended (BASM.MAINRSLT = CI, CN, CS, CH, CP, CU, CX, CZ, IP, IA) must have one and only one HOME record.
- A11. For each completed ECPP Interview (BASM.MAINRSLT = CI or CN) there must be a DEMO record and a CHIL record.
- A12. For each completed ASPA Interview (BASM.MAINRSLT = CS or CH) there must be a DEMO record and a YUTH record.
- A13. For each completed AELL Interview (BASM.MAINRSLT = CP, CU, CX, CZ) there must be an ADLT record.
- A14. For each completed ECPP Interview (BASM.MAINRSLT = CI or CN) there must be no YUTH record and no ADLT record.

- A15. For each completed ASPA Interview (BASM.MAINRSLT = CS or CH) there must be no CHIL record and no ADLT record.
- A16. For each completed AELL Interview (BASM.MAINRSLT = CP, CU, CX, CZ) there must be no DEMO record, no CHIL record and no YUTH record.
- A17. Every ECPP or ASPA Interview in which the child is currently receiving care from a relative on a regular basis (DEMO.RCNOW = 1) must have one RELA record.
- A18. Every ECPP or ASPA Interview in which the child is NOT currently receiving care from a relative on a regular basis (DEMO.RCNOW not = 1) must have no RELA records.
- A19. Every ECPP or ASPA Interview in which the child is currently receiving care from a nonrelative on a regular basis (DEMO.NCNOW = 1) must have one NREL record.
- A20. Every ECPP or ASPA Interview in which the child is NOT currently receiving care from a nonrelative on a regular basis (DEMO.NCNOW not = 1) must have no NREL records.
- A21. Every ECPP or ASPA Interview in which the child is currently attending a center-based arrangement (DEMO.CPNNOW = 1 or DEMO.CPSNOW = 1) must have one CENT record.
- A22. Every ECPP or ASPA Interview in which the child is NOT currently attending a center-based arrangement (DEMO.CPNNOW not = 1 and DEMO.CPSNOW not = 1) must have no CENT records.
- A23. Every ECPP or ASPA Interview in which the child has had another care arrangement since September (DEMO.PCOTHER = 1) must have one CONT record.
- A24. Every ECPP or ASPA Interview in which the child has NOT had another care arrangement since September (DEMO.PCOTHER not = 1) must have no CONT records.
- A25. Every AELL Interview in which the adult has taken ESL classes in the past 12 months (ADLT.ESLANG = 1) must have one and only one LANG record.
- A26. Every AELL Interview in which the adult has NOT taken ESL classes in the past 12 months (ADLT.ESLANG not = 1) must have no LANG records.
- A27. Every AELL Interview in which the adult has taken basic skills or high school completion courses in the past 12 months and did not get a diploma through regular daytime high school in the past 12 months [(ADLT.BSIMPROV = 1 or ADLT.BSGED = 1 or ADLT.BSHSEQUV = 1) and not (ADLT.IBDIPLYR = 1 and ADLT.IBHSREQ = 1)] must have one SKIL record.
- A28. Every AELL Interview in which the adult has NOT taken basic skills or high school completion courses in the past 12 months or got a diploma through regular daytime high school in the past 12 months [(ADLT.BSIMPROV not= 1 and ADLT.BSGED not= 1 and ADLT.BSHSEQUV not= 1) or (ADLT.IBDIPLYR = 1 and ADLT.IBHSREQ = 1)] must have no SKIL records.
- A29. Every AELL Interview in which the adult has been enrolled in courses toward a college or university degree in the past 12 months or was enrolled in a post-degree certificate program in the past 12 months (ADLT.CRDEGREE = 1 or ADLT.CRPOSTDG = 1) must have one CRED record.
- A30. Every AELL Interview in which the adult has NOT been enrolled in courses toward a college or university degree in the past 12 months and was not enrolled in a post-degree certificate program in the past 12 months (ADLT.CRDEGREE not = 1 and ADLT.CRPOSTDG not = 1) must have no CRED records.
- A31. Every AELL Interview in which the adult has taken courses toward a vocational/technical credential in the past 12 months (ADLT.CRVCDIP = 1) must have one VOCA record.

- A32. Every AELL Interview in which the adult has NOT taken courses toward a vocational/technical credential in the past 12 months (ADLT.CRVOCDIP not = 1) must have no VOCA records.
- A33. Every AELL Interview in which the adult has been enrolled in an apprenticeship program in the past 12 months (ADLT.APPRENTI = 1) must have one APPR record.
- A34. Every AELL Interview in which the adult has NOT been enrolled in an apprenticeship program in the past 12 months (ADLT.APPRENTI not = 1) must have no APPR records.
- A35. Every AELL Interview in which the adult has taken work-related or personal interest courses in the past 12 months (ADLT.FCACTY = 1 or ADLT.FCACTOTH = 1) must have at least one CRSE record (CRSE records store all of the courses mentioned at AG2).
- A36. Every AELL Interview in which the adult has NOT taken work-related or personal interest courses in the past 12 months (ADLT.FCACTY not = 1 and ADLT.FCACTOTH not = 1) must have no CRSE records.
- A37. Every AELL Interview in which the adult has taken work-related courses in the past 12 months (ADLT.WRCOUNT > 0) must have at least one WORK record (WORK records are only created for sampled courses if ADLT.WRCOUNT > 4).
- A38. Every AELL Interview in which the adult has NOT taken work-related courses in the past 12 months (ADLT.WRCOUNT <= 0) must have no WORK records.
- A39. Every AELL Interview in which the adult has taken personal interest courses in the past 12 months (ADLT.PDCOUNT > 0) must have at least one ACTY record (ACTY records are only created for sampled courses if ADLT.PDCOUNT > 2).
- A40. Every AELL Interview in which the adult has NOT taken personal interest courses in the past 12 months (ADLT.PDCOUNT <= 0) must have no ACTY records.
- A41. All completed ECPP Interviews for infants/toddlers (BASM.MAINRSLT = CI) must have PATH equal to I.
- A42. All completed ECPP Interviews for preschool children who are not homeschooled (BASM.MAINRSLT = CN) must have PATH equal to N.
- A43. All completed ASPA Interviews for school-age children who are not homeschooled (BASM.MAINRSLT = CS) must have PATH equal to S.
- A44. All completed ASPA Interviews for children in home school (BASM.MAINRSLT = CH) must have PATH equal to H.
- A45. For completed AELL Interviews in which the respondent was sampled as a participant and completed as a participant (BASM.MAINRSLT = CP), the following conditions must be true:
 The adult must have been sampled as a participant (SELECTED = HP or LP) AND
 The adult must have taken courses of some sort (ESLANG = 1 or [BSIMPROV = 1 or BSGED = 1 or BSHSEQUV = 1 and not(IBDIPLYR = 1 and IBHSREQ = 1)] or CRDEGREE = 1 or CRPOSTDG = 1 or CRVOCDIP = 1 or APPRENTI = 1 or WRCOUNT > 0 or PDCOUNT > 0).

- A46. For completed AELL Interviews in which the respondent was sampled as a participant and completed as a nonparticipant (BASM.MAINRSLT = CX), the following conditions must be true:
The adult must have been sampled as a participant (SELECTED = HP or LP) AND
The adult must not have taken courses of any sort (ESLANG not = 1 and [BSIMPROV not = 1 and BSGED not = 1 and BSHSEQUV not = 1 or (IBDIPLYR = 1 and IBHSREQ = 1)] and CRDEGREE not = 1 and CRPOSTDG not = 1 and CRVODIP not = 1 and APPRENTI not = 1 and WRCOUNT <= 0 and PDCOUNT <= 0).
- A47. For completed AELL Interviews in which the respondent was sampled as a nonparticipant and completed as a participant (BASM.MAINRSLT = CZ), the following conditions must be true:
The adult must have been sampled as a nonparticipant (SELECTED = HU or LU) AND
The adult must have taken courses of some sort (ESLANG = 1 or [BSIMPROV = 1 or BSGED = 1 or BSHSEQUV = 1 and not(IBDIPLYR = 1 and IBHSREQ = 1)] or CRDEGREE = 1 or CRPOSTDG = 1 or CRVODIP = 1 or APPRENTI = 1 or WRCOUNT > 0 or PDCOUNT > 0).
- A48. For completed AELL Interviews in which the respondent was sampled as a nonparticipant and completed as a nonparticipant (BASM.MAINRSLT = CU), the following conditions must be true:
The adult must have been sampled as a nonparticipant (SELECTED = HU or LU) AND
The adult must not have taken courses of any sort (ESLANG not = 1 and [BSIMPROV not = 1 and BSGED not = 1 and BSHSEQUV not = 1 or (IBDIPLYR = 1 and IBHSREQ = 1)] and CRDEGREE not = 1 and CRPOSTDG not = 1 and CRVODIP not = 1 and APPRENTI not = 1 and WRCOUNT <= 0 and PDCOUNT <= 0).

B. Appropriate Person Records

Every completed interview must have the appropriate associated person records. This includes person records for the subject and for the respondent, as well as for the mother, the father, and all other household members.

As in the NHES:1999, ENU2 records were identical in structure and content to the ENUM records. At the completion of the Screener, each ENUM record for a household was copied to a corresponding ENU2 record. These ENU2 records were not modified, so there was always a record of the persons enumerated and their characteristics *at the time of sampling*. During the ECPP or ASPA Interview for CHIL1, household members may be added, deleted or characteristics modified at PA7. These changes were applied to the ENUM records, but the number and content of the ENU2 records did not change.

- B1. Every BASM record must represent an enumerated, interview-eligible household member (ENU2.PERSNUM = BASM.ENUMNUM and ENU2.ELIGFLG = 1).
- B2. All completed ECPP and ASPA Interviews (BASM.MAINRSLT = CI, CN, CS, CH) must have been completed by an enumerated household member and this respondent's sex must match PARSEX for the child's interview. (There must be an ENUM where ENUM.PERSNUM = ENUM.PARNUM of child's ENUM and ENUM.SEX = ENUM.PARSEX of child's ENUM.)
- B3. If DEMO.MOMNUM not = -1 then there must be an ENUM record where ENUMID = the first 8 digits of DEMOID concatenated with DEMO.MOMNUM.
- B4. If DEMO.DADNUM not = -1 then there must be an ENUM record where ENUMID = the first 8 digits of DEMOID concatenated with DEMO.DADNUM.
- B5. NUMKID15 must equal the number of ENUM records with ENUM.AGE <= 15.
- B6. NUMKID20 must equal the number of ENUM records with ENUM.AGE <= 20.
- B7. If the ECPP or ASPA Interview respondent is not a parent of the sampled child (ENUM.PARRELN not = 1 or 2) then there must be an ENUM where ENUMID = the first 8 digits of BASMID concatenated with the child's ENUM.PARNUM and the respondent must be 12 or older (ENUM.AGE >= 12).

- B8. If the ECPP or ASPA Interview respondent is a grandparent of the child (ENUM.PARRELN = 5, 6) then there must be an ENUM where ENUMID = the first 8 digits of BASMID concatenated with the child's ENUM.PARNUM and the respondent must be 24 or more years older than the child (ENUM.AGE >= child's DEMO.AGE2000 + 24).
- B9. For every relationship recorded in the ECPP or ASPA Interview, (DEMO.RELATION[n] not = -1), there must be an ENUM record with ENUMID = BASEID concatenated with n.
- B10. If the ECPP or ASPA Interview respondent is the child's mother (ENUM.PARRELN = 1), then there must be an ENUM record with ENUM.PERSNUM = DEMO.MOMNUM.
- B11. If the ECPP or ASPA Interview respondent is the child's father (ENUM.PARRELN = 2), then there must be an ENUM record with ENUM.PERSNUM = DEMO.DADNUM.

C. Parent Relationships

Every person defined as a parent must have had appropriate records and database values. The parent relationship structural edits checked that expected records and database relationships were correct.

- C1. If any mother relationship is recorded in the ECPP or ASPA Interview (DEMO.RELATION[n] = 1), then there must be an ENUM where ENUM.PERSNUM = DEMO.MOMNUM.
- C2. If any father relationship is recorded in the ECPP or ASPA Interview (DEMO.RELATION[n] = 2), then there must be an ENUM where ENUM.PERSNUM = DEMO.DADNUM.
- C3. If there is a mother or female guardian in the household (DEMO.HHMOM = 1, 2 or 3), then there must be a MAMA record.
- C4. If there is a father or male guardian in the household (DEMO.HHDAD = 1, 2 or 3), then there must be a PAPA record.
- C5. If there is a mother in the household (DEMO.HHMOM = 1, 2), then the child's ENUM should represent this in the RELATION cell corresponding to the mother's enumeration number (ENUM.RELATION[MOMNUM] = 1).
- C6. If there is a father in the household (DEMO.HHDAD = 1, 2), then the child's ENUM should represent this in the RELATION cell corresponding to the father's enumeration number (ENUM.RELATION[DADNUM] = 2).
- C7. If there is a birth mother in the household (not missing DEMO.MOMNUM and FEMGUARD[DEMO.MOMNUM] = 1) then there must be an ENUM record where ENUMID = the first 8 digits of BASMID concatenated with DEMO.MOMNUM and the mother must be between 12 and 55 years older (inclusive) than the child (ENUM.AGE <= child's AGE2000 + 55 and ENUM.AGE >= child's AGE2000 + 12).
- C8. If there is a birth father in the household (not missing DEMO.DADNUM and MALGUARD[DEMO.DADNUM] = 1) then there must be an ENUM record where ENUMID = the first 8 digits of BASMID concatenated with DEMO.DADNUM and the father must be between 12 and 55 years older (inclusive) than the child (ENUM.AGE <= child's AGE2000 + 55 and ENUM.AGE >= child's AGE2000 + 12).
- C9. Every child must have one and only one mother (for every BASM there must be one and only one RELATION[n] = 1). Note: a same-sex parent will have RELATION[n] = 12.
- C10. Every child must have one and only one father (for every BASM there must be one and only one RELATION[n] = 2). Note: a same-sex parent will have RELATION[n] = 12.

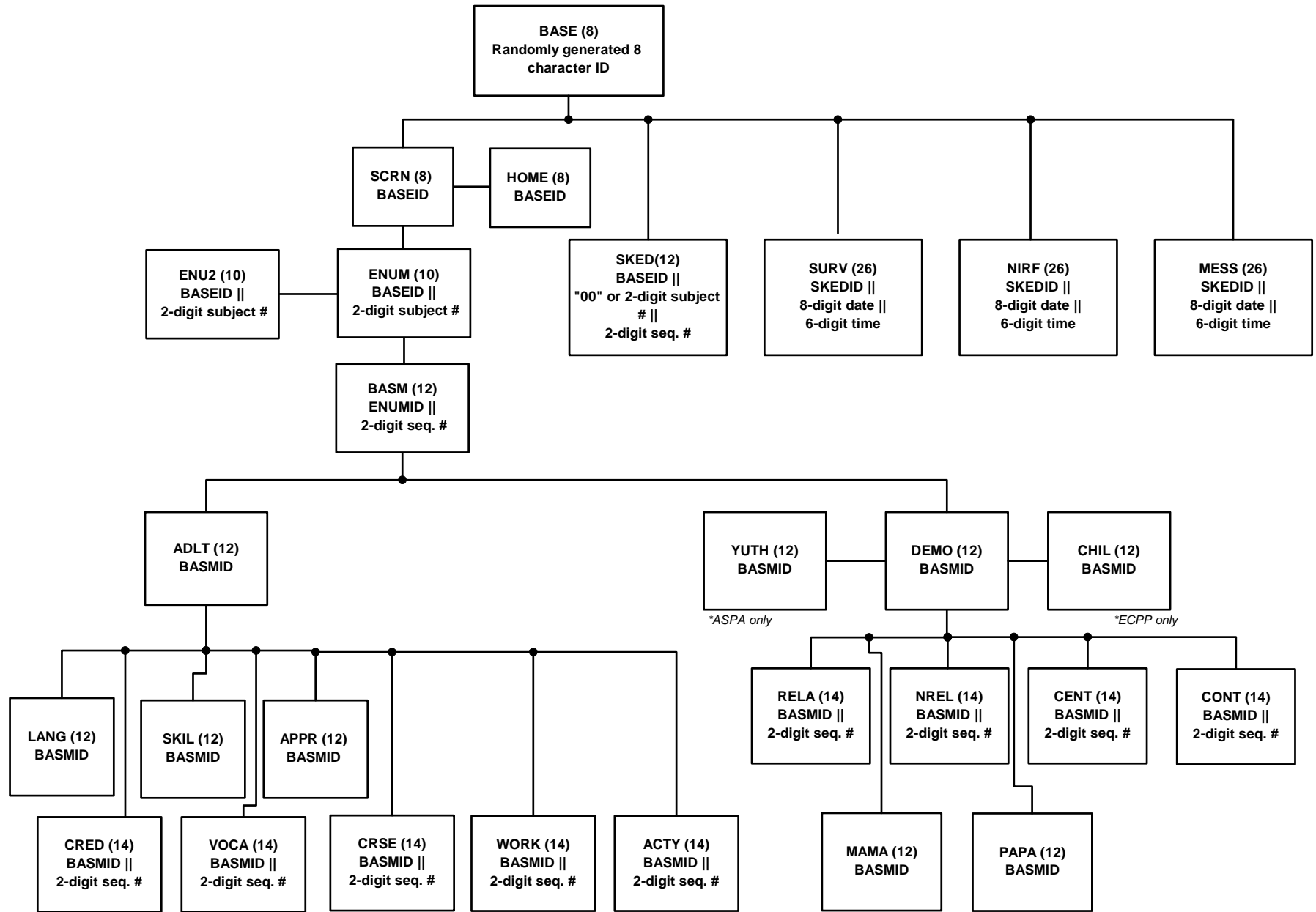
- C11. If there is no mother or father in the household (DEMO.HHMOM not = 1 or 2 and DEMO.HHDAD not = 1 or 2) and the respondent is female, there must be a MAMA record but no PAPA record.
- C12. If there is no mother or father in the household (DEMO.HHMOM not = 1 or 2 and DEMO.HHDAD not = 1 or 2) and the respondent is male, there must be a PAPA record but no MAMA record.

D. Common Items

Items asked only once per interview were copied over to successive records. These edits confirmed that parent information was identical for similar children.

- D1. All children with the same mother or same female respondent (all DEMO records with the same DEMO.MOMNUM) or (HHMOM = 3 and the same ENUM.PARNUM) must have a MAMA record with identical non-child specific information.
- D2. All children with the same father or same male respondent (all DEMO records with the same DEMO.DADNUM or (HHDAD = 3 and the same ENUM.PARNUM) must have a PAPA record with identical non-child specific information.

NHES:2001 Database Design Diagram



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APPENDIX K

Review of Weighting for the ECPP and ASPA Surveys

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1. INTRODUCTION

This appendix presents information on an investigation of technical issues associated with the survey weighting methods for children in the 2001 National Household Education Surveys Program (NHES). NHES is a random-digit-dial (RDD) telephone survey that collects information on the civilian, noninstitutionalized population of the 50 States and the District of Columbia. The NHES surveys are designed to allow repeated measures of various phenomena over time. Data from NHES surveys are weighted to national totals using a multistage weighting process that includes adjustments for nonresponse at the household and individual levels as well as adjustment to national totals at the household and person levels. The weights involved in this investigation were those for the Early Childhood Program Participation Survey (ECPN-NHES:2001), which included children from birth through age 6 who had not yet entered kindergarten, and the Before- and After-School Programs and Activities Survey (ASPA-NHES:2001), which included children enrolled in kindergarten through grade 8, with a maximum age of 15 years.

The objective of NHES:2001 is to make inferences about the entire civilian, noninstitutionalized population for the domains of interest. Although only telephone households are sampled, the estimates are adjusted to totals of persons living in both telephone and nontelephone households derived from the Current Population Survey (CPS). One of the main reasons for doing this is to reduce the bias arising from the noncoverage of households without telephones in NHES.¹

Throughout the history of NHES, the weights from the topical surveys have been adjusted to population totals obtained from the CPS using a weighting method called raking. The October CPS Education Supplement is the source of percentage distributions of children by enrollment status and grade of school, race/ethnicity, and home tenure (own/rent). The March CPS is the source of population totals. The control totals are derived by multiplying the March totals by the percentage distributions from the October CPS data. For the NHES:2001 surveys, the October 1999 and March 2000 CPS data sets were used, as they were the most recent ones available at the time the weighting procedures were conducted.

The main reason for the current study is that the initial weights for the ECPN and ASPA resulted in a discrepancy in the estimated number of 5-year-olds when compared to the CPS estimates. Due to this discrepancy, the weighting procedure and the raking procedures in particular were revised. The revised weights produced estimates with a peculiar pattern. Specifically, the mean weight was found to

¹ Beginning in 1994, the CPS weights were adjusted to population totals that were adjusted to account for the undercoverage from the 1990 decennial census. Any additional undercoverage in the census of special populations, such as the homeless, remains in the totals obtained from the CPS.

decline by age within grade of school. Following discussions with NCES on these issues, the current full scale study was conducted in order to examine the source of this problem, to make a recommendation concerning weights for data from the NHES:2001 surveys, and to inform the weighting procedures for NHES:2003.

The sections that follow document the original weighting procedures used in NHES:2001, the alternative raking procedures subsequently attempted, and the results of the current investigation of the source of the anomalous results. Recommendations for the NHES:2001 weights and the rationale for these recommendations are provided. The implications for NHES:2003 are also stated. The weighting procedures are described briefly below. More complete details are presented in chapter 7.

2. ORIGINAL WEIGHTING PROCEDURES

In NHES:2001, a screening interview was administered at the household level to provide information required to assess the eligibility of household members for an extended interview. Household-level information that is of analytic interest was also collected during the extended interview. Since no data intended for analyses were collected at the household level only, household-level weights were calculated solely for use as a basis for computing person-level weights for the analysis of the extended interview data. In computing household weights, a household base weight was developed to account for the RDD sampling of telephone numbers, including the sampling rate differences by minority concentration stratum² and listed stratum³ and a factor to reflect the subsampling for follow-up of no-answer telephone numbers.

This household base weight was adjusted for Screener nonresponse and further adjusted for households that had more than one telephone number, hence more than one chance of being included in the sample. A CHAID analysis was run to identify characteristics most associated with Screener nonresponse.⁴ These characteristics, which were primarily geographic characteristics associated with the telephone exchange, were used to form cells for nonresponse adjustment of the household weights.

The final step at this level was a poststratification adjustment of the household weights. The primary purpose of the poststratification adjustment was to account for undercoverage resulting from the sampling of telephone households only. Poststratification ensures that survey weights sum to known population totals. See attachment KA for a technical description of poststratification. The characteristics used in poststratification were Census region (Northeast/South/Midwest/West) and presence of children less than 18 years of age. Table K-1 presents the control totals used for poststratifying the household-level weights. The variables used in poststratification were chosen to address differences in coverage rates with respect to region in which the household is located and presence of children in the household.

² The high-minority stratum included telephone numbers in areas with 20 percent or more Black residence or 20 percent or more Hispanic residence. All other telephone numbers were assigned to the low minority stratum.

³ The listed stratum included residential numbers listed in the telephone company White Pages. All other telephone numbers were assigned to the nonlisted stratum.

⁴ Chi-Square Automatic Interaction Detection (CHAID) is a categorical search algorithm that identifies characteristics associated with response propensity.

Table K-1. Control totals for poststratifying the NHES:2001 household-level weights: CPS:2000

Census region ¹	Children under 18 in household	Control total
Total		104,781,947
Northeast	Yes	13,123,145
Northeast	No	6,969,672
South.....	Yes	23,970,552
South.....	No	13,343,144
Midwest.....	Yes	15,639,333
Midwest.....	No	8,900,832
West.....	Yes	14,013,486
West.....	No	8,821,783

¹ The following states and the District of Columbia are in each Census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000.

2.1 Original Approach for Person-Level Weighting for ECPP and ASPA

The next set of weighting procedures produced person-level weights, i.e., weights used to estimate the number of persons and to produce estimates of characteristics of persons. The household-level weight was treated as the base or initial weight, and the weighting procedures included raking the weights to independent totals from the CPS. Before discussing the raking, a brief description of the other person-level weighting steps is given.

The sampling of persons within household used data collected in the Screener interview from the adult household member who responded to the Screener.⁵ The eligibility of the sampled children was later verified or updated when the parent/guardian most knowledgeable about the child responded to the ECPP or ASPA interviews.

The same procedures were used for creating person-level weights for the ECPP interview and for the ASPA interview. Several of the weighting steps were performed simultaneously but independently for the two surveys. The first step in developing the person weights for the ECPP and ASPA surveys was to account for the probability of sampling the child's domain in the given household. For example, if there was one preschooler, one elementary school child (enrolled in kindergarten through 5th grade), and one middle school child (enrolled in 6th through 8th grade), then the preschooler and the

⁵ A sampling algorithm was used to limit the number of persons sampled in each household while maintaining the sampling rates required to attain the target sample sizes.

middle school child were sampled with certainty, and the elementary school child was sampled with probability 0.5; the domain sampling adjustment factors for the preschooler and the middle school child were 1, and the factor for the elementary school child (if sampled) was 2. The second step accounted for the probability of sampling the child from among all eligible children in the given domain. For example, if there were three preschoolers in the household, then one was sampled, and the weighting factor was 3, the reciprocal of the probability of selecting the child from among all children in that domain. The application of these two adjustments to the household weight created a person-level base weight for the ECPP and the ASPA interviews.

The next step involved adjusting the person-level base weight for nonresponse to the ECPP or ASPA interviews. Nonresponse adjustment cells were created using age/grade combinations (data for these cells were collected in the Screener): children age 0, children age 1, children age 2, unenrolled children ages 3 through 6, preschoolers, kindergartners, and children enrolled in each single grade for grade 1 through grade 8. Enrolled children with no grade equivalent were included in the cell containing the modal grade for their age; that is, they were assigned to the grade in which most children their age are enrolled. For each cell, the ratio of the weighted⁶ number of eligible sampled children to the weighted number of responding children was then computed. This ratio was multiplied by the person-level base weight to create the nonresponse-adjusted person-level ECPP and ASPA interview weight.

The final step of weighting for the ECPP and the ASPA interviews was a raking adjustment. Raking is a statistical method proposed by Deming and Stephan (1940) as a way to ensure consistency between complete counts and sample data from the 1940 U.S. census (see attachment KA for a detailed discussion of raking). The raking procedure typically improves the reliability of survey estimates, and also corrects for the bias due to households or persons not covered by the survey, e.g., households without telephones and households with unlisted telephone numbers belonging to zero-listed telephone banks. The raking procedure is carried out in a sequence of adjustments: first, the weights are adjusted to sum to the totals on one marginal distribution (or dimension), and then the adjusted weights are further adjusted to sum to the totals on the second marginal distribution, and so on. One sequence of adjustments to the marginal distributions is known as a cycle or iteration. The procedure is repeated until convergence of weighted totals is achieved as discussed in attachment KA.

As noted earlier, the raking procedure for the ECPP and ASPA weights involved adjusting the nonresponse-adjusted person-level weights to national totals obtained using the percentage distributions from the October 1999 CPS and the total number of children from the March 2000 CPS.

⁶ The weight was the person-level base weight.

The October 1999 CPS contains variables not available on the March 2000 CPS (such as grade of school), but the totals in the latter are more current. In the procedure used in NHES:2001, the control total for a raking cell is the proportion in that cell from the October 1999 CPS multiplied by the estimate of the total number of children from the March 2000 CPS. Separate sets of totals were derived for ECPP-eligible children and ASPA-eligible children.

Three raking dimensions were originally used for both the ECPP interview weights and the ASPA interview weights. The dimensions were created by crossing race/ethnicity of the child (Black, non-Hispanic/Hispanic/other) and household income categories (\$10,000 or less/\$10,001–\$25,000/\$25,001 or more), Census region (Northeast/South/Midwest/West), and urbanicity (urban/rural), and a home tenure (rent/own or other) and age or grade of child (with those enrolled in school but having no grade equivalent assigned to the modal grade for their age). These raking dimensions were used because they include important analysis variables (e.g., grade) and characteristics that have been shown to be associated with telephone coverage (e.g., race/ethnicity). Tables K-2 and K-3 show the control totals used in the original raking of the ECPP interview weights and the ASPA interview weights, respectively.

2.2 Estimated Totals With Original Weights

Once the procedures described above were completed, estimates could be produced for the surveys. As a standard practice in NHES, estimates are compared to other sources to assess the credibility of the NHES weights. Table K-4 gives one such table, the age-by-grade distribution for children from birth to age 15 up to grade 8. For the NHES estimates in this table, the age of the child was calculated as of September 30, in order to match the CPS timeframe. The first page of the table presents estimates from ECPP and ASPA (combined) and the second page gives the estimates from CPS. Standard errors of the NHES estimates are given in table K-4A.

When the table was examined, the main concern was the discrepancy in the number of 5-year-olds. The estimate of 3,522,000 from NHES was considerably lower than the estimate of 4,037,000 from the CPS. There was also concern regarding the NHES estimate of 5-year-olds enrolled in kindergarten (86 percent). This estimate is greater than the CPS estimate (74 percent). These differences led to preliminary review of the weighting procedures that is described in the next section.

**Table K-2. Control totals for original raking of the ECPP-NHES:2001 person-level weights:
CPS:1999**

Characteristics used in raking	Percent of total	Control total
Total.....	100	20,281,225
Race/ethnicity of child by household income		
Black, non-Hispanic		
\$10,000 or less	4.5	903,941
\$10,001-\$25,000.....	3.9	786,749
\$25,001 or more.....	6.4	1,299,255
Hispanic		
\$10,000 or less	2.9	585,259
\$10,001-\$25,000.....	6.7	1,361,729
\$25,001 or more.....	8.6	1,747,611
Other		
\$10,000 or less	3.9	789,577
\$10,001-\$25,000.....	9.9	1,999,918
\$25,001 or more.....	53.3	10,807,186
Census region¹ by urbanicity		
Northeast		
Urban	14.5	2,932,856
Rural	3.9	783,761
South		
Urban	23.0	4,674,758
Rural	10.5	2,135,003
Midwest		
Urban	17.2	3,488,476
Rural	6.8	1,378,273
West		
Urban	20.8	4,216,150
Rural	3.3	671,948
Home tenure by age/grade of child		
Rent		
Age 0	7.5	1,515,009
Age 1	7.3	1,484,801
Age 2	7.8	1,582,170
Age 3-6, not enrolled	8.3	1,692,269
Nursery/Preschool/Head Start.....	7.0	1,417,237
Own or other		
Age 0	11.6	2,352,826
Age 1	11.9	2,417,177
Age 2	11.6	2,348,363
Age 3-6, not enrolled	11.4	2,302,434
Nursery/Preschool/Head Start.....	15.6	3,168,939

¹ The following states and the District of Columbia are in each Census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000; October 1999.

**Table K-3. Control totals for original raking of the ASPA-NHES:2001 person-level weights:
CPS:1990**

Characteristics used in raking	Percent of total	Control total
Total	100	36,679,001
Race/ethnicity by household income		
Black, non-Hispanic		
\$10,000 or less	3.4	1,254,638
\$10,001-\$25,000	5.2	1,922,579
\$25,001 or more	7.3	2,685,666
Hispanic		
\$10,000 or less	2.2	791,211
\$10,001-\$25,000	5.7	2,094,365
\$25,001 or more	7.8	2,857,845
Other		
\$10,000 or less	3.2	1,189,588
\$10,001-\$25,000	9.6	3,518,165
\$25,001 or more	55.5	20,364,944
Census region¹ by urbanicity		
Northeast		
Urban	14.5	5,304,128
Rural	3.9	1,417,447
South		
Urban	23.0	8,454,393
Rural	10.5	3,861,196
Midwest		
Urban	17.2	6,308,980
Rural	6.8	2,492,634
West		
Urban	20.8	7,624,991
Rural	3.3	1,215,232
Home tenure by age/grade of child		
Rent		
Transitional kindergarten/Kindergarten/Pre-1st grade	3.8	1,390,202
1st grade	3.9	1,431,051
2nd grade	3.6	1,327,395
3rd grade	3.7	1,344,591
4th grade	3.6	1,314,613
5th grade	3.6	1,306,471
6th grade	3.3	1,217,448
7th grade	3.0	1,117,932
8th grade	3.0	1,102,602
Own or other		
Transitional kindergarten/Kindergarten/Pre-1st grade	6.7	2,440,869
1st grade	7.9	2,902,274
2nd grade	7.1	2,606,563
3rd grade	8.2	2,998,054
4th grade	7.9	2,899,098
5th grade	7.8	2,848,472
6th grade	7.6	2,804,840
7th grade	7.5	2,767,142
8th grade	7.8	2,859,384

¹ The following states and the District of Columbia are in each Census region: Northeast: CT, MA, ME, NH, NJ, NY, PA, RI, VT; South: AL, AR, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; Midwest: IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI; West: AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), March 2000; October 1999.

Table K-4. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below using original raking: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
NHES:2001												
0	4,838	100	†	†	†	†	†	†	†	†	†	†
1	3,850	100	†	†	†	†	†	†	†	†	†	†
2	4,027	94	6	†	†	†	†	†	†	†	†	†
3	3,845	55	44	1	†	†	†	†	†	†	†	†
4	3,779	27	64	9	#	†	†	†	†	†	†	†
5	3,522	1	7	86	6	#	†	†	†	†	†	†
6	4,217	#	#	11	83	6	#	†	†	†	†	†
7	3,838	†	†	†	15	79	6	#	†	†	†	†
8	4,090	†	†	†	1	15	77	6	†	†	†	†
9	4,343	†	†	†	†	1	21	73	6	#	†	†
10	4,177	†	†	†	†	†	1	17	75	7	#	†
11	3,940	†	†	†	†	†	†	1	19	74	6	#
12	3,873	†	†	†	†	†	†	#	1	20	74	5
13	3,674	†	†	†	†	†	†	†	#	1	19	80
14	861	†	†	†	†	†	†	†	†	1	10	89
15	86	†	†	†	†	†	†	†	7	†	†	89

See notes at end of table.

Table K-4. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below using original raking: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
CPS:1999												
0	3,861	100	†	†	†	†	†	†	†	†	†	†
1	3,895	100	†	†	†	†	†	†	†	†	†	†
2	3,924	100	†	†	†	†	†	†	†	†	†	†
3	3,862	61	38	1	†	†	†	†	†	†	†	†
4	4,021	31	61	8	†	†	†	†	†	†	†	†
5	4,037	6	15	74	5	#	†	†	†	†	†	†
6	4,060	2	2	11	81	4	1	†	†	†	†	†
7	4,083	1	†	1	18	73	6	#	†	†	†	†
8	3,955	†	†	†	2	18	75	5	#	†	†	†
9	4,269	†	†	†	1	1	23	70	5	1	†	†
10	4,053	†	†	†	†	#	2	22	70	5	#	†
11	4,042	†	†	†	†	†	#	2	24	68	4	1
12	3,905	†	†	†	†	†	†	1	3	23	68	6
13	3,709	†	†	†	†	†	†	†	#	3	25	71
14	1,020	†	†	†	†	†	†	†	†	1	8	90
15	166	†	†	†	†	†	†	†	†	†	24	76

† Not applicable.

Rounds to zero.

NOTE: For NHES, kindergarten (K) includes grades classified as kindergarten, transitional kindergarten, and prefirst grade. Age in NHES:2001 was recalculated to match the CPS definition of the child's age as of September 30. 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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-4A. Standard errors of the percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001 and ASPA-NHES:2001

Child's age	Number of children (thousands)	Not enrolled	Child's current grade										
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8	
NHES:2001													
0	4,838	(1)	†	†	†	†	†	†	†	†	†	†	
1	3,850	(1)	†	†	†	†	†	†	†	†	†	†	
2	4,027	0.7	0.7	†	†	†	†	†	†	†	†	†	
3	3,845	1.1	1.1	0.2	†	†	†	†	†	†	†	†	
4	3,779	1.1	1.3	1.1	(1)	†	†	†	†	†	†	†	
5	3,522	0.4	0.8	1.1	0.8	(1)	†	†	†	†	†	†	
6	4,217	(1)	(1)	1.1	1.4	1.0	(1)	†	†	†	†	†	
7	3,838	†	†	†	1.5	1.5	1.0	(1)	†	†	†	†	
8	4,090	†	†	†	0.5	1.1	1.5	1.0	†	†	†	†	
9	4,343	†	†	†	†	0.4	1.6	1.6	0.7	(1)	†	†	
10	4,177	†	†	†	†	†	0.4	1.2	1.4	0.7	(1)	†	
11	3,940	†	†	†	†	†	†	0.5	1.5	1.6	0.6	(1)	
12	3,873	†	†	†	†	†	†	(1)	0.4	1.1	1.2	0.5	
13	3,674	†	†	†	†	†	†	†	(1)	0.3	1.0	1.0	
14	861	†	†	†	†	†	†	†	†	0.7	1.8	1.9	
15	86	†	†	†	†	†	†	†	6.7	†	†	3.1	7.3

† Not applicable.

¹ Standard errors are not provided for estimates of 100 percent or estimates of less than 1 percent.

NOTE: Standard errors increase for children who are 14 and 15 years old. This is because there are small numbers of those children in the grade categories shown above.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001.

Table K-5 shows a comparison of the age by grade distribution, where the NHES age has not been recalculated. That is, the age used for the NHES estimates is age as of December 31. Standard errors of the NHES estimates are given in table K-5A.

Table K-5. Percentage distribution of children ages 0 through 15, not enrolled in school or enrolled in 8th grade or below using original raking: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Child's age	Number of children (thousands)	Not enrolled	Child's current grade										
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8	
NHES:2001													
0	3,868	100	†	†	†	†	†	†	†	†	†	†	
1	3,902	100	†	†	†	†	†	†	†	†	†	†	
2	3,931	100	†	†	†	†	†	†	†	†	†	†	
3	3,808	63	37	#	†	†	†	†	†	†	†	†	
4	3,976	36	62	3	†	†	†	†	†	†	†	†	
5	3,525	5	20	74	1	†	†	†	†	†	†	†	
6	4,062	#	1	26	73	1	†	†	†	†	†	†	
7	3,817	†	†	2	34	63	2	†	†	†	†	†	
8	4,178	†	†	†	1	34	63	2	†	†	†	†	
9	4,264	†	†	†	#	2	36	61	1	†	†	†	
10	4,146	†	†	†	†	†	3	34	62	1	†	†	
11	4,021	†	†	†	†	†	†	3	36	60	1	#	
12	3,969	†	†	†	†	†	†	#	2	37	61	1	
13	3,753	†	†	†	†	†	†	†	#	3	34	63	
14	1,547	†	†	†	†	†	†	†	†	1	10	89	
15	194	†	†	†	†	†	†	†	†	3	†	3	94

See notes at end of table.

Table K-5. Percentage distribution of children ages 0 through 15, not enrolled in school or enrolled in 8th grade or below using original raking: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
CPS:1999												
0	3,861	100	†	†	†	†	†	†	†	†	†	†
1	3,895	100	†	†	†	†	†	†	†	†	†	†
2	3,924	100	†	†	†	†	†	†	†	†	†	†
3	3,862	61	38	1	†	†	†	†	†	†	†	†
4	4,021	31	61	8	†	†	†	†	†	†	†	†
5	4,037	6	15	74	5	#	†	†	†	†	†	†
6	4,060	2	2	11	81	4	1	†	†	†	†	†
7	4,083	1	†	1	18	73	6	#	†	†	†	†
8	3,955	†	†	†	2	18	75	5	#	†	†	†
9	4,269	†	†	†	1	1	23	70	5	1	†	†
10	4,053	†	†	†	†	#	2	22	70	5	#	†
11	4,042	†	†	†	†	†	#	2	24	68	4	1
12	3,905	†	†	†	†	†	†	1	3	23	68	6
13	3,709	†	†	†	†	†	†	†	#	3	25	71
14	1,020	†	†	†	†	†	†	†	†	1	8	90
15	166	†	†	†	†	†	†	†	†	†	24	76

† Not applicable.

Rounds to zero.

NOTE: For NHES, kindergarten (K) includes grades classified as kindergarten, transitional kindergarten, and prefirst grade. For NHES estimates, age is as of December 31; for CPS estimates, age is as of September 30. Detail may not sum to totals because of rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECP) Survey of the National Household Education Surveys Program (NHES), 2001, and Before and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-5A. Standard errors of the percentage distribution of children ages 0 through 15, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001 and ASPA-NHES:2001

Child's age	Number of children (thousands)	Not enrolled	Child's current grade										
			Center-based care	K	1	2	3	4	5	6	7	8	
NHES:2001													
0	3,868	(1)	†	†	†	†	†	†	†	†	†	†	
1	3,902	(1)	†	†	†	†	†	†	†	†	†	†	
2	3,931	(1)	†	†	†	†	†	†	†	†	†	†	
3	3,808	1.1	1.1	0.2	†	†	†	†	†	†	†	†	
4	3,976	1.1	1.1	0.6	†	†	†	†	†	†	†	†	
5	3,525	0.7	1.0	1.2	0.4	†	†	†	†	†	†	†	
6	4,062	(1)	0.3	1.5	1.5	0.4	†	†	†	†	†	†	
7	3,817	†	†	0.8	1.6	1.6	0.7	†	†	†	†	†	
8	4,178	†	†	†	0.7	1.5	1.7	0.6	†	†	†	†	
9	4,264	†	†	†	(1)	0.6	1.6	1.6	0.3	†	†	†	
10	4,146	†	†	†	†	†	0.6	1.4	1.6	0.3	†	†	
11	4,021	†	†	†	†	†	†	0.6	1.5	1.6	0.2	(1)	
12	3,969	†	†	†	†	†	†	(1)	0.5	1.0	1.0	0.2	
13	3,753	†	†	†	†	†	†	†	(1)	0.5	1.1	1.1	
14	1,547	†	†	†	†	†	†	†	†	0.4	1.3	1.3	
15	194	†	†	†	†	†	†	†	3	†	†	1.8	3.1

† Not applicable.

¹ Standard errors are not provided for estimates of 100 percent or estimates of less than 1 percent.

NOTE: Standard errors increase for children who are 14 and 15 years old. This is because there are small numbers of those children in the grade categories shown.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001.

In another comparison, estimates of the number of children age 3 through 8th grade, by school type and by student grade level, are presented in table K-6 for the ECPP and ASPA surveys and for CPS:1999. No differences were detected in comparisons of NHES:2001 and CPS:1999 estimates for numbers of children age 3 through 8th grade enrolled in public and private schools. The NHES:2001 estimates 31,885,000 children enrolled in public schools and 3,896,000 enrolled in private schools. The CPS:1999 estimates 32,192,000 children enrolled in public schools and 4,259,000 enrolled in private schools. The table also shows the NHES estimates of the number of children at each grade level from age 3 through grade 8 are comparable to the CPS estimates. This was expected to some degree because the NHES weights were raked to estimates of grade by home tenure from the CPS.

Table K-6. Number of children age 3 through 8th grade, by school type and by student grade level using original raking: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

School type and grade	NHES:2001		CPS:1999
	Number (thousands)	s.e. (thousands)	Number (thousands)
Total number of children age 3 through 8th grade.....	45,260	99	45,183
School type¹			
Public	31,885	173	32,192
Private	3,896	138	4,259
Student grade level			
Not enrolled.....	3,995	0 ²	3,988
Preschool/nursery school.....	4,586	0	4,578
K.....	3,831	0	3,825
1.....	4,333	0	4,326
2.....	3,934	0	3,927
3.....	4,343	0	4,335
4.....	4,214	0	4,207
5.....	4,155	0	4,148
6.....	4,022	0	4,015
7.....	3,885	0	3,878
8.....	3,962	0	3,955

¹ Preschoolers and children who are homeschooled are not included.

² The estimates of total number of students by grade level have standard errors of 0, because this characteristic was used (in combination with home tenure) in forming a raking dimension. (See section 2.1 of this appendix for more details.)

NOTE: s.e. is standard error. Age in the NHES:2001 estimates was recalculated to match the CPS definition of the child's age as of September 30. Because of rounding, details may not add to totals.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

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3. PRELIMINARY INVESTIGATION

Concerns about the discrepancy between the NHES:2001 and CPS estimates of the total number of 5-year-olds resulted in a limited investigation into the reasons for this discrepancy prior to the current study. A memorandum documenting this preliminary study is given in Attachment KB. The first step in this preliminary investigation was to review the implementation of the weighting methodology. Although careful checks had been conducted at each stage of weighting, the procedures were reviewed again to ensure that they had been correctly computed and applied. No problems were found in the computation or application of the weighting adjustments.

The next step in the preliminary investigation was to examine alternative sets of raking dimensions. The raking procedure was determined to be the probable step that led to the discrepancy since the previous weights; the nonresponse-adjusted person-level weights did not exhibit the problem. As noted in section 2.1, the dimensions originally used in raking the ECPP and ASPA weights were race/ethnicity by household income, Census region by urbanicity, and home tenure by age/grade of the child. For the last dimension, single year of age was used only for infants (ages 0–2). Unenrolled children ages 3 through 6 were grouped in one category, and enrolled children in this age range were classified into grade categories. Thus, although the NHES and CPS estimates match for unenrolled children ages 3 through 6, and for kindergartners, for example, the estimates of total number of 5-year-olds do not match.

For the evaluation of alternative raking dimensions, two alternative sets of raking dimensions were considered. In both cases, the first two dimensions (race/ethnicity by household income, and Census region by urbanicity) remained the same. In Alternative 1, the home tenure by age/grade dimension was replaced with two dimensions: single year of age (alone), and home tenure by grade. In Alternative 2, the home tenure by age/grade dimension was replaced with a single dimension: home tenure by single year of age.

3.1 Comparison to Estimates from External Sources

Tables K-7 and K-8 give estimates of the total number of children by age and by grade, respectively, for selected ages and grades (chosen because of their proximity to kindergarten). Due to the forced matching by age, Alternatives 1 and 2 both alleviate the shortfall of 5-year-olds that is present

under the original raking approach. However, as seen in table K-8, Alternative 2 results in a substantially higher estimate of the total number of kindergartners than the other approaches.

Table K-7. Estimates of total number of children by age (in thousands): ECPP-NHES:2001, ASPA-NHE:2001, and CPS:1999

Age	October 1999 CPS	NHES:2001—Raking dimensions		
		Original	Alternative 1	Alternative 2
4.....	4,021	3,976	4,028	4,028
5.....	4,037	3,525	4,044	4,044
6.....	4,060	4,062	4,067	4,067
7.....	4,083	3,817	4,090	4,090

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-8. Estimates of total number of children by grade (in thousands): ECPP-NHES:2001, ASPA-NHE:2001, and CPS:1999

Grade	October 1999 CPS	NHES:2001—Raking dimensions		
		Original	Alternative 1	Alternative 2
Nursery school/preschool	4,578	4,586	4,586	5,104
Kindergarten.....	3,825	3,831	3,831	4,417
1st grade.....	4,326	4,333	4,333	4,269
2nd grade.....	3,927	3,934	3,934	4,093

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

3.2 Summary Statistics for Each Alternative

Table K-9 gives the mean weight obtained using each of the raking alternatives. Because no differential sampling or weighting was done by age within a given grade, it was expected that the mean weights would be relatively uniform for all ages within a given grade. This is the case under the original approach and Alternative 2, but not with Alternative 1.

Table K-9. Mean weight for each of the raking alternatives, by grade and AGE2000

Grade	AGE2000	Number of respondents	Mean nonresponse adjusted weight ¹	Mean raked weight (Figures in parentheses are estimated totals, in thousands)				
				Original	Alternative 1	Alternative 2	Alternative 3 ²	Alternative 3 with adjusted control totals ²
Not enrolled ...	0	1,070	2,987 (3,313)	3,615 (3,868)	3,615 (3,868)	3,615 (3,868)	2,812 (3,009)	3,459 (3,701)
Not enrolled ...	1	1,258	2,874 (3,747)	3,102 (3,902)	3,102 (3,902)	3,102 (3,902)	3,017 (3,796)	3,137 (3,946)
Not enrolled ...	2	1,271	2,997 (3,949)	3,092 (3,931)	3,092 (3,931)	3,092 (3,931)	3,099 (3,938)	3,049 (3,875)
Not enrolled ...	3	774	2,688 (2,156)	3,085 (2,388)	3,121 (2,416)	2,886 (2,234)	3,208 (2,483)	3,157 (2,443)
Not enrolled ...	4	470	2,571 (1,253)	3,011 (1,415)	2,981 (1,401)	2,635 (1,238)	4,085 (1,920)	4,020 (1,889)
Not enrolled ...	5	64	2,716 (180)	2,922 (187)	2,755 (176)	2,751 (176)	4,486 (287)	4,414 (282)
Not enrolled ...	6	2	1,613 (3)	2,148 (4)	752 (2)	1,650 (3)	2,990 (6)	2,953 (6)
Preschool	3	585	2,710 (1,587)	2,490 (1,407)	2,541 (1,436)	2,866 (1,619)	2,449 (1,384)	2,410 (1,362)
Preschool	4	992	2,690 (2,766)	2,465 (2,446)	2,498 (2,478)	2,682 (2,660)	2,361 (2,342)	2,324 (2,305)
Preschool	5	277	2,794 (802)	2,559 (709)	2,391 (662)	2,877 (797)	3,790 (1,050)	3,729 (1,033)
Preschool	6	6	4,830 (30)	4,195 (25)	1,727 (10)	4,561 (27)	10,995 (66)	10,823 (65)

See notes at end of table.

Table K-9. Mean weight for each of the raking alternatives, by grade and AGE2000—Continued

Grade	AGE2000	Number of respondents	Mean nonresponse adjusted weight ¹	Mean raked weight (Figures in parentheses are estimated totals, in thousands)				
				Original	Alternative 1	Alternative 2	Alternative 3 ²	Alternative 3 with adjusted control totals ²
Kindergarten	3	4	3,726 (15)	3,268 (13)	4,276 (17)	3,874 (15)	3,232 (13)	3,183 (13)
Kindergarten	4	30	4,304 (134)	3,848 (115)	4,970 (149)	4,297 (129)	3,826 (115)	3,766 (113)
Kindergarten	5	539	5,488 (3,066)	4,813 (2,594)	5,773 (3,112)	5,630 (3,035)	4,769 (2,571)	4,693 (2,529)
Kindergarten	6	194	5,960 (1,199)	5,414 (1,050)	2,774 (538)	6,022 (1,168)	5,534 (1,074)	5,446 (1,057)
Kindergarten	7	5	13,299 (69)	11,568 (58)	3,008 (15)	13,913 (70)	11,818 (59)	11,625 (58)
1	5	8	4,487 (37)	4,361 (35)	11,721 (94)	4,527 (36)	4,164 (33)	4,098 (33)
1	6	554	5,158 (2,962)	5,321 (2,948)	6,196 (3,433)	5,114 (2,833)	5,006 (2,773)	4,926 (2,729)
1	7	235	5,275 (1,285)	5,473 (1,286)	3,367 (791)	5,702 (1,340)	6,129 (1,440)	6,031 (1,417)
1	8	9	6,911 (64)	6,805 (61)	1,697 (15)	6,262 (56)	9,091 (82)	8,941 (80)
1	9	1	3,262 (3)	3,359 (3)	484 (—)	3,214 (3)	4,623 (5)	4,558 (5)
2	6	6	6,224 (39)	5,810 (35)	14,035 (84)	5,797 (35)	5,641 (34)	5,548 (33)
2	7	484	4,980 (2,498)	4,946 (2,394)	6,352 (3,074)	5,363 (2,596)	4,785 (2,316)	4,709 (2,279)
2	8	266	5,495 (1,515)	5,372 (1,429)	2,827 (752)	5,210 (1,386)	5,621 (1,495)	5,531 (1,471)
2	9	15	5,020 (78)	5,095 (76)	1,551 (23)	5,131 (77)	5,921 (89)	5,826 (87)

See notes at end of table.

Table K-9. Mean weight for each of the raking alternatives, by grade and AGE2000—Continued

Grade	AGE2000	Number of respondents	Mean nonresponse adjusted weight ¹	Mean raked weight (Figures in parentheses are estimated totals, in thousands)				
				Original	Alternative 1	Alternative 2	Alternative 3 ²	Alternative 3 with adjusted control totals ²
3.....	7	13	5,972 (80)	6,097 (79)	16,077 (209)	6,478 (84)	5,439 (71)	5,338 (69)
3.....	8	476	5,305 (2,617)	5,478 (2,607)	6,376 (3,035)	5,124 (2,439)	5,256 (2,502)	5,173 (2,462)
3.....	9	260	5,677 (1,530)	5,897 (1,533)	4,031 (1,048)	5,587 (1,453)	6,238 (1,622)	6,136 (1,595)
3.....	10	23	4,286 (102)	5,172 (119)	1,954 (45)	5,038 (116)	6,257 (144)	6,165 (142)
4.....	8	15	5,257 (82)	5,089 (76)	10,278 (154)	5,052 (76)	4,659 (70)	4,582 (69)
4.....	9	545	4,972 (2,809)	4,774 (2,602)	5,691 (3,101)	4,938 (2,691)	4,436 (2,418)	4,366 (2,379)
4.....	10	299	4,955 (1,536)	4,731 (1,415)	3,045 (910)	4,586 (1,371)	5,271 (1,576)	5,187 (1,551)
4.....	11	20	4,701 (97)	5,075 (102)	1,917 (38)	5,089 (102)	6,355 (127)	6,245 (125)
4.....	12	3	2,898 (9)	2,706 (8)	526 (2)	2,459 (7)	3,496 (10)	3,428 (10)
4.....	15	1	4,893 (5)	5,632 (6)	560 (1)	5,719 (6)	6,888 (7)	6,798 (7)

See notes at end of table.

Table K-9. Mean weight for each of the raking alternatives, by grade and AGE2000—Continued

Grade	AGE2000	Number of respondents	Mean nonresponse adjusted weight ¹	Mean raked weight (Figures in parentheses are estimated totals, in thousands)				
				Original	Alternative 1	Alternative 2	Alternative 3 ²	Alternative 3 with adjusted control totals ²
5.....	9	14	3,359 (49)	3,134 (44)	6,859 (96)	3,296 (46)	2,851 (40)	2,807 (39)
5.....	10	572	4,837 (2,868)	4,488 (2,567)	5,268 (3,013)	4,421 (2,529)	4,091 (2,340)	4,025 (2,302)
5.....	11	297	5,286 (1,628)	4,934 (1,466)	3,420 (1,016)	4,976 (1,478)	5,613 (1,667)	5,523 (1,640)
5.....	12	20	3,512 (73)	3,856 (77)	1,485 (30)	3,839 (77)	5,335 (107)	5,254 (105)
5.....	13	1	1,408 (1)	1,089 (1)	230 (—)	1,062 (1)	1,455 (1)	1,419 (1)
6.....	10	18	2,734 (51)	2,487 (45)	5,087 (92)	2,454 (44)	2,363 (43)	2,326 (42)
6.....	11	948	2,771 (2,723)	2,552 (2,419)	3,072 (2,913)	2,566 (2,432)	2,400 (2,275)	2,361 (2,239)
6.....	12	548	2,785 (1,582)	2,647 (1,450)	1,780 (976)	2,605 (1,428)	2,864 (1,569)	2,818 (1,544)
6.....	13	38	2,307 (91)	2,601 (99)	1,065 (40)	2,834 (108)	3,268 (124)	3,213 (122)
6.....	14	3	2,223 (7)	3,105 (9)	738 (2)	2,133 (6)	3,805 (11)	3,748 (11)

See notes at end of table

Table K-9. Mean weight for each of the raking alternatives, by grade and AGE2000—Continued

Grade	AGE2000	Number of respondents	Mean nonresponse adjusted weight ¹	Mean raked weight (Figures in parentheses are estimated totals, in thousands)				
				Original	Alternative 1	Alternative 2	Alternative 3 ²	Alternative 3 with adjusted control totals ²
7.....	11	14	2,554 (37)	2,353 (33)	5,169 (72)	2,467 (35)	2,254 (32)	2,222 (31)
7.....	12	1,009	2,537 (2,653)	2,379 (2,400)	2,820 (2,845)	2,349 (2,370)	2,187 (2,206)	2,151 (2,171)
7.....	13	529	2,582 (1,416)	2,418 (1,279)	1,685 (891)	2,515 (1,330)	2,691 (1,424)	2,635 (1,394)
7.....	14	66	2,389 (163)	2,445 (161)	1,027 (68)	1,730 (114)	3,187 (210)	3,100 (205)
7.....	15	4	2,037 (8)	1,671 (7)	846 (3)	1,471 (6)	2,207 (9)	2,153 (9)
8.....	11	1	1,481 (2)	2,511 (3)	9,688 (10)	2,372 (2)	2,492 (2)	2,450 (2)
8.....	12	15	1,825 (28)	1,856 (28)	3,663 (55)	1,710 (26)	1,763 (26)	1,738 (26)
8.....	13	924	2,564 (2,456)	2,569 (2,374)	3,013 (2,784)	2,464 (2,277)	2,400 (2,218)	2,362 (2,182)
8.....	14	497	2,735 (1,409)	2,768 (1,376)	1,914 (951)	1,812 (901)	2,993 (1,488)	2,896 (1,440)
8.....	15	56	2,870 (167)	3,244 (182)	2,897 (162)	2,760 (155)	4,065 (228)	3,876 (217)
Ungraded	8	1	2,528 (3)	3,979 (4)	5,570 (6)	4,837 (5)	4,457 (4)	4,403 (4)
Ungraded	9	2	2,617 (5)	2,920 (6)	3,688 (7)	3,191 (6)	2,775 (6)	2,727 (5)
Ungraded	12	1	5,553 (6)	4,685 (5)	5,343 (5)	4,733 (5)	4,444 (4)	4,376 (4)

¹ Normalized so that the weighted total of the nonresponse adjusted weights is equal to the weighted total of the raked weights.

² Alternative 3 (including the variation using adjusted control totals) is described later in this appendix but is included in this table for completeness.

— Indicates an estimate of less than 1,000.

NOTE: Rows highlighted using boldface are the modal grades for each age (ages 3 and older). AGE2000 is the child's age as of December 31, 2000.

Tables K-10 through K-13 contain age by grade distributions similar to those given in table K-4, but computed using the NHES:2001 nonresponse adjusted, Alternative 1, and Alternative 2 weights, and the Alternative 3 weights computed using the adjusted control totals, respectively. As in table K-4, the NHES:2001 age has been recalculated to be the age as of September 30, to be comparable to the CPS age.

Table K-10. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999: Nonresponse adjusted NHES weights

Child's age	Number of children (thousands)	Not enrolled	Child's current grade										
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8	
NHES:2001													
0	4,335	100	†	†	†	†	†	†	†	†	†	†	
1	3,720	100	†	†	†	†	†	†	†	†	†	†	
2	3,933	93	7	†	†	†	†	†	†	†	†	†	
3	3,865	48	50	1	†	†	†	†	†	†	†	†	
4	4,026	22	68	10	#	†	†	†	†	†	†	†	
5	4,080	1	7	87	5	#	†	†	†	†	†	†	
6	4,310	#	#	12	82	6	#	†	†	†	†	†	
7	4,004	†	†	†	14	80	6	#	†	†	†	†	
8	4,166	†	†	†	1	16	77	7	†	†	†	†	
9	4,587	†	†	†	†	1	19	75	6	#	†	†	
10	4,631	†	†	†	†	†	1	17	75	7	#	†	
11	4,384	†	†	†	†	†	†	1	19	74	6	#	
12	4,240	†	†	†	†	†	†	#	1	20	75	5	
13	3,836	†	†	†	†	†	†	†	#	1	20	79	
14	852	†	†	†	†	†	†	†	†	1	10	90	
15	80	†	†	†	†	†	†	†	6	†	†	5	89

See notes at end of table.

Table K-10. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999: Nonresponse adjusted NHES weights—Continued

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
CPS:1999												
0	3,861	100	†	†	†	†	†	†	†	†	†	†
1	3,895	100	†	†	†	†	†	†	†	†	†	†
2	3,924	100	†	†	†	†	†	†	†	†	†	†
3	3,862	61	38	1	†	†	†	†	†	†	†	†
4	4,021	31	61	8	†	†	†	†	†	†	†	†
5	4,037	6	15	74	5	#	†	†	†	†	†	†
6	4,060	2	2	11	81	4	1	†	†	†	†	†
7	4,083	1	†	1	18	73	6	#	†	†	†	†
8	3,955	†	†	†	2	18	75	5	#	†	†	†
9	4,269	†	†	†	1	1	23	70	5	1	†	†
10	4,053	†	†	†	†	#	2	22	70	5	#	†
11	4,042	†	†	†	†	†	#	2	24	68	4	1
12	3,905	†	†	†	†	†	†	1	3	23	68	6
13	3,709	†	†	†	†	†	†	†	#	3	25	71
14	1,020	†	†	†	†	†	†	†	†	1	8	90
15	166	†	†	†	†	†	†	†	†	†	24	76

† Not applicable.

Rounds to zero.

NOTE: For NHES, kindergarten (K) includes grades classified as kindergarten, transitional kindergarten, and prefirst grade. Age in NHES:2001 was recalculated to match the CPS definition of the child's age as of September 30. 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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-11. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999: NHES Alternative 1 weights

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
NHES:2001												
0	4,848	100	†	†	†	†	†	†	†	†	†	†
1	3,836	100	†	†	†	†	†	†	†	†	†	†
2	4,052	94	6	†	†	†	†	†	†	†	†	†
3	3,893	55	44	1	†	†	†	†	†	†	†	†
4	3,846	26	62	11	1	†	†	†	†	†	†	†
5	3,709	1	6	85	7	#	†	†	†	†	†	†
6	4,257	#	#	5	87	8	#	†	†	†	†	†
7	3,990	†	†	†	9	81	10	#	†	†	†	†
8	4,043	†	†	†	#	8	83	9	†	†	†	†
9	4,301	†	†	†	†	#	14	78	8	#	†	†
10	4,158	†	†	†	†	†	#	11	79	9	#	†
11	3,949	†	†	†	†	†	†	#	13	79	7	#
12	3,844	†	†	†	†	†	†	#	#	13	80	6
13	3,573	†	†	†	†	†	†	†	#	1	13	86
14	592	†	†	†	†	†	†	†	†	#	6	93
15	68	†	†	†	†	†	†	†	1	†	†	96

See notes at end of table.

Table K-11. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999: NHES Alternative 1 weights—Continued

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
CPS:1999												
0	3,861	100	†	†	†	†	†	†	†	†	†	†
1	3,895	100	†	†	†	†	†	†	†	†	†	†
2	3,924	100	†	†	†	†	†	†	†	†	†	†
3	3,862	61	38	1	†	†	†	†	†	†	†	†
4	4,021	31	61	8	†	†	†	†	†	†	†	†
5	4,037	6	15	74	5	#	†	†	†	†	†	†
6	4,060	2	2	11	81	4	1	†	†	†	†	†
7	4,083	1	†	1	18	73	6	#	†	†	†	†
8	3,955	†	†	†	2	18	75	5	#	†	†	†
9	4,269	†	†	†	1	1	23	70	5	1	†	†
10	4,053	†	†	†	†	#	2	22	70	5	#	†
11	4,042	†	†	†	†	†	#	2	24	68	4	1
12	3,905	†	†	†	†	†	†	1	3	23	68	6
13	3,709	†	†	†	†	†	†	†	#	3	25	71
14	1,020	†	†	†	†	†	†	†	†	1	8	90
15	166	†	†	†	†	†	†	†	†	†	24	76

† Not applicable.

Rounds to zero.

NOTE: For NHES, kindergarten (K) includes grades classified as kindergarten, transitional kindergarten, and prefirst grade. Age in NHES:2001 was recalculated to match the CPS definition of the child's age as of September 30. 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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-12. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999: NHES Alternative 2 weights

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
NHES:2001												
0	4,844	100	†	†	†	†	†	†	†	†	†	†
1	3,843	100	†	†	†	†	†	†	†	†	†	†
2	4,023	93	7	†	†	†	†	†	†	†	†	†
3	3,899	50	49	1	#	†	†	†	†	†	†	†
4	3,940	23	67	10	#	†	†	†	†	†	†	†
5	4,011	1	7	87	5	#	†	†	†	†	†	†
6	4,216	#	#	12	82	6	#	†	†	†	†	†
7	4,010	†	†	†	15	79	6	#	†	†	†	†
8	3,878	†	†	†	1	16	76	7	†	†	†	†
9	4,360	†	†	†	†	1	20	74	5	#	†	†
10	4,136	†	†	†	†	†	1	17	75	7	#	†
11	3,933	†	†	†	†	†	†	1	19	74	6	#
12	3,859	†	†	†	†	†	†	#	1	20	74	5
13	3,347	†	†	†	†	†	†	†	#	1	21	77
14	591	†	†	†	†	†	†	†	†	1	11	88
15	72	†	†	†	†	†	†	†	8	†	†	88

See notes at end of table.

Table K-12. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999: NHES Alternative 2 weights—Continued

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
CPS:1999												
0	3,861	100	†	†	†	†	†	†	†	†	†	†
1	3,895	100	†	†	†	†	†	†	†	†	†	†
2	3,924	100	†	†	†	†	†	†	†	†	†	†
3	3,862	61	38	1	†	†	†	†	†	†	†	†
4	4,021	31	61	8	†	†	†	†	†	†	†	†
5	4,037	6	15	74	5	#	†	†	†	†	†	†
6	4,060	2	2	11	81	4	†	†	†	†	†	†
7	4,083	1	†	1	18	73	6	#	†	†	†	†
8	3,955	†	†	†	2	18	75	5	#	†	†	†
9	4,269	†	†	†	1	1	23	70	5	1	†	†
10	4,053	†	†	†	†	#	2	22	70	5	#	†
11	4,042	†	†	†	†	†	#	2	24	68	4	1
12	3,905	†	†	†	†	†	†	1	3	23	68	6
13	3,709	†	†	†	†	†	†	†	#	3	25	71
14	1,020	†	†	†	†	†	†	†	†	1	8	90
15	166	†	†	†	†	†	†	†	†	†	24	76

† Not applicable.

Rounds to zero.

NOTE: For NHES, kindergarten (K) includes grades classified as kindergarten, transitional kindergarten, and prefirst grade. Age in NHES:2001 was recalculated to match the CPS definition of the child's age as of September 30. 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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-13. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999: NHES Alternative 3* weights with adjustment to control totals

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
NHES:2001												
0	4,758	100	†	†	†	†	†	†	†	†	†	†
1	3,840	100	†	†	†	†	†	†	†	†	†	†
2	3,868	93	7	†	†	†	†	†	†	†	†	†
3	3,954	59	41	1	#	†	†	†	†	†	†	†
4	4,121	37	55	8	#	†	†	†	†	†	†	†
5	3,836	2	17	77	5	#		†	†	†	†	†
6	3,986	#	#	12	82	6	#	†	†	†	†	†
7	3,862	†	†	†	20	74	6	#	†	†	†	†
8	3,987	†	†	†	1	18	75	6	†	†	†	†
9	4,170	†	†	†	†	1	24	69	5	#	†	†
10	4,065	†	†	†	†	†	1	23	69	7	#	†
11	3,967	†	†	†	†	†	†	1	26	68	5	#
12	3,771	†	†	†	†	†	†	#	2	25	68	5
13	3,642	†	†	†	†	†	†	†	#	2	25	74
14	1,035	†	†	†	†	†	†	†	†	1	11	88
15	99	†	†	†	†	†	†	†	7	†	†	89

See notes at end of table.

Table K-13. Percentage distribution of children ages 0 through 15 as of September 30, not enrolled in school or enrolled in 8th grade or below: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999NHES Alternative 3 weights with adjustment to control totals—Continued

Child's age	Number of children (thousands)	Not enrolled	Child's current grade									
			Pre-school/nursery school	K	1	2	3	4	5	6	7	8
CPS:1999												
0	3,861	100	†	†	†	†	†	†	†	†	†	†
1	3,895	100	†	†	†	†	†	†	†	†	†	†
2	3,924	100	†	†	†	†	†	†	†	†	†	†
3	3,862	61	38	1	†	†	†	†	†	†	†	†
4	4,021	31	61	8	†	†	†	†	†	†	†	†
5	4,037	6	15	74	5	#	†	†	†	†	†	†
6	4,060	2	2	11	81	4	1	†	†	†	†	†
7	4,083	1	†	1	18	73	6	#	†	†	†	†
8	3,955	†	†	†	2	18	75	5	#	†	†	†
9	4,269	†	†	†	1	1	23	70	5	1	†	†
10	4,053	†	†	†	†	#	2	22	70	5	#	†
11	4,042	†	†	†	†	†	#	2	24	68	4	1
12	3,905	†	†	†	†	†	†	1	3	23	68	6
13	3,709	†	†	†	†	†	†	†	#	3	25	71
14	1,020	†	†	†	†	†	†	†	†	1	8	90
15	166	†	†	†	†	†	†	†	†	†	24	76

† Not applicable.

Rounds to zero.

NOTE: Alternative 3 (including the variation using adjusted control totals) is described later in this appendix but is included in this table for completeness. For the NHES, kindergarten (K) includes grades classified as kindergarten, transitional kindergarten, and prefirst grade. Age in the NHES:2001 was recalculated to match the CPS definition of the child's age as of September 30. 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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Based on this preliminary analysis, Westat recommended using the Alternative 1 weights because they force the NHES estimates by age and grade to match the CPS estimates. The variability in the mean weights under Alternative 1 was highlighted as being disconcerting, and further research was suggested. The need to locate additional sources for estimates of kindergartners was also mentioned. NCES agreed that further research was needed; the next section describes those efforts.

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4. DETAILED STUDY

As noted in the previous section, the Alternative 1 weights were viewed as the best of the alternatives, but it was decided that further review of the weighting procedures should be undertaken. Four separate but potentially related concerns were:

- Differences in estimates of the number of kindergartners;
- Large number of iterations required for convergence of the raking algorithm;
- Inconsistent ages (CPS age is as of September 30, while the NHES age is as of December 31); and
- The effect of the interaction between age and grade in the raking procedure.

In order to examine these issues, four alternative raking schemes were considered (see exhibit K-1). In addition to the four raking alternatives, a “deaged” variation of Alternative 1, was also considered. The “deaged” approach, which used the NHES age as of September 30 (rather than age as of December 31) in raking, is discussed in section 4.4.⁷ Each of the issues listed above is described below.

⁷ “Deaging” was used with the Alternative 1 and Alternative 3 dimensions because of concerns about the interaction between age and grade. It was not used with the Alternative 2 dimensions, since Alternative 2 uses age but not grade (thus, there is no age/grade interaction with which to be concerned).

Exhibit K-1. Raking schemes used in evaluation

Original

Three raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Home tenure by age or grade of child (age 0; age 1; age 2; ages 3-6, not enrolled; nursery/preschool; kindergarten; single grade, for grades 1 through 8)

Alternative 1

Four raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Single year of age
- Home tenure by grade/enrollment of child (not enrolled; nursery/preschool; kindergarten; single grade, for grades 1 through 8)

Alternative 2

Three raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Home tenure by age of child (single year of age, for ages 0 through 15)

Deaged

Same dimensions as Alternative 1, but NHES age was recalculated to age as of September 30, 2000, for comparability to the CPS.

Alternative 3*

Three raking dimensions:

- Race/ethnicity of the child by household income
- Census region by urbanicity
- Home tenure by grade/age classification of child. For each grade, two subclassifications were created: At or below modal age for the grade, and above modal age for the grade). Age was recalculated to age as of September 30, 2000, for comparability to the CPS.

* Additionally, a variation of Alternative 3 was considered in which the control totals used for raking were adjusted. The aim of the adjustment was to account for the proportion of 0-year-olds (as of December 31, 2000) who would not have been eligible for NHES as of September 30, 2000, because they were unborn at that time, and 16-year-olds who would have been eligible for NHES as of September 30, 2000, because they were 15 at that time.

4.1 Differences in Estimates of the Number of Kindergartners

In order to examine the discrepancy in the estimates of the total number of kindergartners between CPS and NHES, estimates from other sources were obtained. Those estimates, as well as various estimates from the ASPA-NHES:2001 survey, are listed in table K-14.

The Common Core of Data (CCD) is a universe of public schools that has enrollment by grade, and the Private School Universe Survey (PSS) provides estimates of private school enrollment. The CCD (Fall 1999) estimated public school enrollment in kindergarten to be 3,397,199, and the PSS:1999-2000 estimated private kindergarten enrollment to be 593,687. Two different approaches were used with the CCD and PSS estimates to obtain an overall estimate of kindergarten enrollment. With the first approach, the CCD estimate was inflated using information on the proportion of kindergartners who are enrolled in public school. The October 1999 CPS estimates that 83 percent of kindergartners are enrolled in public school. Inflating the CCD estimate by the reciprocal of 0.83, the resulting estimate of the total number of kindergartners is 4,093,011. For the second approach, the CCD and PSS estimates were summed to obtain an estimated number of kindergartners of 3,990,886. The Census 2000 estimates that 3,536,045 children are enrolled in public kindergarten and 621,446 are enrolled in private kindergarten, for a total of 4,157,491.

Based on all of these sources, it seems reasonable to assume that the number of children in kindergarten is between 3.8 and 4.2 million. One point of interest is that while all the sources classify enrollment at the point of time of the interview (or of list collection for the Early Childhood Longitudinal Kindergarten Cohort—ECLS-K), the lower estimates are those collected in the fall and the higher estimates are those collected in the spring. Although not substantiated by research, it is possible that enrollment in kindergarten varies over the year, with somewhat higher enrollment in the spring than in the fall.

Table K-15 gives estimates of enrollment by grade from the CCD, the PSS, and the CPS. Additionally, for each grade, the CCD and PSS estimates were added to obtain an estimate of overall (public and private school) enrollment. There is less grade-to-grade variability in the CCD and PSS estimates (both individually and combined) than in the CPS estimates.

Table K-14. Estimates of the total number of kindergartners: CCD:1999, PSS:1999–2000, and CPS:1999

Source	Estimated number of kindergartners
Census 2000 (Summary File 3)	4,157,491
October CPS	
1997.....	3,933,383
1998.....	3,828,044
1999.....	3,824,540
2000.....	3,831,654
Early Childhood Longitudinal Survey Kindergarten Cohort (ECLS-K): Fall 1998	3,866,000
Common Core of Data (CCD) Survey: Fall 1999, and Private School Universe Survey (PSS): 1999-2000¹	3,990,886
ASPA-NHES:2001	
Base weights, with one overall adjustment for nonresponse	4,406,480
Nonresponse-adjusted weights	4,486,794

¹ The CCD provides an estimate of public school enrollment and the PSS provides an estimate of private school enrollment. These two estimates were summed to obtain an estimate of overall kindergarten enrollment.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD) survey, 1999. U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 1999-2000. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-15. Estimates of enrollment by grade: CCD:1999, PSS:1999 – 2000, and CPS:1999

Grade	CCD enrollment ¹	PSS enrollment	Sum of CCD and PSS enrollments	CPS enrollment
Kindergarten	3,397,199	593,687	3,990,886	3,824,539
1 st grade	3,683,877	472,110	4,155,987	4,325,937
2 nd grade.....	3,655,473	449,093	4,104,566	3,927,250
3 rd grade	3,690,418	436,732	4,127,150	4,335,241
4 th grade	3,686,366	425,140	4,111,506	4,206,527
5 th grade	3,603,664	407,590	4,011,254	4,147,860
6 th grade	3,564,116	403,114	3,967,230	4,015,431
7 th grade	3,541,274	384,144	3,925,418	3,878,450
8 th grade	3,496,977	369,579	3,866,556	3,955,231

¹ Excludes “Elementary unclassified” estimates.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD) survey, 1999. U.S. Department of Education, National Center for Education Statistics, Private School Universe Survey (PSS), 1999-2000. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

4.2 Slowness of Convergence

As described in attachment KA, raking is an iterative procedure, and the weights are said to converge when all the marginal constraints are met. For the raking using the original dimensions, convergence was achieved in 10 iterations for the ECPP weights and in 8 iterations for the ASPA weights. This is a relatively quick convergence and not a source of concern. The Alternative 1 set of dimensions required 941 iterations to converge. Slowness of convergence may be indicative of inconsistencies in the definitions of the dimensions between the survey and the source of the control totals or interactions between raking dimensions. It may also be due to sparse or small sample sizes in the cells.⁸ Attachment KA discusses these issues in greater detail.

In an effort to understand why the Alternative 1 weights were so slow to converge, two separate evaluations were undertaken. In the first, the Alternative 1 dimensions were used without alteration, but the process was split into two separate raking adjustments. The first raking adjustment used race/ethnicity by household income and Census region by urbanicity. The converged weights from that process were then input to rake by age of the child and home tenure by grade/enrollment status of the child. The raking run involving the first two dimensions required six iterations for convergence. The second required 928 iterations to converge. It is worth noting that the weights created in this examination follow the same pattern that the Alternative 1 weights follow; i.e., within each grade, the mean weight decreases as age increases. This evaluation clearly indicates that the age and grade dimensions are responsible for the slow convergence of the weights.

For the second evaluation, the dimensions were altered so either age or grade/enrollment status alone was used, but not both.⁹ The nonresponse-adjusted weights were raked first using the dimensions race/ethnicity by household income, Census region by urbanicity, and age. In a separate run, the nonresponse-adjusted weights were raked using the dimensions race/ethnicity by household income, Census region by urbanicity, and grade/enrollment status. With age as the third dimension, seven iterations were required for convergence. With grade/enrollment status as the third dimension, the raking procedure converged in 11 iterations. The pattern observed in the Alternative 1 weights (decreasing mean weight as age increases, within each grade) is not present in the weights created for the second evaluation.

⁸ A third possibility to consider is that the rate of convergence might depend on the order of the raking dimensions; however, using a different order did not affect the rate of convergence in this case. This conforms to theory when the estimates are raked to convergence.

⁹ Grade must still be used to select the total eligible population for the control totals since the NHES eligibility is based on enrolled children. A substantial number of 6- and 7-year-olds and children around age 15 are not enrolled in preschool or in kindergarten through 8th grade.

Additionally, for Alternative 1, the mean raking adjustment factor and the mean weights for grade/age combinations were computed for each dimension, at each iteration. For selected iterations, these mean adjustment factors are tabulated in tables K-16 through K-19, and the mean weights for age/grade combinations are given in tables K-20 through K-23. As shown in tables K-16 and K-17, for the race/ethnicity by household income and Census region by urbanicity dimensions, the raking factors converged quickly to 1. For the age and home tenure by grade/enrollment status dimensions, relatively large adjustments are necessary, even after 25 iterations. Tables K-20 through K-23 demonstrate the evolution of the unusual pattern observed in the mean Alternative 1 weights for age/grade combinations. This pattern did not arise suddenly, either at the beginning or end of the raking process, but rather resulted from a slow progression.

Table K-16. Mean raking adjustment factor at selected iterations, following the adjustment for dimension 1 (race/ethnicity by household income): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Race/ethnicity by household income	Iteration								
	1	2	3	4	5	25	500	900	941
Black, non-Hispanic									
Income under \$10,000	1.893	0.994	0.990	0.997	1.000	1.000	1.000	1.000	1.000
Income \$10,000 – \$25,000	1.460	0.993	0.993	0.999	1.000	1.000	1.000	1.000	1.000
Income over \$25,000	1.062	1.030	1.001	0.999	0.999	1.000	1.000	1.000	1.000
Hispanic									
Income under \$10,000	1.039	0.892	0.985	0.997	0.999	1.000	1.000	1.000	1.000
Income \$10,000 – \$25,000	0.956	0.922	0.990	0.998	0.999	1.000	1.000	1.000	1.000
Income over \$25,000	0.740	0.988	1.000	0.999	0.999	1.000	1.000	1.000	1.000
Other race/ethnicity									
Income under \$10,000	1.482	0.945	0.987	0.997	0.999	1.001	1.000	1.000	1.000
Income \$10,000 – \$25,000	1.047	0.975	0.992	0.998	1.000	1.000	1.000	1.000	1.000
Income over \$25,000	0.903	1.023	1.005	1.001	1.000	1.000	1.000	1.000	1.000

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-17. Mean raking adjustment factor at selected iterations, following the adjustment for dimension 2 (census region by urbanicity): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Census region by urbanicity	Iteration								
	1	2	3	4	5	25	500	900	941
Northeast; urban	1.010	0.995	0.998	0.999	0.999	1.000	1.000	1.000	1.000
Northeast; rural.....	0.983	1.013	1.000	0.999	0.999	1.000	1.000	1.000	1.000
Midwest; urban.....	0.931	0.996	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Midwest; rural	1.094	1.014	1.004	1.002	1.001	1.001	1.000	1.000	1.000
South; urban.....	0.934	0.994	1.001	1.001	1.000	1.000	1.000	1.000	1.000
South; rural	1.012	1.020	1.005	1.001	1.001	1.000	1.000	1.000	1.000
West; urban.....	1.055	0.995	0.997	0.999	0.999	1.000	1.000	1.000	1.000
West; rural	1.437	1.008	0.998	0.999	1.000	1.000	1.000	1.000	1.000

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-18. Mean raking adjustment factor at selected iterations, following the adjustment for dimension 3 (age): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Age as of December 31, 2000	Iteration								
	1	2	3	4	5	25	500	900	941
0.....	1.224	0.982	0.994	1.004	1.009	1.019	1.000	1.000	1.000
1.....	1.084	0.981	0.994	1.004	1.009	1.019	1.000	1.000	1.000
2.....	1.034	0.983	0.994	1.004	1.009	1.019	1.000	1.000	1.000
3.....	1.074	1.033	1.023	1.019	1.018	1.018	1.000	1.000	1.000
4.....	1.010	1.070	1.045	1.032	1.026	1.018	1.000	1.000	1.000
5.....	1.053	1.133	1.089	1.065	1.050	1.016	1.000	1.000	1.000
6.....	0.994	1.033	1.046	1.045	1.041	1.011	1.000	1.000	1.000
7.....	1.074	1.025	1.014	1.016	1.018	1.005	1.000	1.000	1.000
8.....	0.953	0.976	0.990	0.996	0.999	0.998	1.000	1.000	1.000
9.....	0.980	0.980	0.987	0.990	0.992	0.992	1.000	1.000	1.000
10.....	0.920	0.997	0.994	0.992	0.990	0.984	1.000	1.000	1.000
11.....	0.938	0.996	0.995	0.988	0.982	0.977	1.000	1.000	1.000
12.....	0.924	0.989	0.970	0.962	0.959	0.971	1.000	1.000	1.000
13.....	0.967	0.900	0.912	0.922	0.929	0.967	1.000	1.000	1.000
14.....	0.662	0.859	0.894	0.911	0.922	0.966	1.000	1.000	1.000
15.....	0.845	0.839	0.889	0.909	0.921	0.966	1.000	1.000	1.000

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-19. Mean raking adjustment factor at selected iterations, following the adjustment for dimension 4 (home tenure by grade/enrollment status): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Home tenure by grade/ enrollment status	Iteration								
	1	2	3	4	5	25	500	900	941
Rent; not enrolled	1.156	1.027	1.001	0.992	0.988	0.982	1.000	1.000	1.000
Rent; preschool.....	0.957	0.953	0.961	0.968	0.973	0.982	1.000	1.000	1.000
Rent; kindergarten	1.030	0.926	0.933	0.945	0.955	0.985	1.000	1.000	1.000
Rent; 1st grade.....	1.092	0.994	0.969	0.966	0.967	0.991	1.000	1.000	1.000
Rent; 2nd grade.....	1.039	1.017	0.999	0.992	0.988	0.997	1.000	1.000	1.000
Rent; 3rd grade	0.988	1.036	1.014	1.006	1.002	1.003	1.000	1.000	1.000
Rent; 4th grade	1.043	1.031	1.015	1.010	1.009	1.011	1.000	1.000	1.000
Rent; 5th grade	1.145	1.024	1.011	1.012	1.014	1.018	1.000	1.000	1.000
Rent; 6th grade	1.129	1.031	1.024	1.027	1.030	1.026	1.000	1.000	1.000
Rent; 7th grade	1.144	1.069	1.059	1.056	1.054	1.031	1.000	1.000	1.000
Rent; 8th grade	1.328	1.158	1.110	1.090	1.079	1.034	1.000	1.000	1.000
Own/other; not enrolled.....	0.949	0.993	0.994	0.990	0.987	0.982	1.000	1.000	1.000
Own/other; preschool	0.872	0.924	0.953	0.966	0.973	0.983	1.000	1.000	1.000
Own/other; kindergarten.....	0.797	0.897	0.928	0.944	0.955	0.986	1.000	1.000	1.000
Own/other; 1st grade	0.982	0.962	0.964	0.966	0.968	0.991	1.000	1.000	1.000
Own/other; 2nd grade	0.923	0.984	0.992	0.990	0.988	0.997	1.000	1.000	1.000
Own/other; 3rd grade.....	1.097	1.010	1.008	1.006	1.003	1.004	1.000	1.000	1.000
Own/other; 4th grade.....	0.970	1.003	1.008	1.008	1.008	1.011	1.000	1.000	1.000
Own/other; 5th grade.....	0.953	0.992	1.003	1.009	1.013	1.018	1.000	1.000	1.000
Own/other; 6th grade.....	0.957	0.995	1.012	1.021	1.027	1.025	1.000	1.000	1.000
Own/other; 7th grade.....	0.959	1.034	1.050	1.053	1.053	1.031	1.000	1.000	1.000
Own/other; 8th grade.....	1.126	1.113	1.099	1.087	1.078	1.034	1.000	1.000	1.000

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation (ECPA) Survey of the National Household Education Surveys Program (NHES), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-20. Mean weight by grade/enrollment status and age at selected iterations, following the adjustment for dimension 1 (race/ethnicity by household income): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Grade/ enrollment status	AGE2000	Number of respondents	Iteration								
			1	2	3	4	5	25	500	900	941
Not enrolled	0	1,070	2,978	3,681	3,636	3,602	3,582	3,548	3,615	3,615	3,615
Not enrolled	1	1,258	2,864	3,165	3,121	3,091	3,073	3,045	3,102	3,102	3,102
Not enrolled	2	1,271	2,992	3,149	3,111	3,081	3,064	3,035	3,092	3,092	3,092
Not enrolled	3	774	2,677	2,931	3,045	3,105	3,136	3,182	3,121	3,121	3,121
Not enrolled	4	470	2,571	2,673	2,876	2,995	3,061	3,165	2,982	2,981	2,981
Not enrolled	5	64	2,663	2,790	3,171	3,438	3,627	4,004	2,758	2,755	2,755
Not enrolled	6	2	1,544	1,680	1,775	1,858	1,925	1,992	755	752	752
Preschool	3	565	2,701	2,592	2,499	2,443	2,408	2,345	2,541	2,541	2,541
Preschool	4	992	2,667	2,417	2,412	2,410	2,404	2,389	2,497	2,498	2,498
Preschool	5	277	2,772	2,598	2,748	2,861	2,947	3,131	2,393	2,391	2,391
Preschool	6	6	4,702	4,090	3,959	3,966	4,011	4,027	1,731	1,727	1,727
Kindergarten ...	3	4	3,550	3,354	3,163	3,011	2,899	2,710	4,270	4,276	4,276
Kindergarten ...	4	30	4,171	3,723	3,633	3,534	3,446	3,285	4,964	4,970	4,970
Kindergarten ...	5	539	5,346	4,887	5,029	5,089	5,120	5,214	5,772	5,773	5,773
Kindergarten ...	6	194	6,095	5,192	4,868	4,736	4,677	4,490	2,779	2,774	2,774
Kindergarten ...	7	5	12,959	11,756	10,874	10,239	9,828	8,052	3,017	3,008	3,008
1	5	8	4,075	4,482	4,960	5,213	5,357	5,929	11,698	11,721	11,721
1	6	554	5,139	5,178	5,200	5,253	5,300	5,557	6,195	6,196	6,196
1	7	235	5,337	5,785	5,761	5,644	5,539	4,973	3,370	3,367	3,367
1	8	9	6,620	6,293	5,977	5,725	5,510	4,070	1,701	1,697	1,697
1	9	1	3,593	3,326	3,121	2,970	2,841	1,764	486	484	484
2	6	6	6,063	5,603	5,719	5,945	6,155	7,650	14,012	14,035	14,035
2	7	484	4,999	5,148	5,243	5,285	5,321	5,665	6,351	6,352	6,352
2	8	266	5,503	4,998	4,846	4,773	4,710	4,117	2,830	2,827	2,827
2	9	15	5,379	4,920	4,773	4,680	4,591	3,384	1,554	1,551	1,551
3	7	13	6,053	6,378	6,694	6,872	7,027	9,049	16,056	16,077	16,077
3	8	476	5,350	5,448	5,417	5,418	5,426	5,753	6,375	6,376	6,376
3	9	260	5,734	5,995	5,979	5,962	5,940	5,352	4,034	4,031	4,031
3	10	23	5,262	5,104	5,185	5,205	5,195	3,918	1,957	1,954	1,954
4	8	15	5,303	5,000	4,938	4,945	4,970	6,242	10,267	10,278	10,278
4	9	545	4,970	4,907	4,865	4,851	4,847	5,144	5,689	5,691	5,691
4	10	299	4,992	4,549	4,592	4,614	4,621	4,119	3,047	3,045	3,045
4	11	20	5,362	4,861	4,927	4,965	4,953	3,633	1,919	1,917	1,917
4	12	3	2,965	2,535	2,490	2,431	2,359	1,343	527	526	526
4	15	1	5,312	4,999	4,348	3,934	3,621	1,649	562	560	560
5	9	14	3,440	3,337	3,257	3,228	3,227	4,138	6,851	6,859	6,859
5	10	572	4,757	4,457	4,454	4,453	4,462	4,795	5,267	5,268	5,268
5	11	297	5,326	5,002	4,997	5,004	4,993	4,387	3,422	3,420	3,420
5	12	20	4,076	3,919	3,887	3,793	3,686	2,543	1,487	1,485	1,485
5	13	1	1,396	1,108	973	889	827	465	230	230	230

See notes at end of table.

Table K-20. Mean weight by grade/enrollment status and age at selected iterations, following the adjustment for dimension 1 (race/ethnicity by household income): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Grade/ enrollment status	AGE2000	Number of respondents	Iteration								
			1	2	3	4	5	25	500	900	941
6.....	10	18	2,686	2,467	2,474	2,495	2,532	3,356	5,083	5,087	5,087
6.....	11	948	2,742	2,578	2,581	2,607	2,635	2,857	3,072	3,072	3,072
6.....	12	548	2,820	2,624	2,614	2,578	2,539	2,176	1,781	1,780	1,780
6.....	13	38	2,763	2,719	2,483	2,310	2,184	1,533	1,066	1,065	1,065
6.....	14	3	3,106	2,141	1,891	1,730	1,618	1,090	738	738	738
7.....	11	14	2,561	2,485	2,578	2,696	2,805	3,777	5,166	5,169	5,169
7.....	12	1,009	2,539	2,375	2,454	2,506	2,542	2,705	2,819	2,820	2,820
7.....	13	529	2,580	2,530	2,379	2,286	2,221	1,918	1,685	1,685	1,685
7.....	14	66	2,632	1,780	1,603	1,512	1,453	1,202	1,028	1,027	1,027
7.....	15	4	1,936	1,548	1,354	1,268	1,216	1,002	846	846	846
8.....	11	1	2,275	2,825	3,201	3,512	3,774	5,999	9,678	9,688	9,688
8.....	12	15	1,756	2,026	2,249	2,399	2,510	3,108	3,662	3,663	3,663
8.....	13	924	2,555	2,907	2,942	2,958	2,967	2,997	3,013	3,013	3,013
8.....	14	497	2,747	2,142	2,073	2,044	2,027	1,960	1,914	1,914	1,914
8.....	15	56	3,344	3,333	3,160	3,101	3,070	2,970	2,897	2,897	2,897
Ungraded	8	1	4,963	4,699	4,799	4,832	4,847	5,129	5,569	5,570	5,570
Ungraded	9	2	3,261	3,102	3,068	3,061	3,060	3,278	3,687	3,688	3,688
Ungraded	12	1	5,196	4,752	4,864	4,954	5,020	5,278	5,343	5,343	5,343

NOTE: Age2000 is the child's age as of December 31, 2000.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-21. Mean weight by grade/enrollment status and age at selected iterations, following the adjustment for dimension 2 (census region by urbanicity): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Grade/ enrollment status	AGE 2000	Number of respondents	Iteration								
			1	2	3	4	5	25	500	900	941
Not enrolled	0	1,070	2,953	3,679	3,637	3,602	3,582	3,548	3,615	3,615	3,615
Not enrolled	1	1,258	2,860	3,162	3,121	3,091	3,073	3,045	3,102	3,102	3,102
Not enrolled	2	1,271	2,989	3,147	3,110	3,081	3,064	3,035	3,092	3,092	3,092
Not enrolled	3	774	2,686	2,932	3,046	3,105	3,136	3,182	3,121	3,121	3,121
Not enrolled	4	470	2,606	2,674	2,875	2,994	3,061	3,165	2,982	2,981	2,981
Not enrolled	5	64	2,621	2,785	3,170	3,437	3,627	4,005	2,758	2,755	2,755
Not enrolled	6	2	1,440	1,672	1,776	1,859	1,925	1,993	755	752	752
Preschool	3	565	2,674	2,590	2,498	2,443	2,408	2,345	2,541	2,541	2,541
Preschool	4	992	2,657	2,416	2,412	2,410	2,404	2,389	2,497	2,498	2,498
Preschool	5	277	2,752	2,600	2,750	2,862	2,948	3,132	2,393	2,391	2,391
Preschool	6	6	4,557	4,105	3,966	3,969	4,013	4,028	1,731	1,727	1,727
Kindergarten	3	4	3,586	3,372	3,166	3,011	2,899	2,710	4,270	4,276	4,276
Kindergarten	4	30	4,190	3,731	3,635	3,535	3,447	3,285	4,964	4,970	4,970
Kindergarten	5	539	5,337	4,887	5,028	5,089	5,120	5,214	5,772	5,773	5,773
Kindergarten	6	194	6,073	5,198	4,871	4,738	4,677	4,490	2,779	2,774	2,774
Kindergarten	7	5	13,233	11,757	10,870	10,238	9,827	8,052	3,017	3,008	3,008
1	5	8	4,172	4,480	4,955	5,210	5,355	5,928	11,698	11,721	11,721
1	6	554	5,143	5,175	5,199	5,253	5,300	5,557	6,195	6,196	6,196
1	7	235	5,315	5,789	5,764	5,644	5,540	4,974	3,370	3,367	3,367
1	8	9	6,526	6,312	5,987	5,730	5,513	4,071	1,701	1,697	1,697
1	9	1	3,357	3,305	3,123	2,972	2,842	1,764	486	484	484
2	6	6	5,864	5,572	5,717	5,946	6,155	7,649	14,012	14,035	14,035
2	7	484	4,994	5,144	5,241	5,285	5,320	5,665	6,351	6,352	6,352
2	8	266	5,499	5,001	4,849	4,774	4,710	4,118	2,830	2,827	2,827
2	9	15	5,219	4,895	4,769	4,679	4,591	3,384	1,554	1,551	1,551
3	7	13	5,878	6,359	6,694	6,873	7,027	9,049	16,056	16,077	16,077
3	8	476	5,364	5,450	5,416	5,418	5,425	5,752	6,375	6,376	6,376
3	9	260	5,721	6,003	5,983	5,963	5,941	5,352	4,034	4,031	4,031
3	10	23	5,499	5,127	5,188	5,206	5,196	3,918	1,957	1,954	1,954
4	8	15	5,287	5,003	4,941	4,946	4,971	6,242	10,267	10,278	10,278
4	9	545	5,029	4,905	4,863	4,850	4,847	5,144	5,689	5,691	5,691
4	10	299	4,979	4,554	4,594	4,614	4,622	4,119	3,047	3,045	3,045
4	11	20	5,261	4,878	4,934	4,967	4,954	3,633	1,919	1,917	1,917
4	12	3	2,909	2,521	2,488	2,431	2,359	1,343	527	526	526
4	15	1	5,813	5,068	4,366	3,941	3,625	1,650	562	560	560
5	9	14	3,387	3,321	3,253	3,227	3,226	4,138	6,851	6,859	6,859
5	10	572	4,812	4,459	4,453	4,452	4,462	4,795	5,267	5,268	5,268
5	11	297	5,292	5,008	5,000	5,005	4,994	4,388	3,422	3,420	3,420
5	12	20	4,123	3,913	3,885	3,792	3,685	2,543	1,487	1,485	1,485
5	13	1	1,304	1,101	974	890	828	465	230	230	230

See notes at end of table.

Table K-21. Mean weight by grade/enrollment status and age at selected iterations, following the adjustment for dimension 2 (census region by urbanicity): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Grade/ enrollment status	AGE 2000	Number of respondents	Iteration								
			1	2	3	4	5	25	500	900	941
6.....	10	18	2,653	2,464	2,471	2,494	2,531	3,356	5,083	5,087	5,087
6.....	11	948	2,742	2,577	2,581	2,607	2,634	2,857	3,072	3,072	3,072
6.....	12	548	2,812	2,624	2,615	2,578	2,539	2,176	1,781	1,780	1,780
6.....	13	38	2,693	2,723	2,486	2,312	2,185	1,533	1,066	1,065	1,065
6.....	14	3	3,109	2,178	1,900	1,732	1,619	1,090	738	738	738
7.....	11	14	2,655	2,486	2,576	2,695	2,804	3,777	5,166	5,169	5,169
7.....	12	1,009	2,548	2,375	2,454	2,506	2,542	2,705	2,819	2,820	2,820
7.....	13	529	2,601	2,533	2,380	2,286	2,222	1,918	1,685	1,685	1,685
7.....	14	66	2,589	1,780	1,604	1,512	1,453	1,202	1,028	1,027	1,027
7.....	15	4	1,844	1,549	1,356	1,269	1,216	1,002	846	846	846
8.....	11	1	2,401	2,812	3,190	3,507	3,771	5,997	9,678	9,688	9,688
8.....	12	15	1,863	2,020	2,244	2,397	2,509	3,107	3,662	3,663	3,663
8.....	13	924	2,557	2,906	2,942	2,958	2,967	2,996	3,013	3,013	3,013
8.....	14	497	2,741	2,144	2,074	2,044	2,027	1,960	1,914	1,914	1,914
8.....	15	56	3,275	3,334	3,162	3,102	3,071	2,970	2,897	2,897	2,897
Ungraded	8	1	5,023	4,795	4,825	4,839	4,850	5,130	5,569	5,570	5,570
Ungraded	9	2	3,204	3,086	3,065	3,060	3,059	3,277	3,687	3,688	3,688
Ungraded	12	1	5,248	4,729	4,855	4,950	5,017	5,276	5,343	5,343	5,343

NOTE: AGE2000 is the child's age as of December 31, 2000.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-22. Mean weight by grade/enrollment status at selected iterations, following the adjustment for dimension 3 (age): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Grade/ enrollment status	AGE 2000	Number of respondents	Iteration								
			1	2	3	4	5	25	500	900	941
Not enrolled...	0	1,070	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615	3,615
Not enrolled...	1	1,258	3,102	3,102	3,102	3,102	3,102	3,102	3,102	3,102	3,102
Not enrolled...	2	1,271	3,092	3,092	3,092	3,092	3,092	3,092	3,092	3,092	3,092
Not enrolled...	3	774	2,883	3,028	3,116	3,165	3,193	3,241	3,121	3,121	3,121
Not enrolled...	4	470	2,633	2,860	3,006	3,089	3,139	3,222	2,982	2,981	2,981
Not enrolled...	5	64	2,760	3,157	3,451	3,661	3,808	4,068	2,758	2,755	2,755
Not enrolled...	6	2	1,431	1,727	1,858	1,942	2,003	2,014	755	752	752
Preschool	3	565	2,870	2,675	2,556	2,490	2,452	2,388	2,541	2,541	2,541
Preschool	4	992	2,685	2,585	2,521	2,486	2,466	2,432	2,497	2,498	2,498
Preschool	5	277	2,898	2,947	2,994	3,048	3,096	3,181	2,393	2,391	2,391
Preschool	6	6	4,529	4,241	4,149	4,147	4,176	4,071	1,731	1,727	1,727
Kindergarten..	3	4	3,850	3,482	3,239	3,069	2,952	2,760	4,271	4,276	4,276
Kindergarten..	4	30	4,233	3,991	3,800	3,647	3,535	3,345	4,965	4,970	4,970
Kindergarten..	5	539	5,621	5,538	5,474	5,420	5,376	5,296	5,772	5,773	5,773
Kindergarten..	6	194	6,035	5,370	5,096	4,950	4,867	4,538	2,779	2,774	2,774
Kindergarten..	7	5	14,208	12,046	11,023	10,403	10,004	8,094	3,017	3,008	3,008
1	5	8	4,393	5,077	5,395	5,549	5,624	6,021	11,698	11,721	11,721
1	6	554	5,111	5,346	5,440	5,489	5,515	5,617	6,195	6,196	6,196
1	7	235	5,707	5,931	5,845	5,735	5,639	4,999	3,370	3,367	3,367
1	8	9	6,217	6,158	5,929	5,705	5,509	4,063	1,701	1,697	1,697
1	9	1	3,290	3,240	3,083	2,943	2,821	1,749	486	484	484
2	6	6	5,827	5,756	5,981	6,212	6,405	7,731	14,013	14,035	14,035
2	7	484	5,363	5,270	5,315	5,370	5,416	5,694	6,351	6,352	6,352
2	8	266	5,239	4,879	4,802	4,753	4,708	4,111	2,830	2,827	2,827
2	9	15	5,115	4,798	4,708	4,634	4,556	3,356	1,554	1,551	1,551
3	7	13	6,311	6,515	6,789	6,984	7,154	9,095	16,056	16,077	16,077
3	8	476	5,110	5,317	5,364	5,394	5,422	5,743	6,375	6,376	6,376
3	9	260	5,607	5,884	5,906	5,906	5,896	5,308	4,034	4,031	4,031
3	10	23	5,057	5,109	5,157	5,166	5,146	3,857	1,957	1,954	1,954

See notes at end of table.

Table K-22. Mean weight by grade/enrollment status at selected iterations, following the adjustment for dimension 3 (age): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Grade/ enrollment status	AGE 2000	Number of respondents	Iteration									
			1	2	3	4	5	25	500	900	941	
4.....	8	15	5,036	4,881	4,894	4,925	4,968	6,231	10,266	10,278	10,278	
4.....	9	545	4,929	4,807	4,801	4,803	4,810	5,102	5,689	5,691	5,691	
4.....	10	299	4,579	4,538	4,566	4,579	4,578	4,054	3,047	3,045	3,045	
4.....	11	20	4,936	4,857	4,909	4,906	4,865	3,551	1,919	1,917	1,917	
4.....	12	3	2,686	2,493	2,413	2,339	2,262	1,304	527	526	526	
4.....	15	1	4,914	4,254	3,882	3,584	3,338	1,594	562	560	560	
5.....	9	14	3,320	3,255	3,211	3,196	3,202	4,104	6,851	6,859	6,859	
5.....	10	572	4,425	4,443	4,427	4,419	4,419	4,720	5,267	5,268	5,268	
5.....	11	297	4,965	4,987	4,975	4,944	4,904	4,288	3,422	3,420	3,420	
5.....	12	20	3,807	3,870	3,769	3,649	3,534	2,469	1,487	1,485	1,485	
5.....	13	1	1,261	991	888	820	769	450	230	230	230	
6.....	10	18	2,439	2,455	2,456	2,475	2,507	3,304	5,083	5,087	5,087	
6.....	11	948	2,572	2,566	2,567	2,575	2,587	2,792	3,072	3,072	3,072	
6.....	12	548	2,597	2,596	2,537	2,481	2,435	2,113	1,781	1,780	1,780	
6.....	13	38	2,605	2,450	2,268	2,131	2,029	1,483	1,066	1,065	1,065	
6.....	14	3	2,059	1,870	1,698	1,578	1,492	1,053	738	738	738	
7.....	11	14	2,491	2,475	2,563	2,662	2,754	3,691	5,165	5,169	5,169	
7.....	12	1,009	2,353	2,349	2,380	2,411	2,437	2,627	2,819	2,820	2,820	
7.....	13	529	2,516	2,279	2,171	2,107	2,064	1,855	1,685	1,685	1,685	
7.....	14	66	1,715	1,528	1,434	1,377	1,339	1,162	1,028	1,027	1,027	
7.....	15	4	1,559	1,300	1,206	1,154	1,120	968	846	846	846	
8.....	11	1	2,252	2,800	3,174	3,464	3,703	5,861	9,678	9,688	9,688	
8.....	12	15	1,721	1,998	2,177	2,307	2,405	3,017	3,662	3,663	3,663	
8.....	13	924	2,473	2,615	2,684	2,726	2,756	2,898	3,013	3,013	3,013	
8.....	14	497	1,815	1,841	1,854	1,863	1,868	1,894	1,914	1,914	1,914	
8.....	15	56	2,768	2,799	2,812	2,821	2,828	2,870	2,897	2,897	2,897	
Ungraded	8	1	4,785	4,678	4,778	4,818	4,847	5,121	5,569	5,570	5,570	
Ungraded	9	2	3,141	3,024	3,026	3,030	3,036	3,250	3,687	3,688	3,688	
Ungraded	12	1	4,846	4,677	4,710	4,763	4,810	5,124	5,343	5,343	5,343	

NOTE: AGE2000 is the child's age as of December 31, 2000.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-23. Mean weight by grade/enrollment status and age at selected iterations, following the adjustment for dimension 4 (home tenure by grade/enrollment status): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Grade/ enrollment status	AGE 2000	Number of respondents	Iteration									
			1	2	3	4	5	25	500	900	941	
Not enrolled..	0	1,070	3,688	3,637	3,602	3,582	3,569	3,549	3,615	3,615	3,615	
Not enrolled..	1	1,258	3,177	3,123	3,091	3,073	3,063	3,045	3,102	3,102	3,102	
Not enrolled..	2	1,271	3,161	3,112	3,082	3,064	3,054	3,036	3,092	3,092	3,092	
Not enrolled..	3	774	2,950	3,048	3,105	3,136	3,153	3,182	3,121	3,121	3,121	
Not enrolled..	4	470	2,698	2,880	2,995	3,061	3,100	3,163	2,982	2,981	2,981	
Not enrolled..	5	64	2,812	3,175	3,439	3,627	3,760	3,993	2,757	2,755	2,755	
Not enrolled..	6	2	1,655	1,774	1,859	1,926	1,979	1,977	755	752	752	
Preschool	3	565	2,577	2,496	2,443	2,408	2,386	2,346	2,541	2,541	2,541	
Preschool	4	992	2,406	2,410	2,409	2,404	2,399	2,390	2,497	2,498	2,498	
Preschool	5	277	2,597	2,748	2,861	2,947	3,011	3,125	2,393	2,391	2,391	
Preschool	6	6	4,053	3,953	3,964	4,010	4,062	4,000	1,731	1,727	1,727	
Kindergarten.	3	4	3,392	3,165	3,012	2,900	2,820	2,720	4,271	4,276	4,276	
Kindergarten.	4	30	3,711	3,627	3,533	3,446	3,377	3,297	4,964	4,970	4,970	
Kindergarten.	5	539	4,895	5,029	5,089	5,120	5,137	5,220	5,772	5,773	5,773	
Kindergarten.	6	194	5,197	4,869	4,736	4,676	4,650	4,473	2,779	2,774	2,774	
Kindergarten.	7	5	11,877	10,876	10,237	9,826	9,558	7,978	3,016	3,008	3,008	
1	5	8	4,515	4,959	5,214	5,359	5,441	5,966	11,698	11,721	11,721	
1	6	554	5,202	5,204	5,254	5,300	5,337	5,566	6,195	6,196	6,196	
1	7	235	5,770	5,762	5,644	5,539	5,458	4,954	3,370	3,367	3,367	
1	8	9	6,238	5,967	5,722	5,509	5,332	4,027	1,701	1,697	1,697	
1	9	1	3,230	3,118	2,972	2,842	2,730	1,734	486	484	484	
2	6	6	5,505	5,700	5,941	6,154	6,330	7,707	14,013	14,035	14,035	
2	7	484	5,153	5,244	5,286	5,321	5,353	5,677	6,351	6,352	6,352	
2	8	266	5,008	4,848	4,773	4,710	4,653	4,098	2,830	2,827	2,827	
2	9	15	4,972	4,790	4,685	4,593	4,503	3,346	1,554	1,551	1,551	
3	7	13	6,405	6,703	6,874	7,027	7,172	9,128	16,056	16,077	16,077	
3	8	476	5,413	5,412	5,417	5,425	5,438	5,765	6,375	6,376	6,376	
3	9	260	5,988	5,978	5,962	5,940	5,914	5,329	4,034	4,031	4,031	
3	10	23	5,268	5,221	5,213	5,197	5,160	3,871	1,957	1,954	1,954	
4	8	15	4,978	4,931	4,943	4,969	5,010	6,297	10,267	10,278	10,278	
4	9	545	4,881	4,861	4,850	4,847	4,851	5,156	5,690	5,691	5,691	
4	10	299	4,546	4,593	4,614	4,621	4,617	4,098	3,047	3,045	3,045	
4	11	20	5,023	4,962	4,972	4,955	4,909	3,590	1,919	1,917	1,917	
4	12	3	2,606	2,502	2,433	2,359	2,280	1,318	527	526	526	
4	15	1	5,126	4,384	3,941	3,622	3,369	1,612	562	560	560	
5	9	14	3,302	3,255	3,228	3,227	3,244	4,178	6,852	6,859	6,859	
5	10	572	4,445	4,451	4,452	4,462	4,478	4,806	5,267	5,268	5,268	
5	11	297	5,002	4,998	5,004	4,993	4,969	4,366	3,422	3,420	3,420	
5	12	20	3,963	3,901	3,796	3,686	3,581	2,514	1,487	1,485	1,485	
5	13	1	1,202	983	891	828	779	458	230	230	230	

See notes at end of table.

Table K-23. Mean weight by grade/enrollment status and age at selected iterations, following the adjustment for dimension 4 (home tenure by grade/enrollment status): ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Grade/ enrollment status	AGE 2000	Number of respondents	Iteration									
			1	2	3	4	5	25	500	900	941	
6.....	10	18	2,430	2,466	2,494	2,532	2,576	3,387	5,083	5,087	5,087	
6.....	11	948	2,567	2,579	2,607	2,635	2,659	2,862	3,072	3,072	3,072	
6.....	12	548	2,616	2,614	2,578	2,539	2,503	2,166	1,781	1,780	1,780	
6.....	13	38	2,755	2,494	2,313	2,184	2,088	1,520	1,066	1,065	1,065	
6.....	14	3	2,176	1,903	1,732	1,618	1,535	1,080	738	738	738	
7.....	11	14	2,464	2,576	2,696	2,806	2,902	3,805	5,166	5,169	5,169	
7.....	12	1,009	2,366	2,453	2,506	2,542	2,568	2,708	2,819	2,820	2,820	
7.....	13	529	2,520	2,378	2,285	2,221	2,174	1,912	1,685	1,685	1,685	
7.....	14	66	1,806	1,610	1,513	1,453	1,411	1,197	1,028	1,027	1,027	
7.....	15	4	1,569	1,357	1,269	1,217	1,180	998	846	846	846	
8.....	11	1	2,991	3,242	3,522	3,776	3,997	6,061	9,678	9,688	9,688	
8.....	12	15	2,024	2,248	2,400	2,510	2,595	3,121	3,662	3,663	3,663	
8.....	13	924	2,900	2,941	2,958	2,967	2,973	2,997	3,013	3,013	3,013	
8.....	14	497	2,137	2,072	2,044	2,027	2,015	1,959	1,914	1,914	1,914	
8.....	15	56	3,340	3,170	3,104	3,071	3,051	2,968	2,897	2,897	2,897	
Ungraded	8	1	4,728	4,846	4,845	4,848	4,858	5,138	5,569	5,570	5,570	
Ungraded	9	2	3,197	3,088	3,065	3,060	3,063	3,285	3,687	3,688	3,688	
Ungraded	12	1	4,646	4,838	4,947	5,017	5,067	5,282	5,343	5,343	5,343	

NOTE: AGE2000 is the child's age as of December 31, 2000.

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), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

These results show that the slowness of convergence of the Alternative 1 raking procedure is due to including age and grade/enrollment status dimensions in the same raking procedure, and is not due to any other raking dimensions. The reason that the raking converges slowly when age and grade dimensions are included is because these two variables are highly correlated. Children of a particular age are in one of a few grades, so there is a high association between the two. This high association is referred to as an interaction between age and grade.

Attachment KA discusses the problems that may arise when two variables that are highly correlated are used to define different raking dimensions. Essentially, the raking procedure attempts to maintain the associations between age and grade that are computed based on the nonresponse-adjusted weights. The raked estimates, upon convergence, have the same cross-product ratios (a measure of association in two-way tables) that are in the estimates prior to raking. As pointed out in attachment KA, the use of dimensions with high interaction terms can result in some undesirable outcomes such as weights with greater variability than typical (table K-24). The Alternative 1 weights appear to exhibit this pattern.

Table K-24. Overall raking adjustment and coefficient of variation (c.v.) of the raking adjustment factor, by grade/enrollment status and age: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Grade\ enrollment status	AGE 2000	Number of respondents	Alt. 1 weights		Alt. 2 weights		Deaged weights		Alt. 3 weights		Alt. 3 with adjusted control totals	
			Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)
Not enrolled	0	1,070	1.17	1,726	1.17	1,671	0.91	1,415	0.96	1,376	1.12	1,553
Not enrolled	1	1,258	1.04	1,649	1.04	1,363	1.01	1,539	1.07	1,413	1.05	1,486
Not enrolled	2	1,271	1.00	1,743	1.00	1,738	1.02	1,637	1.06	1,566	0.98	1,563
Not enrolled	3	774	1.12	1,656	1.04	1,584	1.20	1,776	1.26	2,019	1.13	2,014
Not enrolled	4	470	1.12	1,660	0.99	1,450	1.50	2,056	1.69	2,232	1.51	2,226
Not enrolled	5	64	0.98	1,285	0.98	1,291	2.12	3,143	1.67	1,554	1.57	1,543
Not enrolled	6	2	0.45	713	0.99	1,021	4.98	3,167	1.85	1,319	1.77	1,336
Preschool	3	565	0.90	1,267	1.02	1,546	0.70	1,068	0.91	1,250	0.86	1,247
Preschool	4	992	0.90	1,333	0.96	1,440	0.85	1,325	0.89	1,202	0.83	1,200
Preschool	5	277	0.83	1,253	0.99	1,578	1.30	3,035	1.80	3,409	1.29	3,390
Preschool	6	6	0.34	460	0.91	791	2.24	836	2.25	1,780	2.16	1,772
Kindergarten ...	3	4	1.11	761	1.00	689	0.28	436	0.84	658	0.82	645
Kindergarten ...	4	30	1.11	1,776	0.96	1,525	0.35	1,101	0.91	1,575	0.84	1,583
Kindergarten ...	5	539	1.01	2,118	0.99	2,074	0.82	2,052	0.89	1,849	0.82	1,841
Kindergarten ...	6	194	0.45	1,424	0.97	1,828	0.99	2,342	0.97	2,295	0.88	2,281
Kindergarten ...	7	5	0.22	1,145	1.01	963	1.07	1,881	0.90	3,074	0.84	3,072
1	5	8	2.52	1,652	0.97	1,480	0.60	1,469	0.92	1,117	0.88	1,131
1	6	554	1.16	1,925	0.96	1,840	0.92	1,717	0.98	1,682	0.92	1,677
1	7	235	0.62	1,594	1.04	1,963	1.16	2,693	1.22	2,456	1.10	2,446
1	8	9	0.24	520	0.87	855	1.41	1,175	1.29	1,221	1.25	1,210
1	9	1	0.14	(1)	0.95	(1)	1.59	(1)	1.37	(1)	1.35	(1)
2	6	6	2.18	1,414	0.90	1,050	0.57	784	0.88	911	0.86	920
2	7	484	1.23	2,305	1.04	1,903	0.94	2,078	0.98	1,926	0.91	1,923
2	8	266	0.50	1,497	0.91	1,688	0.98	2,165	1.06	2,369	0.97	2,358
2	9	15	0.30	1,591	0.99	2,827	1.20	3,452	1.28	2,951	1.12	2,925
3	7	13	2.60	2,401	1.05	1,816	0.82	1,556	0.91	1,543	0.86	1,547
3	8	476	1.16	2,006	0.93	2,073	0.95	1,869	1.00	1,788	0.94	1,786
3	9	260	0.68	1,408	0.95	1,853	1.06	1,813	1.11	1,821	1.04	1,815
3	10	23	0.44	1,136	1.13	2,376	1.56	1,898	1.52	2,316	1.39	2,316

See notes at end of table.

Table K-24. Overall raking adjustment and coefficient of variation (c.v.) of the raking adjustment factor, by grade/enrollment status and age: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Grade\ enrollment status	AGE 2000	Number of respondents	Alt. 1 weights		Alt. 2 weights		Deaged weights		Alt. 3 weights		Alt. 3 with adjusted control totals	
			Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)	Overall adjustment	c.v. of raking factor (%)
4.....	8	15	1.89	1,578	0.93	1,117	0.71	919	0.87	1,044	0.84	1,042
4.....	9	545	1.10	2,461	0.96	2,253	0.87	1,846	0.91	1,891	0.85	1,893
4.....	10	299	0.59	1,536	0.89	1,804	0.99	1,938	1.11	2,149	1.01	2,138
4.....	11	20	0.39	1,365	1.04	2,319	1.44	2,362	1.40	2,353	1.28	2,354
4.....	12	3	0.18	291	0.82	629	1.83	1,410	1.18	743	1.14	748
4.....	15	1	0.11	(1)	1.13	(1)	5.32	(1)	1.36	(1)	1.34	(1)
5.....	9	14	1.97	3,783	0.95	2,170	0.65	1,786	0.92	2,138	0.81	2,132
5.....	10	572	1.05	2,056	0.88	1,617	0.82	1,671	0.86	1,715	0.80	1,708
5.....	11	297	0.62	1,880	0.91	1,991	1.01	2,574	1.13	2,471	1.01	2,457
5.....	12	20	0.41	1,059	1.05	1,704	1.66	2,423	1.58	1,992	1.44	1,992
5.....	13	1	0.16	(1)	0.73	(1)	1.50	(1)	1.00	(1)	0.97	(1)
6.....	10	18	1.80	1,711	0.87	897	0.59	828	0.85	863	0.82	866
6.....	11	948	1.07	1,704	0.89	1,329	0.83	1,275	0.87	1,208	0.82	1,206
6.....	12	548	0.62	1,422	0.90	1,415	1.00	1,664	1.08	1,805	0.98	1,800
6.....	13	38	0.45	963	1.18	1,567	1.48	1,973	1.47	1,629	1.34	1,619
6.....	14	3	0.32	696	0.93	1,017	2.35	1,941	1.77	1,659	1.63	1,655
7.....	11	14	1.95	2,134	0.93	1,511	0.68	1,374	0.91	1,390	0.84	1,391
7.....	12	1,009	1.07	1,572	0.89	1,254	0.85	1,250	0.88	1,229	0.82	1,226
7.....	13	529	0.63	1,262	0.94	1,650	0.97	1,615	1.10	1,761	0.98	1,727
7.....	14	66	0.41	1,040	0.70	1,245	1.31	2,038	1.38	1,660	1.25	1,633
7.....	15	4	0.40	634	0.70	859	1.45	1,971	1.08	995	1.02	1,010
8.....	11	1	6.31	(1)	1.55	(1)	0.97	(1)	1.62	(1)	1.60	(1)
8.....	12	15	1.94	1,499	0.90	972	0.74	1,012	0.98	1,129	0.92	1,129
8.....	13	924	1.13	1,646	0.93	1,587	0.91	1,297	0.96	1,474	0.89	1,470
8.....	14	497	0.68	1,323	0.64	1,124	1.02	1,552	1.13	1,522	1.02	1,468
8.....	15	56	0.97	1,921	0.93	1,961	1.55	2,105	1.46	1,721	1.30	1,679
Ungraded.....	8	1	2.12	(1)	1.85	(1)	1.75	(1)	1.70	(1)	1.68	(1)
Ungraded.....	9	2	1.36	2,237	1.18	2,115	1.04	1,737	1.10	1,789	1.01	1,784
Ungraded.....	12	1	0.93	(1)	0.82	(1)	0.82	(1)	0.77	(1)	0.76	(1)

¹ The c.v. is not produced because there is only one observation in the row.

NOTE: AGE2000 is the child's age as of December 31, 2000. The deaged weight in the NHES:2001 was based on age calculated as of September 30, 2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

4.3 Inconsistent Ages

As described in section 2 of this appendix, control totals used for raking the person-level weights for NHES are derived from two different CPS files. School enrollment and grade data are available on the October CPS file, but these data are not available on the March CPS file. However, the March CPS file is more contemporaneous with the NHES field period and contains data from the annual demographic survey of the CPS.

For each raking dimension, the control totals used for raking the ECPP-NHES:2001 and ASPA-NHES:2001 weights were obtained by applying percentage distributions from the October CPS to an overall estimated total number of children from the March CPS. Distributions of race/ethnicity by household income and of Census region by urbanicity remain stable throughout the year. Additionally, marginal grade distributions and age distributions are assumed to remain relatively stable throughout the year.¹⁰ On the other hand, the joint distribution of age and grade changes throughout the year (specifically, over the period from October through March), as children typically remain in the same grade throughout this period while the age distribution within each grade shifts upward. This was demonstrated in table K-5, where for a given age, NHES (based on age as of December 31) estimates a larger proportion of children of a given age being in a higher grade than the CPS (based on September 30 age). For example, among 13-year-olds, NHES estimates (based on the original weights) that 63 percent are in 8th grade, 34 percent are in 7th grade, and 3 percent are in 6th grade; the CPS estimates that 71 percent are in 8th grade, 25 percent are in 7th grade, and 3 percent are in 6th grade. The original raking procedure did not require a large number of iterations to converge because it combined age and grade into a single raking dimension.¹¹ As noted in attachment KA, this is a technique that avoids problems when it can be used.

However, the fluctuation in population by the age/grade dimension over time described above does present a problem with this strategy. The CPS age/grade distribution from October is not consistent with the age/grade distribution captured in NHES in the spring. Once again, the interaction between age and grade is a problem; this time the problem is related to the temporal distribution. An alternative that attempts to address this specific issue is considered in the next section.

¹⁰ See the comment about possible variation in kindergarten enrollment over the year in section 4.1.

¹¹ The combination really used age for younger children and grade for older children.

4.4 Interaction of Age and Grade

In order to examine the effect of the interaction between age and grade on the raking adjustment for the Alternative 1 weights, a variation on Alternative 1 was developed. For this variation, a new age variable was computed for each child with a completed ECPP or ASPA interview. NHES collects each child's current grade or grade equivalent (if enrolled), as well as the information needed to calculate the child's age as of December of the previous year. For NHES:2001, the age as of December 2000 is stored in the variable AGE2000. Because NHES collects the month and year of birth of the child (CDOBMM and CDOBY), the responses to these variables could be used to compute age as of any given date. For this variation, the child's age as of September 30 was computed and used in place of AGE2000 in raking.¹²

The raking dimensions for this "deaged" raking procedure were race/ethnicity by household income, Census region by urbanicity, single year of age as of September 30, and home tenure by enrollment status/grade of the child. The raking procedure was run to compute the adjusted deaged weights. This procedure required 805 iterations to converge.

For each alternative considered, table K-19 contains the overall raking adjustment (computed as the ratio of the sum of the raked weights to the sum of the nonresponse-adjusted weights) and the coefficient of variation of the raking adjustment factor, for each combination of grade/enrollment status and age. In general, among the three alternatives considered, the adjustments are greatest and most variable under Alternative 1, and smallest and least variable under Alternative 2.¹³

Table K-25 gives the estimated total and mean weight for each age/grade combination under each alternative raking scheme, as well as the estimated totals from the October 1999 CPS. The mean weights under Alternative 2 are less variable than under Alternative 1. Within each grade, the age distribution based on the Alternative 1 weights is similar to the CPS age distribution. However, the Alternative 2 weights and the deaged weights each produce age distributions that are "older" than the CPS age distribution within each grade. Because of the difference in the timing of the two surveys (specifically, the fact that the CPS age is as of September 30 but the NHES age is as of December 31), it is reasonable that for a given grade, the NHES age distribution should be older than the October CPS age distribution.

¹² For children born between October 1, 2000, and December 31, 2000, an age of 0 was assigned.

¹³ A fourth alternative, deaging the NHES sample (calculating the child's age as of September 30, 2000) and using the dimensions of the original raking procedure, was considered. However, the results of this approach were similar to the results of the original raking procedure with a substantial shortfall in the estimated number of 5-year-olds.

Table K-26 contains the estimated marginal totals for each age and each grade under each raking alternative. For selected alternatives, table K-26A gives the standard errors of these estimates. Because age was used as a raking dimension, with no manipulation of the age variable, Alternatives 1 and 2 each yield age estimates that are very close to the CPS estimates.¹⁴ Because they used grade as a separate dimension, Alternative 1 and the deaged approach yield grade estimates that are most similar to those of the CPS. However, due to concerns about the variable estimates of kindergartners and the other concerns discussed in this appendix, matching CPS estimates of grade-level enrollment should not be of primary importance for the NHES estimates.

4.5 Coverage

In this study, telephone coverage rates by age and grade were also examined. As the discussion in attachment KA points out, when coverage rates (or unit response rates) do not follow a response model consistent with the model implicit in raking, the raked estimates are not unbiased. Moreover, unit response rates cannot readily be computed by age and grade because the biggest portion of nonresponse occurs in screening before age and grade can be determined.

The telephone coverage rates were computed from the October CPS by child's age and grade (see attachment KC). The pattern of coverage is somewhat unusual, with the coverage seeming to decline off the modal age/grade cell. However, these estimates are based on very small sample sizes in these cells. The overall estimate of household telephone coverage from the October 1999 CPS is that 94.1 percent of households have telephones. Telephone coverage rates from Census 2000 were also examined. The overall telephone coverage rate from Census 2000 is 97.6 percent of households, considerably higher than the CPS estimate.

The results of this part of the study are interesting but not very informative because of the small sample sizes in the CPS for computing the coverage rates.

¹⁴ Since the control totals were obtained by applying distributions from the October CPS to totals from the March CPS, the NHES estimates do not exactly match the October CPS estimates.

Table K-25. Estimated totals and mean weights for grade/enrollment status, by age combinations for alternative raking procedures: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Grade\ enrollment status	Age	Number of respondents	Nonresp. adj. weights:	Final Alt. 1 weights		Final Alt. 2 weights		Final deaged weights		Final Alt. 3 weights		Alt. 3 with adj. control totals		Oct. 1999 CPS (age as of Oct.): estimated total
			Estimated total	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	
Not enrolled.....	0	1,070	3,313,066	3,867,834	3,615	3,867,835	3,615	3,008,148	2,811	3,008,721	2,812	3,701,058	3,459	3,861,241
Not enrolled.....	1	1,258	3,747,389	3,901,976	3,102	3,901,977	3,102	3,797,427	3,019	3,795,842	3,017	3,946,147	3,137	3,895,325
Not enrolled.....	2	1,271	3,949,450	3,930,531	3,092	3,930,532	3,092	4,024,148	3,166	3,938,267	3,099	3,875,374	3,049	3,923,831
Not enrolled.....	3	774	2,156,361	2,415,764	3,121	2,233,802	2,886	2,584,821	3,340	2,483,241	3,208	2,443,410	3,157	2,357,244
Not enrolled.....	4	470	1,252,609	1,401,148	2,981	1,238,408	2,635	1,881,152	4,002	1,919,990	4,085	1,889,359	4,020	1,252,396
Not enrolled.....	5	64	180,132	176,291	2,755	176,076	2,751	382,686	5,979	287,106	4,486	282,469	4,414	233,570
Not enrolled.....	6	2	3,344	1,505	752	3,300	1,650	16,668	8,334	5,979	2,990	5,907	2,953	89,302
Not enrolled.....	7	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	55,381
Preschool.....	3	565	1,587,020	1,435,880	2,541	1,619,449	2,866	1,112,347	1,969	1,383,870	2,449	1,361,902	2,410	1,480,031
Preschool.....	4	992	2,766,492	2,477,521	2,498	2,660,444	2,682	2,361,246	2,380	2,342,458	2,361	2,305,006	2,324	2,439,193
Preschool.....	5	277	802,235	662,415	2,391	797,027	2,877	1,045,430	3,774	1,049,781	3,790	1,032,920	3,729	587,120
Preschool.....	6	6	30,041	10,360	1,727	27,364	4,561	67,154	11,192	65,967	10,995	64,938	10,823	72,013
Kindergarten.....	3	4	15,446	17,103	4,276	15,497	3,874	4,360	1,090	12,930	3,232	12,732	3,183	24,877
Kindergarten.....	4	30	133,847	149,097	4,970	128,915	4,297	46,818	1,561	114,766	3,826	112,990	3,766	329,311
Kindergarten.....	5	539	3,066,152	3,111,612	5,773	3,034,769	5,630	2,522,639	4,680	2,570,655	4,769	2,529,405	4,693	2,983,685
Kindergarten.....	6	194	1,198,596	538,220	2,774	1,168,307	6,022	1,183,729	6,102	1,073,631	5,534	1,056,569	5,446	440,615
Kindergarten.....	7	5	68,928	15,038	3,008	69,567	13,913	73,525	14,705	59,090	11,818	58,127	11,625	46,052
1.....	5	8	37,211	93,767	11,721	36,213	4,527	22,274	2,784	33,308	4,164	32,782	4,098	213,652
1.....	6	554	2,962,180	3,432,673	6,196	2,833,214	5,114	2,721,516	4,912	2,773,282	5,006	2,728,897	4,926	3,285,861
1.....	7	235	1,284,963	791,128	3,367	1,340,034	5,702	1,493,266	6,354	1,440,291	6,129	1,417,346	6,031	732,310
1.....	8	9	64,474	15,273	1,697	56,356	6,262	90,906	10,101	81,821	9,091	80,465	8,941	71,660
1.....	9	1	3,382	484	484	3,214	3,214	5,362	5,362	4,623	4,623	4,558	4,558	22,454

See notes at end of table.

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Table K-25. Estimated totals and mean weights for grade/enrollment status, by age combinations for alternative raking procedures: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999—Continued

Grade\ enrollment status	Age	Number of respondents	Nonresp. adj. weights:	Final Alt. 1 weights		Final Alt. 2 weights		Final deaged weights		Final Alt. 3 weights		Alt. 3 with adj. control totals		Oct. 1999 CPS (age as of Oct.): estimated total
			Estimated total	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	
2.....	5	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	19,164
2.....	6	6	38,714	84,208	14,035	34,783	5,797	22,237	3,706	33,849	5,641	33,289	5,548	145,359
2.....	7	484	2,498,288	3,074,452	6,352	2,595,802	5,363	2,336,391	4,827	2,315,990	4,785	2,279,188	4,709	2,982,403
2.....	8	266	1,515,052	752,032	2,827	1,385,902	5,210	1,481,793	5,571	1,495,304	5,621	1,471,201	5,531	721,909
2.....	9	15	78,058	23,266	1,551	76,967	5,131	93,537	6,236	88,816	5,921	87,389	5,826	45,951
2.....	10	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	12,464
3.....	6	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	26,883
3.....	7	13	80,485	209,005	16,077	84,220	6,478	66,300	5,100	70,713	5,439	69,396	5,338	260,006
3.....	8	476	2,617,368	3,035,012	6,376	2,439,173	5,124	2,488,121	5,227	2,501,777	5,256	2,462,144	5,173	2,957,999
3.....	9	260	1,530,157	1,048,115	4,031	1,452,676	5,587	1,624,654	6,249	1,621,790	6,238	1,595,484	6,136	982,369
3.....	10	23	102,196	44,944	1,954	115,867	5,038	158,987	6,912	143,908	6,257	141,793	6,165	89,677
3.....	11	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	18,306
4.....	7	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	6,497
4.....	8	15	81,749	154,170	10,278	75,787	5,052	57,764	3,851	69,878	4,659	68,737	4,582	192,569
4.....	9	545	2,809,153	3,101,333	5,691	2,691,223	4,938	2,445,839	4,488	2,417,665	4,436	2,379,386	4,366	2,979,929
4.....	10	299	1,535,896	910,361	3,045	1,371,270	4,586	1,520,674	5,086	1,576,142	5,271	1,550,777	5,187	910,091
4.....	11	20	97,461	38,333	1,917	101,774	5,089	140,329	7,016	127,100	6,355	124,910	6,245	74,411
4.....	12	3	9,012	1,577	526	7,376	2,459	16,455	5,485	10,487	3,496	10,285	3,428	43,030
4.....	15	1	5,072	560	560	5,719	5,719	27,006	27,006	6,888	6,888	6,798	6,798	0
5.....	8	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	11,162
5.....	9	14	48,754	96,026	6,859	46,139	3,296	31,530	2,252	39,921	2,851	39,291	2,807	216,074
5.....	10	572	2,867,756	3,013,269	5,268	2,528,835	4,421	2,352,100	4,112	2,339,895	4,091	2,302,494	4,025	2,825,052
5.....	11	297	1,627,524	1,015,716	3,420	1,477,796	4,976	1,648,396	5,550	1,666,969	5,613	1,640,237	5,523	977,598
5.....	12	20	72,818	29,701	1,485	76,779	3,839	120,730	6,036	106,702	5,335	105,076	5,254	99,161
5.....	13	1	1,460	230	230	1,062	1,062	2,187	2,187	1,455	1,455	1,419	1,419	18,812

See notes at end of table.

Table K-25. Estimated totals and mean weights for grade/enrollment status, by age combinations for alternative raking procedures: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Grade\ Enrollment status	Age	Number of respondents	Nonresp. adj. weights:	Final Alt. 1 weights		Final Alt. 2 weights		Final deaged weights		Final Alt. 3 weights		Alt. 3 with adj. control totals		Oct. 1999 CPS (age as of Oct.): estimated total
			Estimated total	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	Estimated total	Mean weight	
6.....	9	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	22,531
6.....	10	18	51,011	91,568	5,087	44,168	2,454	30,017	1,668	42,532	2,363	41,875	2,326	200,794
6.....	11	948	2,722,777	2,912,505	3,072	2,432,119	2,566	2,263,987	2,388	2,274,859	2,400	2,238,655	2,361	2,767,587
6.....	12	548	1,581,983	975,534	1,780	1,427,630	2,605	1,577,800	2,879	1,569,298	2,864	1,544,116	2,818	894,644
6.....	13	38	90,866	40,469	1,065	107,676	2,834	134,263	3,533	124,185	3,268	122,096	3,213	115,374
6.....	14	3	6,912	2,213	738	6,399	2,133	16,222	5,407	11,415	3,805	11,243	3,748	14,501
7.....	10	0	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	15,142
7.....	11	14	37,078	72,364	5,169	34,543	2,467	25,127	1,795	31,558	2,254	31,108	2,222	177,186
7.....	12	1,009	2,653,167	2,844,906	2,820	2,369,830	2,349	2,254,518	2,234	2,206,245	2,187	2,170,862	2,151	2,637,312
7.....	13	529	1,416,160	891,275	1,685	1,330,296	2,515	1,374,268	2,598	1,423,660	2,691	1,393,766	2,635	923,440
7.....	14	66	163,496	67,802	1,027	114,177	1,730	214,176	3,245	210,339	3,187	204,626	3,100	86,363
7.....	15	4	8,448	3,384	846	5,885	1,471	12,273	3,068	8,829	2,207	8,613	2,153	39,007
8.....	11	1	1,535	9,688	9,688	2,372	2,372	1,491	1,491	2,492	2,492	2,450	2,450	26,614
8.....	12	15	28,386	54,944	3,663	25,656	1,710	20,979	1,399	26,446	1,763	26,069	1,738	231,189
8.....	13	924	2,455,539	2,783,762	3,013	2,276,700	2,464	2,243,632	2,428	2,217,654	2,400	2,182,272	2,362	2,651,774
8.....	14	497	1,408,812	951,359	1,914	900,799	1,812	1,437,963	2,893	1,487,763	2,993	1,439,526	2,896	918,769
8.....	15	56	166,626	162,233	2,897	154,572	2,760	257,921	4,606	227,631	4,065	217,061	3,876	126,886
Ungraded.....	8	1	2,621	5,570	5,570	4,837	4,837	4,583	4,583	4,457	4,457	4,403	4,403	0
Ungraded.....	9	2	5,426	7,377	3,688	6,381	3,191	5,644	2,822	5,551	2,775	5,454	2,727	0
Ungraded.....	12	1	5,756	5,343	5,343	4,733	4,733	4,711	4,711	4,444	4,444	4,376	4,376	0

¹ NHES estimates are not given because there were no sample cases with the grade/age combinations.

NOTE: For NHES estimates, age is as of December 31. For deaged estimates and CPS estimates, age is as of September 30, 2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-26. Estimated totals from CPS and estimated NHES totals based on the nonresponse adjusted weight and the weight from each of the raking alternatives, by age and grade/enrollment status: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Characteristic	Estimated total ¹						
	Nonresponse adj. weight	Alt. 1 weight	Alt. 2 weight	Deaged ² weight	Alt. 3 weight	Alt. 3 with adj. control totals	Oct. 1999 CPS
Age							
0	3,313,066	3,867,834	3,867,835	3,008,148	3,008,721	3,701,058	3,861,241
1	3,747,389	3,901,976	3,901,977	3,797,427	3,795,842	3,946,147	3,895,325
2	3,949,450	3,930,531	3,930,532	4,024,148	3,938,267	3,875,374	3,923,831
3	3,758,827	3,868,747	3,868,748	3,701,528	3,880,041	3,818,044	3,862,152
4	4,152,948	4,027,766	4,027,767	4,289,216	4,377,214	4,307,355	4,020,900
5	4,085,729	4,044,085	4,044,085	3,973,029	3,940,851	3,877,576	4,037,191
6	4,232,875	4,066,966	4,066,967	4,011,304	3,952,708	3,889,600	4,060,033
7	3,932,665	4,089,623	4,089,623	3,969,481	3,886,084	3,824,058	4,082,650
8	4,281,265	3,962,056	3,962,055	4,123,168	4,153,237	4,086,949	3,955,299
9	4,474,929	4,276,600	4,276,600	4,206,566	4,178,366	4,111,561	4,269,309
10	4,556,859	4,060,142	4,060,141	4,061,777	4,102,477	4,036,939	4,053,219
11	4,486,375	4,048,606	4,048,605	4,079,330	4,102,977	4,037,360	4,041,702
12	4,351,123	3,912,006	3,912,005	3,995,192	3,923,622	3,860,784	3,905,335
13	3,964,025	3,715,735	3,715,734	3,754,350	3,766,954	3,699,553	3,709,399
14	1,579,220	1,021,374	1,021,374	1,668,361	1,709,517	1,655,395	1,019,633
15	180,147	166,177	166,177	297,200	243,349	232,472	165,893
Grade/enrollment status							
Not enrolled	14,602,350	15,695,049	15,351,929	15,695,050	15,439,147	16,143,724	15,668,289
Preschool.....	5,185,787	4,586,176	5,104,284	4,586,177	4,842,076	4,764,766	4,578,357
Kindergarten	4,482,970	3,831,071	4,417,055	3,831,071	3,831,071	3,769,823	3,824,539
1 st grade.....	4,352,209	4,333,325	4,269,031	4,333,325	4,333,325	4,264,048	4,325,937
2 nd grade.....	4,130,112	3,933,958	4,093,454	3,933,958	3,933,959	3,871,067	3,927,250
3 rd grade	4,330,206	4,337,076	4,091,936	4,338,062	4,338,188	4,268,817	4,335,241
4 th grade	4,538,343	4,206,334	4,253,150	4,208,067	4,208,161	4,140,892	4,206,527
5 th grade	4,618,312	4,154,942	4,130,611	4,154,942	4,154,941	4,088,517	4,147,860
6 th grade	4,453,549	4,022,288	4,017,991	4,022,288	4,022,289	3,957,985	4,015,431
7 th grade	4,278,349	3,879,731	3,854,732	3,880,363	3,880,631	3,808,974	3,878,450
8 th grade	4,060,899	3,961,986	3,360,099	3,961,986	3,961,986	3,867,379	3,955,231
Ungraded/no equivalent.....	13,803	18,289	15,951	14,939	14,451	14,232	0

¹ Children ages 0 through 15, enrolled in grade 8 or below.

² Deaged weight was based on age calculated as of September 30, 2000.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

Table K-26A. Standard errors of estimated totals based on the weight from selected raking alternatives, by age and grade/enrollment status: ECPP-NHES:2001, ASPA-NHES:2001, and CPS:1999

Characteristic	Standard error of the estimated total ¹		
	Original weight	Alt. 2 weight	Alt. 3 with adj. control totals
Age			
0	0	0	60,844
1	0	0	78,065
2	0	0	87,879
3	91,646	0	99,533
4	98,376	0	87,838
5	84,721	0	87,827
6	117,634	0	109,978
7	129,040	0	116,951
8	129,735	0	101,013
9	135,269	0	102,653
10	125,347	0	106,582
11	106,502	0	87,386
12	74,608	0	58,510
13	70,281	0	60,588
14	59,895	0	56,516
15	31,311	0	31,328
Grade/enrollment status			
Not enrolled	0	88,246	32,127
Preschool.....	0	99,442	32,127
Kindergarten	0	116,154	0
1 st grade.....	0	130,287	0
2 nd grade.....	0	107,104	0
3 rd grade	4,029	107,814	4,446
4 th grade	4,291	129,503	4,042
5 th grade	0	112,643	0
6 th grade	0	79,762	0
7 th grade	4,691	80,102	4,380
8 th grade	0	60,839	0
Ungraded/no equivalent.....	7,280	8,046	7,221

¹ Children ages 0 through 15, enrolled in grade 8 or below.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Early Childhood Program Participation Survey of the National Household Education Surveys Program (NHES), 2001, and Before- and After-School Programs and Activities (ASPA) Survey of the NHES, 2001. U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

5. SUMMARY AND RECOMMENDATIONS

The study of the weighting procedures for the ECPP and ASPA surveys from NHES:2001 is wide ranging and has several important findings. This section summarizes findings and presents recommendations for NHES:2001 and NHES:2003.

The weighting procedures in NHES:2001 were executed correctly. The original weights converged to the specified control totals with a small number of iterations, and the variability of the weights was reasonable. The original weighting procedure resulted in estimates of the number of 5-year-olds that differed from the CPS estimate by about 15 percent (500,000 children). The main reasons for the difference are the lower CPS estimate of the number of kindergartners and measurement issues. The distributions of age by grade for children as measured in the CPS and the NHES also differ, and this is mainly due to the difference in the time that data are collected.

Three alternative raking schemes were considered to deal with the concern arising from the original weights. The study focused on raking because it was determined that the unusual patterns and estimates were not present using weights prior to raking. In Alternative 1, the home tenure by age/grade dimension was eliminated, and a dimension of single year of age and a second dimension of home tenure/grade were substituted. The weights from this procedure matched the CPS estimates by age and by grade, but exhibited greater variability than desired. In particular, the mean raked weight for children within a grade decreased as age increased. Another issue noted was the large number of iterations required for the raking procedure to converge.

In Alternative 2, the home tenure by age/grade dimension was eliminated and replaced by the single dimension of home tenure by single year of age. When these weights were used to estimate the number of children in kindergarten, the raked NHES estimates were about 500,000 children higher than the CPS estimate.

A preliminary examination suggested using the Alternative 1 scheme because the weights from this approach produced estimates that agreed with the CPS by both age (the original weights did not have this property) and by grade (the Alternative 2 estimate of kindergarten children differed from the CPS estimate). However, the problem of the variability in the weights by age and grade and the need for a large number of iterations raised concerns and indicated further research would be beneficial.

As part of the additional research, a third alternative was considered. In Alternative 3, the home tenure by age/grade dimension was replaced by the single dimension of home tenure crossed with grade by age category. For each grade, two age categories were created: (1) at or below modal age for the grade and (2) above modal age for the grade. Prior to classifying children into raking cells for this dimension, the age of the child was recalculated as of September 30, to match the reference age used in computing the control totals from CPS.

The additional research found that the CPS estimate of the number of kindergarten children is at the lower end of the range computed using several sources. No study of CPS procedures was undertaken, but the method of classifying a child as being enrolled in kindergarten may differ between the CPS and some of the other sources. Another interesting finding from this part of the study is that there may be some variation in the number of children enrolled in kindergarten over the school year. The 2000 census and NHES were both measured during the second half of the school year and gave higher estimates of the number of kindergarten children than the other sources that were measured in the fall.

As a result of the comparisons, the need to match the CPS estimate of the number of children by grade was reconsidered. The CPS estimate, lower than that from most other sources, is collected in the fall when kindergarten enrollment might be slightly lower than in the spring. The CPS also suffers from its own measurement problems, and those might have a greater effect on the classification of children in the other grades. Although matching the CPS estimates by grade was critical in the preliminary recommendation, the findings from the comparisons of kindergarten estimates suggest the Alternative 2 weights that do not match the CPS estimates by grade are more acceptable. The original estimates that underestimated the number of 5-year-olds are not recommended, because the age distribution from the CPS does not have the same issues as the grade distribution.

The detailed study of the weights also found that the disconcerting features of the Alternative 1 weights noted in the preliminary analysis could be attributed to the use of two raking dimensions (age and grade) that are so highly correlated. When the raking dimensions are highly correlated, it is not uncommon for the raking process to take a large number of iterations to converge and for the weights to have higher variability than might otherwise be expected. In these cases, a solution is to combine the two variables to form a single dimension. The original raking procedure did include age and grade in the same dimension, but the problem encountered was the inconsistency between the age/grade distribution of the NHES and CPS distributions.

The effect of NHES and CPS having children whose ages are calculated at different months was examined by recomputing the ages of children in NHES to be more consistent with the October CPS

data collection. The raking procedure used the same dimensions as Alternative 1, but the NHES ages were computed as of September 30. The deaged raking procedure eliminated some of the problems noted with the Alternative 1 weights. In particular, the peculiar pattern of mean weights within grade decreasing as age increased is not evident with this weighting strategy. However, the number of iterations that were required to attain convergence was still large, and the overall variability in the weights was larger than with the original raking procedure or Alternative 2.

Essentially, the deaged raking scheme handled problems associated with ages being computed at different points in time, but it suffers from having two highly correlated raking dimensions. In addition, the NHES estimates by age that are computed by analysts will still use the standard December 31 date, so the correspondence between the CPS age and the NHES analysis age will not persist. That is, deaging is strictly for computing the weights, and analysis of the NHES data will not match the CPS estimates by age. Nevertheless, the deaged raked weights are preferred to the Alternative 1 weights because they do deal with the fact that the CPS and NHES classify children by age differently.

Based on the complete analysis, it was recommended that the Alternative 2 raking scheme be adopted for NHES:2001. The Alternative 2 weights give estimates of the number of children by age that correspond to the CPS estimates, and they also have good statistical properties in the sense that the raking does not introduce substantial variability into the weights. As noted above, the preliminary concern about the Alternative 2 weights was largely based on the perceived importance of matching the CPS estimates by grade (particularly the number of children in kindergarten). This should no longer be a concern. The data show the CPS estimate of the number of children in kindergarten is lower than other sources. The Alternative 2 raking scheme results in an estimate of the number of children in kindergarten higher than other sources, but the difference between this estimate and the 2000 census estimate is about the same magnitude as the difference between the CPS estimate and the 2000 census figure.

While it is no longer imperative to match the CPS estimates by grade, the CPS estimates should be matched by age. As noted above, the failure of the original raking scheme to approximate the CPS estimate of the number of 5-year-olds makes this approach unacceptable.

The Alternative 2 procedure also has the advantage of avoiding the problem of having two raking dimensions based on highly correlated variables—age and grade. This problem of having age and grade dimensions affects both the Alternative 1 and the deaged raking schemes. In both cases, the problem manifests itself by requiring a large number of iterations before the weights converge, and the resulting weights have greater variability than might be expected. The variability in the weights is an issue because some estimates may be greatly affected by cases with very high weights. Although no such

estimates were discovered in the preliminary analysis of the Alternative 1 weights, it is very possible that estimates for small groups could be unstable as a result of the variability in the weights.

After further discussion, and considering all the options explored, it was decided that the original weights should be used for analysis of the ECPP and ASPA surveys. Each of the alternatives considered had shortcomings, and no alternative was clearly preferable to the original weights. Thus, only the weights computed using the original methodology appear on the data files.

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ATTACHMENT KA

THEORY OF ADJUSTING WEIGHTS USING AUXILIARY DATA

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In this attachment, some of the theory on the use of poststratified and raking estimators is described. Both estimators are in a class of estimators that Deville and Särndal (1992) refer to as calibration estimators. A calibration estimator is one in which the base weights, d_i , the inverse of the probability of selection, are adjusted so that the revised weights, w_i , are close to the original weights but satisfy some constraints. Typically, the constraint is that the sum of the revised weights equals a known population total, $\sum w_i = N$, or more generally $\sum w_i \mathbf{x}_i = \mathbf{X}$, where \mathbf{x}_i is a vector of auxiliary data known for all sampled units and for the entire population. With poststratification, the constraint requires that the revised weights sum to the population total for groups or cells of the population. With raking, the constraints involve summing to the population or control totals for two or more variables at the same time, but the constraints are marginal and do not involve the cells formed by crossing the two variables.

Different calibration estimators can be constructed by changing the measure of closeness. The distance metric for poststratification is different from the one used for raking. For example, raking corresponds to a metric that measures the distance between the revised weight and the original weight (let x denote the ratio) by the function $G(x) = x \log(x) - x + 1$. Deville and Särndal (1992) show the different distance measures have little effect when the sample size is large.

Several reasons exist for using a calibrated estimator rather than an estimator that does not involve any auxiliary variables. One reason is that the constraints force the sum of the weights to equal known population totals for the selected dimensions, and this makes the estimates seem more reasonable to analysts. Since the totals are known from some other source, this is a form of conditioning the estimators that has statistical advantages over unconditional approaches (Holt and Smith, 1979). A second reason for calibrating the estimators is that it is a method of adjusting for other sources of error, including sampling, nonresponse, and noncoverage. In many RDD surveys, adjusting the estimates from a telephone survey to known population counts from the entire population (both telephone and nontelephone households) is the major reason for calibration and is critical to reducing the mean square error of the estimates. The reduction in the mean square error of the estimates is related to the predictive power of the auxiliary variables used in the adjustment. Choosing variables that are highly related to the primary outcome variables of the survey or that are highly related to the propensity to respond or the likelihood of being covered results in the greatest reduction in the mean square error. For example, with poststratification, the error in estimating a population total that is used as a constraint is zero (it is a known value that does not vary from sample to sample). Similarly, estimates of population totals that are highly correlated with the known cell totals used in poststratification have small sampling errors.

Below, poststratification and raking are described in more detail.

Poststratification

Consider poststratification to population control totals, where the population count, N_h ($h=1,\dots,H$), is known for each poststratum or cell h . The poststratified estimator of the population total is

$$\hat{Y}_{ps} = \sum_h N_h \sum_i \left(\frac{d_{hi} y_{hi}}{\sum_i d_{hi}} \right) = \sum_h \sum_i w_{hi} y_{hi}, \quad (\text{KA-1})$$

where d_{hi} is the inverse of the probability of selecting unit i in cell h , $w_{hi} = \frac{N_h}{\hat{N}_h} d_{hi}$, and $\hat{N}_h = \sum_{i \in h} d_{hi}$ is the unadjusted survey estimate of the population total in cell h .

The poststratified estimator assumes that all the sampled units respond. A generalization used in practice that handles unit nonresponse is the population cell weighting estimator. This estimator is

$$\hat{Y}_{pc} = \sum_h N_h \left\{ \frac{\sum_{i \in h_r} y_{hi} d_{hi}}{\sum_{i \in h_r} d_{hi}} \right\} = \sum_h \frac{N_h}{\hat{N}_h} \left(\sum_{i \in h_r} y_{hi} d_{hi} \right), \quad (\text{KA-2})$$

where the sums are over the set of respondents in cell h . As a convenience, the population cell weighting estimator is referred to as the poststratified estimator, ignoring the distinction noted above. The difference will be discussed later.

Two issues arise with using the poststratified estimator in practice. The first issue is that the poststratified estimator requires external data on the number of units in the population in each cell (N_h). When several auxiliary variables are used in the adjustment, the counts in each cell of the cross-tabulation of the auxiliary variables are needed, and this level of detail is not always available. Even when the required counts are available, it may not be wise to use the full cross-classification for adjusting the estimator. The poststratified estimator is a ratio estimator, and its denominator is the sample estimate of the number of units in cell h . If the sample size in cell h is small, then the estimator is biased and the poststratified estimator could be unreliable. One way of dealing with this problem is to reduce the number of cells so that the sample size in each cell is large enough to provide a reliable estimator.

Raking

The population raking estimator is an alternative that may be used when several auxiliary variables are available. Raking is often thought of as a multivariate version of poststratification since the process of raking involves repeated poststratification to multiple dimensions. One virtue of raking is that only the marginal control totals are needed, rather than counts for all the cells in the cross-classification such as would be required with poststratification.

To aid in the discussion, the raking estimator is described in a simple two-variable situation. The extension to more variables is immediate. Suppose there are two auxiliary variables with H and K classes, respectively. The raking estimator can be written as

$$\hat{Y}_{pr} = \sum_h \sum_k \tilde{w}_{hk} \left(\sum_{i \in (k,h)_r} y_{hki} d_{hki} \right), \quad (\text{KA-3})$$

where \tilde{w}_{hk} is the weight formed by raking the weighted count of the number of respondents in cell (h,k) to the marginal totals as described below.

- Let $\hat{N}_{hk} = \sum_{i \in (h,k)} d_{(h,k)i}$ be the unadjusted estimate of the population in cell (h,k) .
- Compute weights at each iteration using the following:

$$\begin{aligned} \tilde{w}_{hk}^{(t)} &= \hat{N}_{hk} && \text{if } t = 0 \\ &= \frac{\tilde{w}_{hk}^{(t-1)} N_{h+}}{\tilde{w}_{h+}^{(t-1)}} && \text{if } t = \text{odd} \\ &= \frac{\tilde{w}_{hk}^{(t-1)} N_{+k}}{\tilde{w}_{+k}^{(t-1)}} && \text{if } t = \text{even} \end{aligned}$$

- Iterate to convergence (i.e., until the sums of the weights match all the marginal counts).

At each iteration the weights are poststratified twice, first to the row dimension and then to the column dimension. With more than two dimensions, this adjustment is repeated for each dimension. If the raked weights converge, then the order of introducing the dimensions does not matter, and the row and column variables can be interchanged without affecting the estimates. The formulation given above shows why raking is viewed as a multivariate type of poststratification.

Another way of writing the raked weight is

$$\tilde{w}_{hk} = \hat{N}_{hk} \hat{\alpha}_h \hat{\beta}_k, \quad (\text{KA-4})$$

where $\hat{\alpha}_h = \lim_{t \rightarrow \infty} \prod_{l < t, l \text{ odd}} \frac{N_{h \cdot}}{\tilde{w}_{h \cdot}^{(l)}}$ and $\hat{\beta}_k = \lim_{t \rightarrow \infty} \prod_{l < t, l \text{ even}} \frac{N_{\cdot k}}{\tilde{w}_{\cdot k}^{(l)}}$. Using this formulation, the weight can be

viewed as being adjusted by a factor for each dimension, α_h is the adjustment for the first dimension (level h) and β_k is the adjustment for the second dimension (level k). The row factor is the product of all the adjustments that are made to the row across iterations. Similarly, the column factor is the product of all the column adjustments across the iterations.

As an example, suppose a sample is selected of children between the ages of 5 and 7 enrolled in kindergarten, 1st or 2nd grade. Table KA-1 below is an illustrative example of the estimates from the survey before raking.

Table KA-1. Illustration of unadjusted survey estimates by age and grade

Grade	Age			Total
	5	6	7	
K.....	3,200	1,000	100	4,300
1	200	2,500	1,200	3,900
2	0	100	2,200	2,300
Total.....	3,400	3,600	3,500	10,500

SOURCE: Hypothetical data for illustrative purposes.

Suppose further that there are control totals that are known for both the age and grade margins. In particular, the control totals are 3,500, 3,800, and 3,700 for 5-, 6-, and 7-year-olds, respectively; the control totals are 4,000, 4,000 and 3,000 for kindergarten, 1st grade, and 2nd grade, respectively. After raking to these marginal totals, the adjusted estimates are given in Table KA-2.

Table KA-2. Illustration of raked survey estimates by age and grade

Grade	Age			Total
	5	6	7	
K.....	3,199	754	47	4,000
1	301	2,843	856	4,000
2	0	203	2,797	3,000
Total.....	3,500	3,800	3,700	11,000

SOURCE: Hypothetical data for illustrative purposes.

Using the factor notation given above, it is easy to compute the grade and age factors for this illustrative example. The grade factors are: $\alpha_{kg} = 0.70$, $\alpha_{1st} = 1.05$, and $\alpha_{2nd} = 1.88$. The age factors are: $\beta_{5yr} = 1.43$, $\beta_{6yr} = 1.08$, and $\beta_{7yr} = 0.68$.

Raking with Dependent Dimensions

An important feature of raking that is not obvious from the presentation given above is that the procedure forces the weights to conform to the marginal totals without perturbing the two-way associations that exist in the unadjusted table. Another way of saying this is that raking retains the two-way associations (as measured by the cross-product ratio or odds ratio) in the observed data in producing estimates that are consistent with the marginal constraints. For example, in the illustration above notice that all nine cross-product ratios that can be formed are the same for the estimates in tables KA-1 and KA-2 (e.g., the cross-product ratio of the subtable of children aged 5 and 7 and in kindergarten or 1st grade has the value of 192 for both tables).

This feature of raking is implicit when the raked weights written as a product of row and column factors, such as given by expression (KA-4). The logarithm of the raked weight is the sum of a row and column effect, but contains no interaction term. The relationship may be clearer if the full table of survey estimates is written using a log-linear model. For example, when there are three dimensions, the survey estimates are fully determined by the model

$$\ln(e_{ijk}) = \mu + \alpha_i + \beta_j + \gamma_k + (\alpha\beta)_{ij} + (\alpha\gamma)_{ik} + (\beta\gamma)_{jk} + (\alpha\beta\gamma)_{ijk}, \quad (\text{KA-5})$$

where e_{ijk} are the unadjusted estimates in cell i of the first dimension, cell j of the second dimension, and cell k of the third dimension. The first term on the righthand side of the equation is an intercept term, the next three terms are the main effects corresponding to the specific level for each dimension, the next three terms are the second-order interactions, and the last term is the three-level interaction.

With poststratification, the survey estimates in the cells defined by the log-linear model in expression (KA-5) are replaced by the control totals. For example, when poststratification to cells in a two-way table is used, the original estimates in these cells are replaced by factors determined by the control totals. Thus, the model of unadjusted estimates given by $\ln(e_{ij}) = \mu + \alpha_i + \beta_j + (\alpha\beta)_{ij}$ is replaced by $\ln(p_{ij}) = \mu' + \alpha'_i + \beta'_j + (\alpha'\beta')_{ij}$, where p_{ij} is the poststratified estimate in cell (i,j) .

With raking, the main effects are fully defined by the control totals, but the raked table retains the higher order interactions from the original table. Thus, with three dimensions the raked table is

$$\ln(r_{ijk}) = \mu' + \alpha'_i + \beta'_j + \gamma'_k + (\alpha\beta)_{ij} + (\alpha\gamma)_{ik} + (\beta\gamma)_k + (\alpha\beta\gamma)_{ijk} \quad (\text{KA-6})$$

where the higher order interactions are identical to those prior to raking in (KA-5). Only the intercept and main effects are replaced by factors determined by the control totals. In the two-way example given above, all nine second-order interactions were preserved between the unadjusted and raked tables.

With this in mind, consider the raking example again. Table KA-3 gives the mean of the weight adjustments in each cell and for both margins. The adjustments can be derived by multiplying the corresponding grade and age factors given above, or by taking the ratio of the raked estimated to the unadjusted estimates for each cell. Notice that none of the margins for the unadjusted estimates differ by much from the control totals, with the largest mean raking factor of 1.30 applied to the unadjusted 2,300 2nd graders to match the control total of 3,000 2nd graders. However, now look at the mean cell factors. In the column corresponding to children who are 6 years old, the adjustment for those in kindergarten is 0.75 and for those in 2nd grade is 2.03. These factors occur even though the overall unadjusted estimate was only 6 percent less than the control total for all 6-year-olds. Across rows or columns, there is substantial variation in the mean raking factors.

Table KA-3. Mean adjustments by cell for the raked survey estimates, by age and grade: 2001

Grade	Age			Total
	5	6	7	
K.....	1.00	0.75	0.47	0.93
1	1.51	1.14	0.71	1.03
2	(1)	2.03	1.27	1.30
Total	1.03	1.06	1.06	1.05

¹ Estimates not given because there were no sample cases with the age/grade combination.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Survey Program (NHES), 2001.

Heuristically, the raking adjustment causes these variations in the mean cell factors because it is attempting to meet the marginal constraints without perturbing the associations in the original table. If the raking dimensions are based on independent variables (i.e., all the interactions are zero), the raking will converge very quickly. If the dimensions are highly correlated, then more iterations are generally required. With highly correlated dimensions, there is also the possibility that the associations in the unadjusted estimates may not be consistent with control totals and the raking process will never converge.

For example, suppose the unadjusted survey estimates fell on the diagonal with 3,400 children who are age 5 and in kindergarten, 3,600 children who are age 6 and in 1st grade, and 3,500 children who are age 7 and in 2nd grade. Assuming the same control totals as given above, the raked estimates never converge.¹⁷

Even when the raking does converge, it is important to realize that the associations that are being preserved are based on a sample and are subject to sampling variability, as well as other sources of error. The other sources of error may not be the same for the survey and the source of the control totals. For example, it was noted above that the cross-product ratio of the subtable of children aged 5 and 7 and in kindergarten or 1st grade has the value of 192. This cross-product ratio is computed from the sample cases in the four cells corresponding to a subtable of the full sample. If the sample size in the subtable is small, then the estimated cross-product ratio may not be very stable (even though generally these ratios are stable with moderate cell sizes).

When the sample sizes in subtables of the raking dimensions are small, then it is possible that the raking procedure that tries to preserve the associations based on small samples may have some undesirable features. This situation can arise in many settings, but it is most common when the dimensions are highly correlated, such as with age and grade. One remedy is to combine the dimensions that are highly correlated into one dimension and collapse the cells as needed to retain a large enough sample size in every collapsed cell. Of course, this option is not always possible for the reasons stated earlier.

Response and Coverage Issues

Earlier it was noted that the poststratified estimator assumed complete unit response, and the population cell weighting estimator was based on the responding units. More accurately, the poststratified estimator assumes complete unit response and coverage, while the population cell weighting estimator is based on the responding, covered units. It is assumed that the control totals are based on a source with 100 percent coverage. The same distinction applies with raking, and the raked estimator given by (KA-3) corresponds to the population cell weighting estimator in this regard.

When the data are based on incomplete data (due to either unit nonresponse or noncoverage), it is necessary to use a model to evaluate the statistical properties of the estimates. Kalton and Maligalig

¹⁷ Ireland and Kullback (1968) show that raking will always converge in this situation if there are no cells with zero counts.

(1991) show that the population cell weighting estimator is unbiased under the response model that assumes all units within a cell have the same probability of being observed (including only response and coverage propensities). Moreover, they show that if the probability of being observed within a cell is the product of the row and column probabilities, then the population raking estimator is unbiased.

Since most survey estimates are subject to both nonresponse and undercoverage, the implication is that the raked estimates will be biased unless there are no interactions of the auxiliary variables used to create the raking dimensions with the unit response and coverage rates. In the examples above, this would mean that probability of being observed may differ by age and grade levels, but the overall probability of being observed must be the product of the age and grade factors to insure unbiasedness under the model.

The practical implications of these results are somewhat limited. First, it is difficult to ascertain whether unit response rates are products of the row and column effects in most situations. Coverage rates may be estimated in some cases, but the coverage estimates for individual cells are often poorly estimated because of small sample sizes. Second, the data are not expected to conform to the model completely. Often, the bias remaining after adjusting for the row and column effects is smaller than if no adjustments were made. This statement corresponds to the common observation that higher order interactions are generally smaller than lower order effects, but there are exceptions. Third, Little and Wu (1991) show that raking generally works well, even if the model that justifies raking does not hold.

Consequently, it is a reasonable and good practice to use raking in these situations, absent reliable data that indicates the model of multiplicative factors for the levels of the dimensions is invalid. If raking is used and the model is inappropriate, then the bias of the raked estimates still will be smaller than bias of the unadjusted estimates in most cases.

ATTACHMENT KB

MEMORANDUM DOCUMENTING PRELIMINARY INVESTIGATION OF WEIGHTS

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TO: Chris Chapman April 17, 2002
FROM: Mike Brick, Mary Hagedorn, Jill Montaquila **MEMO:** MISC-3.0
SUBJECT: NHES:2001 Weighting—An examination of alternatives for raking the ECPP and ASPA weights

This memorandum addresses issues concerning the methodology used to compute weights for the Early Childhood Program Participation (ECPP) and Before- and After-School Programs and Activities (ASPAs) surveys of the 2001 National Household Education Surveys Program. NCES questioned the number of 5-year-olds in the weighted NHES:2001 estimates compared with Current Population Survey (CPS) estimates. In the NHES:2001, the estimate of the total number of 5-year-olds was 3,522,000 compared to 4,037,000 in the CPS. In light of this discrepancy, we reviewed the weighting steps and evaluated alternative approaches for raking the ECPP and ASPA weights. The review of the weighting steps did not indicate any problems in the implementation of the methodology. The remainder of this memorandum will focus on the raking alternatives.

Section 1 gives an overview of the raking alternatives considered in this evaluation. In section 2, estimates based on weights computed using each of these alternatives are compared to external sources. Summary statistics for the weights from each raking alternative are given in section 3. Finally, section 4 contains recommendations for the ECPP-NHES:2001 and ASPA-NHES:2001 data files and considerations for the development of weighting methodology for future NHES surveys.

1. Overview of raking alternatives

The dimensions originally used in raking the ECPP and ASPA weights were race/ethnicity by household income, Census region by urbanicity, and home tenure by age/grade of the child. For the last dimension, single year of age was used only for infants (ages 0-2). Unenrolled children ages 3 through 6 were grouped in one category, and enrolled children in this age range were classified into grade categories. Thus, although the NHES and CPS estimates match for unenrolled children ages 3-6, and for kindergartners, for example, the estimates of total number of 5 year olds do not match.

For this evaluation, two alternative sets of raking dimensions were considered. In both cases, the first two dimensions (race/ethnicity by household income, and Census region by urbanicity) remained the same. In Alternative 1, the home tenure by age/grade dimension was replaced with two dimensions: single year of age (alone), and home tenure by grade. In Alternative 2, the home tenure by age/grade dimension was replaced with a single dimension: single year of age.

2. Comparison to estimates from external sources

Tables 1 and 2 give estimates of the total number of children by age and by grade, respectively, for selected ages and grades (chosen because of their proximity to kindergarten). Due to the forced matching by age, Alternatives 1 and 2 both alleviate the shortfall of 5-year-olds that is present under the original raking approach. However, as seen in table 2, Alternative 2 results in a substantially higher estimate of the total number of kindergartners than the other approaches.

Table 1. Estimates of total number of children by age (in thousands) CPS:1999 and NHES:2001

Age	October 1999 CPS	NHES:2001		
		Original (age/grade—single dimension)	Alternative 1 (age and grade— separate dimensions)	Alternative 2 (age only)
4	4,021	3,976	4,028	4,028
5	4,037	3,525	4,044	4,044
6	4,060	4,062	4,067	4,067
7	4,083	3,817	4,090	4,090

SOURCE: U.S. Department of Education, Bureau of the Census, Current Population Survey (CPS), 1999; and U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

Table 2. Estimates of total number of children by grade (in thousands) CPS:1999 and NHES:2001

Grade	October 1999 CPS	NHES:2001		
		Original (age/grade—single dimension)	Alternative 1 (age and grade— separate dimensions)	Alternative 2 (age only)
Nursery school/ preschool	4,578	4,586	4,586	5,104
Kindergarten	3,825	3,831	3,831	4,417
1 st grade	4,326	4,333	4,333	4,269
2 nd grade	3,927	3,934	3,934	4,093

SOURCE: U.S. Department of Education, Bureau of the Census, Current Population Survey (CPS), 1999; and U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

In order to examine the discrepancy in the estimates of the total number of kindergartners, we sought estimates from other sources. The Common Core of Data (CCD) Survey estimated that in Fall 1998, 3,442,584 children were enrolled in public kindergarten. The October 1999 CPS estimates of public and private kindergarten enrollment were 3.167 million and 658 thousand, respectively. The Early Childhood Longitudinal Survey-Kindergarten Cohort (ECLS-K) estimated the total number of children enrolled in kindergarten in Fall 1998 to be 3.866 million. Based on these figures, we suspect that the total number of kindergartners is between 3.8 and 4.1 million.

Table 3. Mean weight for each of the raking alternative, by ALLGRADE and AGE2000: NHES:2001

ALLGRADE	AGE2000	n	Mean nonresponse adjusted weight ¹	Mean Raked Weight		
				Original (age/grade—single dimension)	Alternative 1 (age and grade—separate dimensions)	Alternative 2 (age only)
0.....	0	1,070	2,987	3,615	3,615	3,615
0.....	1	1,258	2,874	3,102	3,102	3,102
0.....	2	1,271	2,997	3,092	3,092	3,092
0.....	3	774	2,688	3,085	3,121	2,886
0.....	4	470	2,571	3,011	2,981	2,635
0.....	5	64	2,716	2,922	2,755	2,751
0.....	6	2	1,613	2,148	752	1,450
1.....	5	8	4,487	4,361	11,721	4,527
1.....	6	554	5,158	5,321	6,196	5,114
1.....	7	235	5,275	5,473	3,367	5,702
1.....	8	9	6,911	6,805	1,697	6,262
1.....	9	1	3,262	3,359	484	3,214
2.....	6	6	6,224	5,810	14,035	5,797
2.....	7	484	4,980	4,946	6,352	5,363
2.....	8	266	5,495	5,372	2,827	5,210
2.....	9	15	5,020	5,095	1,551	5,131
3.....	7	13	5,972	6,097	16,077	6,478
3.....	8	476	5,305	5,478	6,376	5,124
3.....	9	260	5,677	5,897	4,031	5,587
3.....	10	23	4,286	5,172	1,954	5,038
4.....	8	15	5,257	5,089	10,278	5,052
4.....	9	545	4,972	4,774	5,691	4,938
4.....	10	299	4,955	4,731	3,045	4,586
4.....	11	20	4,701	5,075	1,917	5,089
4.....	12	3	2,898	2,706	526	2,459
4.....	15	1	4,893	5,632	560	5,719
5.....	9	14	3,359	3,134	6,859	3,296
5.....	10	572	4,837	4,488	5,268	4,421
5.....	11	297	5,286	4,934	3,420	4,976
5.....	12	20	3,512	3,856	1,485	3,839
5.....	13	1	1,408	1,089	230	1,062
6.....	10	18	2,734	2,487	5,087	2,454
6.....	11	948	2,771	2,552	3,072	2,566
6.....	12	548	2,785	2,647	1,780	2,605
6.....	13	38	2,307	2,601	1,065	2,834
6.....	14	3	2,223	3,105	738	2,133

See notes at end of table.

**Table 3. Mean weight for each of the raking alternative, by ALLGRADE and AGE2000
NHES:2001—Continued**

ALLGRADE	AGE2000	n	Mean nonresponse adjusted weight*	Mean Raked Weight		
				Original (age/grade—single dimension)	Alternative 1 (age and grade— separate dimensions)	Alternative 2 (age only)
7.....	11	14	2,554	2,353	5,169	2,467
7.....	12	1,009	2,537	2,379	2,820	2,349
7.....	13	529	2,582	2,418	1,685	2,515
7.....	14	66	2,389	2,445	1,027	1,730
7.....	15	4	2,037	1,671	846	1,471
8.....	11	1	1,481	2,511	9,688	2,372
8.....	12	15	1,825	1,856	3,663	1,710
8.....	13	924	2,564	2,569	3,013	2,464
8.....	14	497	2,735	2,768	1,914	1,812
8.....	15	56	2,870	3,244	2,897	2,760
K.....	3	4	3,726	3,268	4,276	3,874
K.....	4	30	4,304	3,848	4,970	4,297
K.....	5	539	5,488	4,813	5,773	5,630
K.....	6	194	5,960	5,414	2,774	6,022
K.....	7	5	13,299	11,568	3,008	13,913
N.....	3	585	2,710	2,490	2,541	2,866
N.....	4	992	2,690	2,465	2,498	2,682
N.....	5	277	2,794	2,559	2,391	2,877
N.....	6	6	4,830	4,195	1,727	4,561
U.....	8	1	2,528	3,979	5,570	4,837
U.....	9	2	2,617	2,920	3,688	3,191
U.....	12	1	5,553	4,685	5,343	4,733

¹ Normalized so that the weighted total of the nonresponse adjusted weights is equal to the weighted total of the raked weights.

NOTE: Rows highlighted using bold font are the modal grades for each age (ages 3 and older).

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Household Education Surveys Program (NHES), 2001.

3. Summary statistics for each alternative

Table 3 gives the mean weight obtained using each of the raking alternatives. Because no differential sampling or weighting was done by age within a given grade, it is expected that the mean weights would be relatively uniform for all ages within a given grade. This is the case under the original approach and Alternative 2, but is not the case with Alternative 1.

4. Recommendations

As a result of the findings of this evaluation, we recommend using the set of weights calculated using Alternative 1 (with single year of age and home tenure by grade as separate dimensions) on the ECPP and ASPA data files. This approach forces NHES totals by age or by grade (separately) to match totals obtained from the CPS. Although the lack of uniformity of the mean weights by age, within each grade category, is disconcerting, we believe the desire to match weighted totals by age and by grade

outweighs this concern. We have examined the expected effect of the variation in weights on the precision of the survey estimates, and estimate a root mean design effect (for “overall” estimates—i.e., for the entire ECPP and ASPA populations as a whole) due to unequal weighting of 1.30 under Alternative 1, compared to 1.25 under the original raking approach. We have also examined the effect on the root mean design effect of estimates by grade and found nothing alarming.

We recommend continued investigation of this and continued evaluation of these alternative methodologies, as we prepare for weighting for the NHES:2003 surveys. We propose to examine estimates from other data sources, including the Private School Survey and the American Community Survey, in an attempt to ascertain the “correct” level of the estimated total number of kindergartners.

ATTACHMENT KC

TELEPHONE COVERAGE BY AGE AND GRADE

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Table KC-1 gives estimates from the October 1999 CPS of the percentage of children residing in telephone households. The telephone coverage rates generally increase as age or grade increases. However, there is an interesting pattern in the coverage rates for age/grade combinations. For a given grade, telephone coverage tends to be highest for the modal age, and decreasing in either direction away from the modal age.

Table KC-1. Percentage of children residing in telephone households, by age and grade: CPS:1999

Grade	Age															Overall	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14		15
Overall	93	92	92	94	93	93	93	93	94	94	94	95	94	96	95	95	94
Nursery school	†	†	†	94	94	94	83	†	†	†	†	†	†	†	†	†	94
Kindergarten	†	†	†	84	90	93	92	100	†	†	†	†	†	†	†	†	93
Grade 1.....	†	†	†	†	†	92	94	93	77	90	†	†	†	†	†	†	93
Grade 2.....	†	†	†	†	†	100	94	93	93	77	100	†	†	†	†	†	93
Grade 3.....	†	†	†	†	†	†	83	97	95	94	80	88	†	†	†	†	94
Grade 4.....	†	†	†	†	†	†	†	66	93	95	92	80	81	†	†	†	94
Grade 5.....	†	†	†	†	†	†	†	†	78	94	95	93	87	91	†	†	95
Grade 6.....	†	†	†	†	†	†	†	†	†	86	96	96	92	87	69	†	95
Grade 7.....	†	†	†	†	†	†	†	†	†	†	100	90	96	95	87	91	95
Grade 8.....	†	†	†	†	†	†	†	†	†	†	†	91	94	96	95	86	95

† Not applicable.

SOURCE: U.S. Department of Commerce, Bureau of the Census, Current Population Survey (CPS), October 1999.

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APPENDIX L

ASPA Reinterview Questionnaire

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ASPA REINTERVIEW

(11/2000)

INTRO. INTRO. Hello, my name is (INTERVIEWER). A few weeks ago, someone from our staff conducted an interview with you about (CHILD) for the U.S. Department of Education. We are reasking some selected questions from the interview as a measure of survey quality. These questions should only take a few minutes.

School Characteristics [Path= S, H (HOMSCFLG=1)]

YUT2

If PATH = S or (PATH=H and HOMSCFLG=1), go to RSD9. Else, go to PTINTRO.

RSD9. The first few questions are about (CHILD)'s school. At what time does (CHILD)'s school usually start?

SSTRTHR2 HOUR.....
REFUSED-7
DON'T KNOW-8

SSTRTMN2 MINUTE
REFUSED-7
DON'T KNOW-8

SSTRAMP2 AM..... 1
PM..... 2
REFUSED-7
DON'T KNOW-8

SD10. At what time does (his/her) school usually let out?

SENDHR2 HOUR.....
REFUSED-7
DON'T KNOW-8

SENDMN2 MINUTE
REFUSED-7
DON'T KNOW-8

SENDAMP2 AM..... 1
PM..... 2
REFUSED-7
DON'T KNOW-8

SD11. How long does it usually take for (CHILD) to get from home to school?

SSCHOMM2 MINUTES
REFUSED-7
DON'T KNOW-8

Relative Care

If SF9 = 1 (child has relative care at least once each week), go to next box. Else, go to first box after RSF26.

If SF4 = 2 or 3 (care provided in other home), ask RSF6. Else, go to box before RSF15.

RSF6. When we spoke with you last time, you told us that (CHILD) is cared for by (his/her) (RELATIVE) for about (# HOURS) hours each week during out-of-school time. How long does it usually take to go from your home to (CHILD)'s (RELATIVE)'s home?

- RCHOMM2** MINUTES
 REFUSED -7
 DON'T KNOW -8
 NOW SAYS NO RELATIVE CARE ARRANGEMENT 99 (GO TO FIRST BOX AFTER RSF26)

SF7. How long does it usually take to go from (CHILD)'s school to (his/her) (RELATIVE)'s home?

- RCSCMM2** MINUTES
 REFUSED -7
 DON'T KNOW -8

If SF8 = 2 or 3 (after-school care), ask RSF15. Else, go to box before RSF26.

RSF15. (When we spoke with you last time, you told us that (CHILD) is cared for by (his/her) (RELATIVE) for about (# HOURS) hours each week during out-of-school time.) How many of the hours that (CHILD) is cared for by (his/her) (RELATIVE), if any, occur after 6:00 p.m. each week? [DISPLAY TOTAL HOURS]

- RCAFT62** HOURS.....
 REFUSED -7
 DON'T KNOW -8
 NOW SAYS NO RELATIVE CARE ARRANGEMENT 99 (GO TO FIRST BOX AFTER RSF26)

SF24. Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends with (his/her) (RELATIVE). During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

- RCAEDUC2** HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL 1
RCACOMP2 COMPUTERS..... 2
RCAREAD2 READING/WRITING (NON-SCHOOL-RELATED) 3
RCAART2 ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) .. 4
RCACHOR2 CHORES/WORK..... 5
RCAOUTP2 OUTDOOR PLAY/ACTIVITIES/SPORTS 6
RCAINPL2 INDOOR PLAY 7
RCAPHON2 TELEPHONE..... 8
RCAEAT2 EATING/SNACKS 9
RCATV2 TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC 10
RCATALK2 TALKING TO PARENT/CARE PROVIDER 11
RCAOTHE2 OTHER 91
RCAOTHO2 SPECIFY _____
 REFUSED -7
 DON'T KNOW -8

*If SF4 = 1 (care is in child's home), ask RSF26a, b, c, and e.
Else, ask RSF26a-e.*

RSF26. (When we spoke with you last time, you told us that (CHILD) is cared for by (his/her) (RELATIVE) for about (# HOURS) hours each week during out-of-school time.) How would you rate the following aspects of this arrangement on a scale from excellent to poor? How about...[ENTER 99 IF NOW SAYS NO RELATIVE CARE ARRANGEMENT]

Excellent Good Fair Poor R DK NA

RCQUAL2 a. The quality of (CHILD)'s activities? Would you say
excellent, good, fair, or poor? 1 2 3 4 -7 -8 99

If RSF26a = 99, skip RSF26b-e, and go to next box. Else, ask RSF26b.

RCAFFOR2 b. The affordability of the arrangement? 1 2 3 4 -7 -8
RCRELIB2 c. The reliability of the arrangement? 1 2 3 4 -7 -8
RCTRANS2 d. Transportation of (CHILD) to and from the arrangement?.... 1 2 3 4 -7 -8
RCSAFTY2 e. (CHILD)'s safety and well-being in this arrangement? 1 2 3 4 -7 -8

NONRELATIVE CARE

If SG8 = 1 (child has nonrelative care at least once each week), go to next box. Else, go to box before RSH3.

*If SG3 = 2 or 3 (care provided in other home), ask RSG5.
Else, go to box before RSG14.*

RSG5. When we spoke with you last time, you told us that (CHILD) is cared for by a person who is not a relative for (# HOURS) hours each week during out-of-school time. How long does it usually take to go from your home to that person's home?

NCHOMM2 MINUTES
 REFUSED -7
 DON'T KNOW -8
 NOW SAYS NO NONRELATIVE CARE ARRANGEMENT 99 (GO TO BOX BEFORE RSH3)

SG6. How long does it usually take to go from (CHILD)'s school to that person's home?

NCSCMM2 MINUTES
 REFUSED -7
 DON'T KNOW -8

If SG7 = 2 or 3 (after-school care), ask RSG14. Else, go to RSG18A.

RSG14. (When we spoke with you last time, you told us that (CHILD) is cared for by a person who is not a relative for (# HOURS) hours each week during out-of-school time.) How many of the hours that (CHILD) is cared for by that person, if any, occur after 6:00 pm. each week? [DISPLAY TOTAL HOURS]

- NCAFT62**
- HOURS.....□□
 - REFUSED-7
 - DON'T KNOW-8
 - NOW SAYS NO NONRELATIVE CARE ARRANGEMENT 99 (GO TO BOX BEFORE RSH3)

RSG18A. (When we spoke with you last time, you told us that (CHILD) is cared for by a person who is not a relative for (# HOURS) hours each week during out-of-school time.) Is that person age 18 or older?

- NCAGE2**
- YES 1 (GO TO BOX BEFORE SG23)
 - NO 2 (GO TO SG18AOV)
 - REFUSED-7 (GO TO BOX BEFORE SG23)
 - DON'T KNOW-8 (GO TO BOX BEFORE SG23)
 - NOW SAYS NO NONRELATIVE CARE ARRANGEMENT 99 (GO TO BOX BEFORE RSH3)

SG18AOV. How old is that person?

- NCAGEYY2**
- YEARS□□
 - REFUSED-7
 - DON'T KNOW-8

If SG7 = 2 or 3, (after-school care), ask SG23. Else, go to RSG25.

SG23. Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends with your care provider. During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

- NCAEDUC2** HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL..... 1
- NCACOMP2** COMPUTERS..... 2
- NCAREAD2** READING/WRITING (NON-SCHOOL-RELATED) 3
- NCAART2** ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) .. 4
- NCACHOR2** CHORES/WORK..... 5
- NCAOUTP2** OUTDOOR PLAY/ACTIVITIES/SPORTS 6
- NCAINPL2** INDOOR PLAY 7
- NCAPHON2** TELEPHONE..... 8
- NCAEAT2** EATING/SNACKS 9
- NCATV2** TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC 10
- NCATALK2** TALKING TO PARENT/CARE PROVIDER 11
- NCAOTHE2** OTHER 91
- NCAOTHO2** SPECIFY _____
- REFUSED-7
- DON'T KNOW-8

If SG3 = 1, ask a, b, c, and e. Else, ask a-e.

RSG25. How would you rate the following aspects of this arrangement that you have for (CHILD) with this care provider? How about...[ENTER 99 IF NOW SAYS NO NONRELATIVE CARE ARRANGEMENT]

Excellent Good Fair Poor R DK NA

NCQUAL2 a. The quality of (CHILD)'s activities? Would you say
 excellent, good, fair, or poor? 1 2 3 4 -7 -8 99

If RSG25a = 99, skip RSG25b-e, and go to next box.
Else, ask RSG25b.

NCAFFOR2 b. The affordability of the arrangement? 1 2 3 4 -7 -8
NCRELIA2 c. The reliability of the arrangement? 1 2 3 4 -7 -8
NCTRANS2 d. Transportation of (CHILD) to and from the arrangement?.... 1 2 3 4 -7 -8
NCSAFTY2 e. (CHILD)'s safety and well-being in this arrangement? 1 2 3 4 -7 -8

Center-based Programs

If SH9 = 1 (child attends center-based program at least
once each week), ask RSH3. Else, go to SIINTRO.

RSH3. When we spoke with you last time, you said that (CHILD) spends (# HOURS) hours per week (before) (and) (after) school in a center-based program. Is (CHILD) signed up to attend the program on particular days and times?

CPSIGNU2 YES 1
 NO 2
 NOW SAYS NO CENTER-BASED ARRANGEMENT 99 (GO TO SIINTRO)
 REFUSED -7
 DON'T KNOW -8

If SH5 = 1, (program is at child's school) go to box before
RSH15. Else, ask SH6.

SH6. How long does it usually take to go from your home to that program?

CPHOMM2 MINUTES □□
 REFUSED -7
 DON'T KNOW -8

SH7. How long does it usually take to go from (CHILD)'s school to that program?

CPSCMM2 MINUTES □□
 REFUSED -7
 DON'T KNOW -8

If SH8 = 2 or 3 (after-school program), ask RSH15. Else,
go to SH20.

SH15. How many of the hours that (CHILD) is in the program, if any, occur after 6:00 p.m. each week?
[DISPLAY TOTAL HOURS]

HOURS.....□□
CPAFT62 REFUSED-7
 DON'T KNOW-8

SH20. How many children are usually in (CHILD)'s group, at the same time, at that program, counting (CHILD)? [PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT MAJORITY OF TIME CHILD IS AT PROGRAM.]

NUMBER.....□□
CPKIDS2 REFUSED-7
 DON'T KNOW-8

SH21. How many adults usually are in (CHILD)'s group, at the same time, at that program?
[PROBE: IF R ANSWERS "IT VARIES," ASK ABOUT MAJORITY OF TIME CHILD IS AT PROGRAM.]

NUMBER.....□□
CPADLTS2 REFUSED-7
 DON'T KNOW-8

SH22. Are the children in (CHILD)'s group within the program about the same age as (him/her), mostly older, or mostly younger?

CPCHAGE2 ABOUT THE SAME AGE.....1
 MOSTLY OLDER2
 MOSTLY YOUNGER.....3
 SOME OLDER, SOME YOUNGER4
 REFUSED-7
 DON'T KNOW-8

If SH8 = 1 or 3, (before-school program), ask SH24. Else, go to box before SH25.

SH24. Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends at this program. During those before-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

CPBEDUC2 HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL 1
CPBCOMP2 COMPUTERS..... 2
CPBREAD2 READING/WRITING (NON-SCHOOL-RELATED) 3
CPBART2 ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) .. 4
CPBCHOR2 CHORES/WORK..... 5
CPBOUPT2 OUTDOOR PLAY/ACTIVITIES/SPORTS 6
CPBINPL2 INDOOR PLAY 7
CPBPHON2 TELEPHONE..... 8
CPBEAT2 EATING/SNACKS 9
CPBTV2 TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC 10
CPBTALK2 TALKING TO PARENT/CARE PROVIDER 11
CPBOTHE2 OTHER 91
CPBOTHO2 SPECIFY _____
 REFUSED-7
 DON'T KNOW-8

If SH8 = 2 or 3, (after-school program), ask SH25. Else, go to SH26.

SH25. (Now I'd like to ask about (CHILD)'s activities during the time (he/she) spends at this program.) During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

CPAEDUC2	HOMework/SCHOOL-RELATED/ EDUCATIONAL	1
CPACOMP2	COMPUTERS.....	2
CPAREAD2	READING/WRITING (NON-SCHOOL-RELATED)	3
CPAART2	ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) ..	4
CPACHOR2	CHORES/WORK.....	5
CPAOUTP2	OUTDOOR PLAY/ACTIVITIES/SPORTS	6
CPAINPL2	INDOOR PLAY	7
CPAPHON2	TELEPHONE.....	8
CPAEAT2	EATING/SNACKS	9
CPATV2	TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC	10
CPATALK2	TALKING TO PARENT/CARE PROVIDER	11
CPAOTHE2	OTHER	91
CPAOTHO2	SPECIFY _____	
	REFUSED	-7
	DON'T KNOW	-8

SH26. Does the program set aside time for physical activities like sports or active games?

	YES	1
CPPHYS2	NO.....	2
	REFUSED	-7
	DON'T KNOW	-8

SH27. Does the program set aside time for (CHILD) to do homework?

	YES	1
CPHOMWK2	NO.....	2
	REFUSED	-7
	DON'T KNOW	-8

If SH4 = 1, (program is in child's home), ask SH34a, b, c, and e. Else, ask SH34a-e.

SH34. How would you rate the following aspects of (CHILD)'s program? How about...

Excellent Good Fair Poor R DK

CPQUAL2	a. The quality of (CHILD)'s activities? Would you say excellent, good, fair, or poor?	1	2	3	4	-7	-8
CPAFFOR2	b. The affordability of the arrangement?.....	1	2	3	4	-7	-8
CPRELIA2	c. The reliability of the arrangement?	1	2	3	4	-7	-8
CPTRANS2	d. Transportation of (CHILD) to and from the arrangement?....	1	2	3	4	-7	-8
CPSAFTY2	e. (CHILD)'s safety and well-being in this arrangement?	1	2	3	4	-7	-8

Before- and After-School Activities

SIINTRO. Now let's talk about any activities that (CHILD) might do on weekdays outside of school hours that are not part of a before- or after-school program. These might include activities such as organized sports, music lessons, scouts, or religious education.

RSI1. (Not counting the program we have already talked about,) Is (CHILD) participating in any activities on weekdays before or after school on a regular basis?

- ASNOW2**
- YES 1 (GO TO SI2)
 - NO..... 2 (GO TO NEXT BOX)
 - REFUSED-7 (GO TO NEXT BOX)
 - DON'T KNOW-8 (GO TO NEXT BOX)

If SI1 = 1, go to box before RSI13. Else, go to first box after RSI14.

SI2. Since the beginning of the school year, has (CHILD) participated in any of the following kinds of before- or after-school activities? How about... [IF YES: Were those activities provided by (CHILD)'s school?]

	YES	NO	R	DK	YES	NO	R	DK		
ASARTS2	a. Arts, like music, dance, or painting?	1	2	-7	-8	1	2	-7	-8	ASSCART2
ASSPORT2	b. Sports?.....	1	2	-7	-8	1	2	-7	-8	ASSCSPO2
ASCLUB2	c. Clubs, like yearbook, debate, or a book club?.....	1	2	-7	-8	1	2	-7	-8	ASSCCLU2
ASACAD2	d. Other academic activities, like tutoring, or math lab? .	1	2	-7	-8	1	2	-7	-8	ASSCACA2
ASVOLUN2	e. Volunteer work or community service?.....	1	2	-7	-8	1	2	-7	-8	ASSCVOL2

If SI2f = 1 and SD1 = 2 (child is in a private school), ask SI2f_followup (on whether child's school provided the activity). Else, go to SI2g.

ASRELI2	f. Religious activities or instruction?.....	1	2	-7	-8	1	2	-7	-8	ASSCREL2
ASSCOUT2	g. Scouts?	1	2	-7	-8					
ASOTHER2	i. Any other activities?.....	1	2	-7	-8	1	2	-7	-8	ASSCOTH2
ASOTHEO2	(specify)_____									

SI3. Does (CHILD) currently participate in activities or lessons before or after school on a regularly scheduled basis at least once each week?

- ASWEEK2**
- YES 1 (GO TO SI8)
 - NO..... 2 (GO TO BOX BEFORE RSI14)
 - REFUSED-7 (GO TO BOX BEFORE RSI14)
 - DON'T KNOW-8 (GO TO BOX BEFORE RSI14)

SI8. Does (CHILD)'s participation in these activities help to cover the hours when you need adult supervision for (him/her)?

- ASCOVER2**
- YES 1
 - NO..... 2
 - REFUSED-7
 - DON'T KNOW-8

SI2A. Does (CHILD) participate in those activities or lessons before school, after school, or both?

- ASBFAFT2** BEFORE SCHOOL 1
- AFTER SCHOOL..... 2
- BOTH 3
- REFUSED-7
- DON'T KNOW-8

SI9. How many days each week does (CHILD) currently participate in activities or lessons (before) (or) (after) school?

- ASDAYS2** DAYS
- REFUSED-7
- DON'T KNOW-8

If SI2A = 1 or 3, (before-school activities), ask SI10. Else, go to box before SI10A.

SI10. How many hours each week does (CHILD) currently participate in activities or lessons before school?

- ABSHRS2** HOURS.....
- REFUSED-7
- DON'T KNOW-8

If SI2A = 2 or 3, (after-school activities), ask SI10A. Else, go to box before SI11.

SI10A. How many hours each week does (CHILD) currently participate in activities or lessons after school?

- ASHRS2** HOURS.....
- REFUSED-7
- DON'T KNOW-8

If SI9 or SI10 or SI10A = -7 or -8, or SI9 = 1, go to box before SI12. Else, ask SI11.

SI11. On the days that (CHILD) takes part in activities or lessons, that would be about (HOURS) per day on average. Is that correct?

- ASAVGHR2** YES 1 (GO TO BOX BEFORE SI12)
- NO..... 2 (CORRECTION SCREEN)
- REFUSED-7 (GO TO BOX BEFORE SI12)
- DON'T KNOW-8 (GO TO BOX BEFORE SI12)

If SI2A = 2 or 3, (after-school activities), ask SI12. Else, go to box before RSI14.

SI12. How many of those hours, if any, occur after 6:00 p.m. each week? [DISPLAY TOTAL HOURS]

- ASAFT62** HOURS.....
- REFUSED-7
- DON'T KNOW-8

If RSI1 = 2, -7, -8 and SI1 = 1, ask RSI13. Else, go to box before RSI14.

RSI13. Since the last time we spoke with you, on (DATE), have any of (CHILD)'s activities or lessons ended or been discontinued?

- ACTEND2**
- YES 1
 - NO..... 2
 - REFUSED-7
 - DON'T KNOW -8

If RSI1 = 1 and SI1 = 2, -7, -8, ask RSI14. Else, go to first box after RSI14.

RSI14. And since (DATE), has (CHILD) started any new activities or lessons?

- ACTNEW2**
- YES 1
 - NO..... 2
 - REFUSED-7
 - DON'T KNOW -8

Self Care

If SJ3 = 1, (child is in self-care at least once each week), go to next box. Else, go to box before SK5.

If SJ2 = 2 or 3, (self-care after-school), ask RSJ14. Else, go to RSJ17.

RSJ14. Last time we spoke, you said that (CHILD) is responsible for (himself/herself) on a regular basis during some after-school hours. Where does (CHILD) usually spend that time after school?
[CODE ALL THAT APPLY.]

- SCAHOMI2** OWN HOME/INSIDE 1
- SCAHOMO2** OWN HOME/OUTSIDE..... 2
- SCARELA2** A RELATIVE'S HOME 3
- SCAFRND2** A FRIEND'S HOME 4
- SCANEIG2** A NEIGHBOR'S HOME..... 5
- SCAPUBL2** A PUBLIC PLACE, FOR EXAMPLE, A LIBRARY OR MALL..... 6
- SCACENT2** A COMMUNITY OR RECREATIONAL CENTER 7
- SCAOUT2** OUTDOORS 8
- SCASCH2** A SCHOOL 9
- SCAPLOT2** OTHER 91
- SCAPLOS2** SPECIFY _____
- REFUSED-7
- DON'T KNOW -8
- SCANONE2** NOW SAYS NO SELF-CARE ARRANGEMENT..... 99 (GO TO BOX BEFORE SK5)

SJ15. During those after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

SCAEDUC2	HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL.....	1
SCACOMP2	COMPUTERS.....	2
SCAREAD2	READING/WRITING (NON-SCHOOL-RELATED)	3
SCAART2	ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) ..	4
SCACHOR2	CHORES/WORK.....	5
SCAOUTP2	OUTDOOR PLAY/ACTIVITIES/SPORTS	6
SCAINPL2	INDOOR PLAY	7
SCAPHON2	TELEPHONE.....	8
SCAEAT2	EATING/SNACKS	9
SCATV2	TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC	10
SCATALK2	TALKING TO PARENT/CARE PROVIDER	11
SCAOTH2	OTHER	91
SCAOTH02	SPECIFY _____	
	REFUSED	-7
	DON'T KNOW	-8

RSJ8. How many of the hours that (CHILD) is responsible for (himself/herself) after school, if any, occur after 6:00 p.m. each week? [DISPLAY TOTAL HOURS]

	HOURS.....	<input type="checkbox"/> <input type="checkbox"/>
SCAFT62	REFUSED	-7
	DON'T KNOW	-8

RSJ17. (Last time we spoke, you said that child is responsible for (himself/herself) on a regular basis during some out-of-school hours.) Can (CHILD) reach you (or) (his/her) (parents) (mother/stepmother/foster mother) (or) (father/stepfather/foster father) (or another adult in the household) whenever (he/she) might need to during out-of-school hours?

	YES	1
SCREACH2	NO	2
	REFUSED	-7
	DON'T KNOW	-8

Parental Care

If SF1, SG1, SH1, SI8 (reinterview response), SJ1 = 2, -7, -8 (no type of nonparental supervision before or after school) or all of SF8, SG7, SH8, SJ2 not = 2 or 3 (no after-school arrangement), then go to SK5. Else, go to box before SK7.

SK5. Where does (CHILD) usually spend (his/her) time during after-school hours?
 [CODE ALL THAT APPLY.]

PAAHMIN2	OWN HOME/INSIDE	1
PAAHMOU2	OWN HOME/OUTSIDE.....	2
PAARELA2	A RELATIVE'S HOME	3
PAAFRND2	A FRIEND'S HOME	4
PAANEIG2	A NEIGHBOR'S HOME.....	5
PAAPUBL2	A PUBLIC PLACE, FOR EXAMPLE, A LIBRARY OR MALL.....	6
PAACENT2	A COMMUNITY OR RECREATIONAL CENTER	7
PAAOUT2	OUTDOORS	8
PAASCH2	A SCHOOL	9
PAAPLOT2	OTHER	91
PAAPLOS2	SPECIFY _____	
	REFUSED	-7
	DON'T KNOW	-8

SK6. During these after-school hours, what does (CHILD) spend most of (his/her) time doing? You may name up to three things. [CODE UP TO THREE ACTIVITIES.]

PAAEDUC2	HOMEWORK/SCHOOL-RELATED/ EDUCATIONAL.....	1
PAACOMP2	COMPUTERS.....	2
PAAREAD2	READING/WRITING (NON-SCHOOL-RELATED)	3
PAAART2	ARTS (PERFORM OR STUDY MUSIC, CRAFTS, DRAMA, ETC.) ..	4
PAACHOR2	CHORES/WORK.....	5
PAAOUTP2	OUTDOOR PLAY/ACTIVITIES/SPORTS	6
PAAINPL2	INDOOR PLAY	7
PAAPHON2	TELEPHONE.....	8
PAAEAT2	EATING/SNACKS	9
PAATV2	TELEVISION/VIDEOS/VIDEO GAMES/LISTENING TO MUSIC	10
PAAATALK2	TALKING TO PARENT/CARE PROVIDER	11
PAAACTI2	BEFORE- OR AFTER-SCHOOL ACTIVITIES	12
PAAOTHE2	OTHER	91
PAAOTH2	SPECIFY _____	
	REFUSED	-7
	DON'T KNOW	-8

If SF1, SG1, SH1, SI8 (reinterview response), SJ1 = 2,-7,-8 (no nonparental care arrangements), ask SK7. Else, go to box before SM0.

SK7. Some parents prefer to stay home to care for their children before and after school. Others choose to have care arrangements by someone other than a parent. If you could find high-quality, affordable before- or after-school care by a relative, nonrelative, or in a program, would you choose to place (CHILD) in one of these kinds of arrangements?

PACHOOS2	YES	1
	NO.....	2
	REFUSED	-7
	DON'T KNOW	-8

Perceptions of Quality and Factors in Parental Choice

If SK7 = 2, -7, -8 (would not want nonparental care arrangement), ask SM0. Else, go to RSM1.

SM0. Many parents choose to care for their children themselves during before- and after-school hours. What were your main reasons for choosing to have a parent care for (CHILD) during before- and after-school hours?
[CODE ALL THAT APPLY.]

- PPNOWOR2** PARENT DOES NOT WORK/NO NEED FOR CARE..... 1
- PPDAYCA2** PARENT IS DAY CARE PROVIDER IN THE HOME..... 2
- PPWORKH2** PARENT WORKS OR STUDIES AT HOME 3
- PPSPECL2** CHILD HAS SPECIAL NEEDS 4
- PPDEPEN2** PARENTS NEED TO CARE FOR OTHER DEPENDENTS AS WELL 5
- PPBARR2** COST/AVAILABILITY/TRANSPORTATION 6
- PPHMWRK2** TO HELP WITH CHILD’S EDUCATION/HOMEWORK..... 7

- PPCAREE2** PARENT VIEWS STAYING HOME AS CAREER..... 8

- PPBEST2** PARENTAL CARE IS BEST FOR CHILD/DEVELOPMENT..... 9
- PPRESPO2** PARENTS SHOULD BE RESPONSIBLE FOR CARE 10
- PPRELIG2** RELIGIOUS REASONS 11

- PPOTHER2** OTHER 91
- PPOTHEO2** SPECIFY _____
- REFUSED -7
- DON’T KNOW -8

If only SM0_6 = 1 (cost/availability/transportation), ask RSM1. Else, go to PTINTRO.

RSM1. There are a number of kinds of arrangements parents make for their children’s out-of-school time. If you had your choice of any kind of arrangement for (CHILD) during after-school hours, not including care by a parent or guardian, what arrangement would you prefer most?

- CHILD RESPONSIBLE FOR HIMSELF/HERSELF 1
- CHILD TAKEN CARE OF BY OLDER BROTHER OR SISTER 2
- CARE BY A RELATIVE (NOT BROTHER OR SISTER) 3
- PPPREFE2** CARE BY A NONRELATIVE IN A PRIVATE HOME 4
- PARTICIPATION IN A CENTER-BASED PROGRAM 5
- INFORMAL ADULT SUPERVISED ACTIVITIES..... 6
- PPPREFO2** OTHER 91
- SPECIFY _____
- REFUSED -7
- DON’T KNOW -8

If SH1 = 2, -7, -8, then ask SM2. Else, go to box before SM3.

SM2. Are you aware of any before- or after-school programs in your community?

- PPAWARE2 YES 1
- NO..... 2
- REFUSED-7
- DON'T KNOW-8

If RSM1 = 5, then go to SM3. Else, go to box before SM4.

SM3. What (is/was) your biggest obstacle to enrolling (CHILD) in a before- or after-school program?

- PPOBSTC2 COST 1
- LOCATION/TRANSPORTATION 2
- CHILD'S WISHES 3
- AVAILABILITY 4
- POOR QUALITY OF AVAILABLE PROGRAMS 5
- NO OBSTACLES..... 6
- OTHER 91
- PPOBOS2 SPECIFY _____
- REFUSED-7
- DON'T KNOW-8

If SF1, SG1, SH1, SI8 (reinterview response), or SJ1 = 1 (child currently participates in at least one arrangement or self-care), ask SM4. Else, go to SM6.

SM4. How much difficulty did you have finding the type of out-of-school care you wanted for (CHILD)? Would you say...

- PPDIFCL2 A lot, 1
- Some, 2
- A little, 3
- No difficulty, or 4
- Have you not found the out-of school care you wanted? .. 5
- REFUSED-7
- DON'T KNOW-8

SM5. When you made your arrangement(s) for (CHILD)'s out-of-school time, did you feel that you had more than one option that you were willing to consider?

- PPOPTIO2 YES 1
- NO..... 2
- REFUSED-7
- DON'T KNOW-8

SM6. Do you feel there are good choices for before-school care where you live?

- PPBCHOI2 YES 1
- NO..... 2
- HAVE NOT TRIED TO FIND CARE..... 3
- REFUSED-7
- DON'T KNOW-8

SM7. Do you feel there are good choices for after-school care where you live?

- PPACHOI2**
- YES 1
 - NO..... 2
 - HAVE NOT TRIED TO FIND CARE..... 3
 - REFUSED-7
 - DON'T KNOW-8

SM8. I'm going to read some things that people look for in selecting before- or after-school arrangements for their children. For each one, please tell me if you think it is very important, somewhat important, or not too important in a before- or after-school arrangement for (CHILD). How about...

[PROBE: Would that be very important, somewhat important, or not too important?]

[RANDOM START]		VI	SI	NI	R	DK
PPHWHL2	a. Time for homework or schoolwork	1	2	3	-7	-8
PPENRCH2	b. Enrichment education (e.g., special drama, science, or computer activities).....	1	2	3	-7	-8
PPSPORT2	c. Time for sports or physical activities.	1	2	3	-7	-8
PPRELIA2	d. A reliable arrangement.....	1	2	3	-7	-8
PPCONV2	e. A convenient location	1	2	3	-7	-8
PPCOST2	f. A reasonable cost	1	2	3	-7	-8
PPKIDS2	g. A small number of children in the same group.....	1	2	3	-7	-8
PPTRANS2	h. Transportation to the arrangement	1	2	3	-7	-8
PPENGL2	i. A care provider or teacher who speaks English with your child.	1	2	3	-7	-8

If PA6 = 2 or 91 (does not speak English mostly or equally with another language at home), ask SM8j. Else, go to SM8k.

PPLANG2	j. A care provider who speaks (CHILD)'s native language	1	2	3	-7	-8
PPKNBEF2	k. Knowing the care provider <u>before</u> making the arrangement.....	1	2	3	-7	-8

PTINTRO. Now I have a few questions about (CHILD)'s health.

PT5A. Does (child) have...

- HDAUTIS2** a. Autism? 1 2 -7 -8
- HDADD2** b. Attention deficit disorder, ADD, or ADHD? 1 2 -7 -8

Mother Items

*If HHMOM = 1,2, or 3 (mother or female guardian), and
PU7 = 1 or PU8 = 1 (working or on leave/vacation), go to
RPUINTRO. Else, go to box before PV15.*

RPUINTRO. These last questions are about (you/(and) (CHILD)'s (mother/stepmother/foster mother) (father/stepfather/foster father)). (Let's start with (you/(CHILD)'s mother)).

PU16. Have (CHILD)'s (child/before- and after-school) care needs influenced [your/(his/her)'s mother's/stepmother's/foster mother's] choice of a job or work schedule in any way?

- MOMCHOI2** YES 1
- NO 2
- REFUSED -7
- DON'T KNOW -8

PU17. How easy is it for (you/(CHILD)'s mother/stepmother/foster mother) to leave work if (CHILD/one of your children/one of her children) gets sick or needs (you/her) unexpectedly? Would you say...

- MOMLVEA2** [VERY] Easy, 1
- Somewhat easy, 2
- Not very easy, or 3
- Difficult? 4
- REFUSED -7
- DON'T KNOW -8

PU18. Does (your/(CHILD)'s mother's/stepmother's/foster mother's) employer have a program that allows employees to put part of their pay -- before taxes -- into an account that can be used to pay for child care costs?

- MOMACCT2** YES 1 (GO TO PU19)
- NO 2 (GO TO BOX BEFORE PV15)
- SELF-EMPLOYED 3 (GO TO BOX BEFORE PV15)
- REFUSED -7 (GO TO BOX BEFORE PV15)
- DON'T KNOW -8 (GO TO BOX BEFORE PV15)

PU19. (Do you/Does she) participate in this program to cover any child care costs?

MOMACUS2 YES 1
NO..... 2
REFUSED-7
DON'T KNOW-8

Father Items

*If HHDAD = 1, 2, or 3 (father or male guardian), and PV6 = 1 or PV7 = 1 (working or on leave/vacation), ask PV15.
Else, go to Close.*

PV15. Have (CHILD)'s (child/before- and after-school) care needs influenced [your/(his/her)'s father's/stepfather's/foster father's] choice of a job or work schedule in any way?

DADCHOI2 YES 1
NO..... 2
REFUSED-7
DON'T KNOW-8

PV16. How easy is it for (you/(CHILD)'s father/stepfather/foster father) to leave work if (CHILD/one of your children/one of his children) gets sick or needs (you/him) unexpectedly? Would you say...

DADLVEA2 [VERY] Easy, 1
Somewhat easy, 2
Not very easy, or 3
Difficult? 4
REFUSED-7
DON'T KNOW-8

PV17. Does (your/(CHILD)'s father's/stepfather's/foster father's) employer have a program that allows employees to put part of their pay -- before taxes -- into an account that can be used to pay for child care costs?

DADACCT2 YES 1 (GO TO PV18)
NO..... 2 (GO TO CLOSE)
REFUSED-7 (GO TO CLOSE)
DON'T KNOW-8 (GO TO CLOSE)

PV18. (Do you/Does he) participate in this program to cover any child care costs?

DADACUS2 YES 1
NO..... 2
REFUSED-7
DON'T KNOW-8

CLOSE. Those are all the questions I have about (CHILD). Thank you again for your participation.