

# NLS

The National Longitudinal Surveys

## NLSY79 CHILD & YOUNG ADULT USERS GUIDE

**Children: 1986-2002**  
**Young Adult: 1994-2002**



# NLSY79

# CHILD & YOUNG ADULT

# DATA USERS GUIDE

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A Guide to the

National Longitudinal Survey of Youth 1979

1986–2002 Child Data

1994–2002 Young Adult Data

Center for Human Resource Research  
The Ohio State University  
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# TABLE OF CONTENTS

<b>Chapter 1: The Children of the NLSY79.....</b>	<b>1</b>
Introduction.....	3
Overview of the NLSY79.....	3
The NLSY79 Child Surveys.....	4
The Child Samples.....	4
The Child & Young Adult Data Collection.....	5
Sample Sizes: Who Was Interviewed in 2002?.....	5
Sample Changes over Time.....	10
Selecting an Age Variable: A Cautionary Note.....	11
Patterning of Child Interview Frequency.....	12
Pooling Sample Sizes.....	17
Sibling and Cousin Samples.....	19
Using the Sampling Weights.....	21
Research Based on the NLSY79 Child and Young Adult Data.....	23
 <b>Chapter 2: The NLSY79 Child Surveys.....</b>	 <b>25</b>
Instrumentation.....	27
Data Collection.....	35
Basic Documentation.....	37
The Child Data.....	39
Age & Demographics.....	41
Child Activities.....	42
Child Alcohol Use - Drinking.....	44
Child Attitudes.....	45
Child Care.....	46
Family Background.....	47
Health.....	48
Maternal Employment.....	51
Parenting.....	52
Schooling.....	55
Smoking, Drugs, and Antisocial Behavior.....	58
The Child Assessments.....	59
What Assessments Are Used and When?.....	60
Changes in the Child Assessments.....	61
What Scores Are Computed?.....	62
Which Children Are Assessed?.....	65
Assessment Completion Rates.....	69
The HOME-SF (Home Observation of the Environment - Short Form).....	70
Temperament (How My Child Usually Acts).....	75
Motor and Social Development.....	76
The Behavior Problems Index.....	78
Parts of the Body (1986 and 1988 only).....	81
Memory for Locations (1986 and 1988 only).....	82
McCarthy Scales of Children's Abilities - Verbal Memory (1986-1994).....	83

Self-Perception Profile for Children (SPPC).....	86
Wechsler Intelligence Scale for Children - Memory for Digit Span.....	87
PIAT Mathematics.....	89
PIAT Reading Recognition .....	91
PIAT Reading Comprehension.....	93
The Peabody Picture Vocabulary Test - Revised (PPVT-R ).....	96
Repeat Assessments.....	99
Interviewer Remarks and Testing Conditions .....	100
Child Completion Rates.....	101
<b>Chapter 3: The NLSY79 Young Adults.....</b>	<b>107</b>
The Young Adult Survey Instrument Structure and Contents.....	112
Section 1: Household Interview .....	116
Section 2: Family Background .....	117
Section 3: Dating and Relationship History .....	118
Section 4: Regular Schooling .....	119
Section 5: Military .....	119
Section 7: Jobs and Employer Supplements.....	120
Section 9: Last Job Lasting Two Weeks or More .....	121
Section 10: First Significant Job after Leaving School.....	121
Section 11: Other Training .....	121
Section 12: Fertility .....	121
Section 13: Child Care.....	122
Section 14: Health .....	123
Section 15: Income and Assets.....	123
Section 16: Attitudes .....	124
Young Adult Self-Report .....	125
Section 17: Interviewer Remarks .....	126
Deleted Sections .....	126
Industry and Occupation Coding.....	127
Key Variables .....	127
Geocode Data.....	130
1994-2002 Geocode Data File Creation Procedure.....	132
Supplementary Created Geocode Variables.....	133
Missing Data.....	133
Use of the Geocode Files.....	134
<b>Chapter 4: Utilizing NLSY79 Child and Young Adult Data for Research .....</b>	<b>135</b>
Introduction.....	137
Life Cycle Profiles for the NLSY79 Children.....	137
Intercohort Analyses.....	141
Possible Research Agendas .....	143
Exploring Cognitive and Socio-Emotional Trajectories.....	144
Validity of Repeat Measures .....	145
Early Family and Relationship Transitions and Behaviors .....	145
Young Adult Schooling and Work Outcomes.....	146

Geographic Moves, Location, and Employment .....	146
Non-Normative Behaviors across Generations.....	147
How Children Affect Mothers .....	148
Variation in High School and College Attendance.....	148
Within-Family Differences in Outcomes.....	149
Child Health and Child Outcomes .....	149
<b>Chapter 5: Data Files &amp; Documentation .....</b>	<b>155</b>
Types of Variables .....	157
Linking the Data & Documentation.....	158
Child Question & Variable Names .....	158
Child Question Naming Conventions—Details.....	159
Young Adult Question & Variable Names .....	160
Child & Young Adult Reference Numbers .....	161
Contents of the Child & Young Adult Public Data Files.....	161
File and Variable Linking Procedures .....	162
Linking Data Files .....	163
Missing Data.....	164
Child & Young Adult Data On-line for Download .....	165
Child & Young Adult Data on CD-ROM.....	166
Child & Young Adult User Documentation .....	166
User Notes & Errata.....	168
Contact and Ordering Information.....	169
The NLSY79 Child-YA Web Page .....	169
<b>References .....</b>	<b>171</b>
<b>Appendices .....</b>	<b>181</b>
<b>Appendix A. NLSY79 Child HOME-SF .....</b>	<b>183</b>
Appendix A-1. NLSY79 Child HOME-SF (Short Form): Scale items by age and type of report.....	184
Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children under age 3 years .....	186
<b>Appendix B. How My Infant/Child Acts: Composition of the Temperament Scales .</b>	<b>195</b>
<b>Appendix C. Motor &amp; Social Development Assessment.....</b>	<b>201</b>
<b>Appendix D. Child Behavior Problems Index .....</b>	<b>211</b>
Appendix D-1. NLSY79 Child Behavior Problems Index: Composition of the BPI subscales, 2002 .....	212
Appendix D-2a. Behavior Problems Index – Anxious/Depressed Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child .....	214
Appendix D-2b. Behavior Problems Index – Antisocial Subscale: Raw, Percentile, and Standard Scores by Age, Sex, and School Experience of Child .....	217

Appendix D-2c. Behavior Problems Index – Dependent Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child .....	220
Appendix D-2d. Behavior Problems Index – Headstrong Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child .....	222
Appendix D-2e. Behavior Problems Index – Hyperactive Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child .....	225
Appendix D-2f. Behavior Problems Index – Peer Conflicts/Withdrawn Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child.....	228
Appendix D-2g. Behavior Problems Index – Total Raw, Percentile, and Standard Scores by Age, Sex, and School Experience of Child.....	230
<b>Appendix E. Sample SPSSx Program for Merging NLSY79 Child Files .....</b>	<b>243</b>
<b>Appendix F. Sample SAS Program for Merging NLSY79 Child Files .....</b>	<b>247</b>
<b>Appendix G. NLSY79 Child and Mother Supplements Flowcharts .....</b>	<b>251</b>
Appendix G-1. R20-2002 NLSY79 Child Survey: Mother Supplement Flowchart .....	253
Appendix G-2. R20-2002 NLSY79 Child Supplement Flowchart.....	254
<b>Appendix H. Child Survey Content by Survey Year .....</b>	<b>257</b>
<b>Appendix I. Young Adult CAPI Questionnaire 2002 Flowchart.....</b>	<b>265</b>
<b>Appendix J. Young Adult Survey Content by Survey Year .....</b>	<b>273</b>
<b>Appendix K. Child Assessment Scores 1986-1994 .....</b>	<b>281</b>
<b>Appendix L. Children Interviewed by Age and Race, 1986-1992 .....</b>	<b>285</b>
<b>Index.....</b>	<b>287</b>

## LIST OF TABLES

Table 1.1. NLSY79 Mother and Child Samples: 1986-2002 Surveys.....	6
Table 1.2. Age of Child by Age of Mother at Birth of Child: NLSY79 Children and Young Adults Interviewed in 2002 .....	8
Table 1.3. Child's Birth Year by Age of Mother at Child's Birth: NLSY79 Children and Young Adults Interviewed in 2002 .....	9
Table 1.4. NLSY79 Child Sample Sizes by Age and Race/Ethnicity: 1986-2002 .....	10
Table 1.5. NLSY79 Younger Children: Number of Interviews by Race/Ethnicity and Age as of December 31 <sup>st</sup> , 2002 .....	13
Table 1.6. Age of YA at December 31 <sup>st</sup> , 2002 by YA, Child, and Total Interviews.....	16
Table 1.7. NLSY79 Young Adult Children: Sample Sizes for Pooled Age Groups .....	18
Table 1.8. NLSY79 Women Interviewed in 2002 by Number and Ages of Children and by Race/Ethnicity .....	20
Table 1.9. NLSY79 Child, Young Adult, and Mother Sampling Weights .....	22
Table 2.1. NLSY79 Child Surveys: Instrument Content in 2002 .....	28
Table 2.2. Mother Supplement 2002 – Administration Pattern by Age of Child .....	29
Table 2.3. Child Supplement 2002 – Administration Pattern by Age of Child .....	32
Table 2.4. NLSY79 Child Data Files: Child Areas of Interest .....	37
Table 2.5. Key Variables on the NLSY79 Child Files: Variable Descriptions and Reference Numbers .....	40
Table 2.6. NSY79 Child: Alcohol Use Questions for Children Ages 10 and Older.....	44
Table 2.7. Parenting Items in the NLSY79 Child 1994-2002.....	53
Table 2.8. NLSY79 Child: Smoking and Drug Use Questions for Children Ages 10 and Older.....	58
Table 2.9. Assessment Scores on the NLSY79 Child File, 1996-2002 .....	63
Table 2.10. NLSY79 Children Interviewed by Single Year of Age and Race/Ethnicity, 1994-2002.....	66
Table 2.11. NLSY79 Child: Variations in Ages of Children Eligible for Assessment by Survey Year.....	68
Table 2.12. NLSY79 children with valid assessment scores: Children ages 0-14 assessed in 2002.....	70
Table 2.13. Repeat PIAT and PPVT Scores: Children Assessed in Any Year 1986-2002.....	99
Table 2.14. Number of PIAT Scores by Age of Child at Date of Last Valid Score: Children Assessed in Any Year 1986-2002 .....	100
Table 2.15. Number of PPVT Scores by Age of Child at Date of Last Valid Score .....	100

Table 2.16. Percentage of Valid Assessments for Interviewed Children .....	103
Table 2.17. Percentage of Valid Assessments for All Children of Interviewed Mothers 1998 and 2002 .....	104
Table 2.18. Percentage of Valid Assessments for All Children of Interviewed Mothers By Race/Ethnicity 2002 .....	105
Table 3.1 NLSY79 Young Adults Interviewed 1994-2002 by Age and Race/Ethnicity .....	110
Table 3.2. Young Adult Age at 2002 Interview by Age of Mother at Birth of Young Adult and by Race/Ethnicity .....	111
Table 3.3. Young Adult Age at 2002 Interview by Type of Dwelling Unit .....	112
Table 3.4. Siblings of Young Adults Interviewed in 2002 .....	112
Table 3.5. Selected Attitudinal/Behavioral Sequences Available for Mothers and Young Adults .....	114
Table 3.6. Young Adult Areas of Interest .....	116
Table 3.7. Administration Pattern of Attitude Scales in the Young Adult .....	125
Table 3.8. Key Variables on the NLSY79 Young Adult Files (1994-2002): Variable Descriptions and Reference Numbers .....	128
Table 4.1. Data Elements Available over the Life Course for Two Age Cohorts .....	138
Table 4.2. NLSY79 Mothers & Children: Comparable Attitudinal and Behavioral Questions .....	140
Table 4.3. Cross-Generational Research Possibilities .....	144
Table 4.4. Health Data in the NLSY79 Child Surveys .....	151
Table 4.5. Health Data in the NLSY79 Young Adult Surveys .....	152

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**CHAPTER 1: THE CHILDREN  
OF THE NLSY79**

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## **Introduction**

This data users guide provides substantive and technical information about the NLSY79 Child and Young Adult survey data. Updated with each new survey round, this document focuses on the current round of data and includes information from past rounds that is most relevant to using the current data. Users are encouraged to review the guides from previous survey rounds for details on changes in the sample or procedures that may affect their analyses. Guides from prior rounds may also contain information about modules and topics of interest that are no longer included in the current survey. User guides from prior rounds can be accessed at the BLS-NLS website: <<http://www.bls.gov/nls/nlsy79ch.htm>> or from the CHRR public ftp site: <<ftp://ftp.chrr.ohio-state.edu/usersvc/>>

This first chapter provides an overview of the NLSY79 Child and Young Adult surveys, focusing on issues that are relevant to children of all ages. Chapter 2 discusses the Child data collection and the assessments used to measure the development and environments of the sample children over time. The chapter focuses on what are now called the Children 0-14, since children age 15 and older are no longer assessed. Chapter 3 focuses on the data collection for the young adult children of NLSY79 mothers, including information about accompanying geocode files. Chapter 4 offers some potential research applications that exploit the longitudinal and intercohort aspects of the data. Chapter 5 provides specifics on how to access and use the data files and documentation.

This document is best used in conjunction with a variety of other materials including the *NLSY79 Child Assessments: Selected Tables*, the NLSY79 Child Handbooks, the *NLS Handbook*, the *NLSY79 User's Guide*, and the questionnaires that are used in the field to collect the data for children, young adults and main Youth respondents. The *NLSY79 User's Guide* provides details on the inputs from the mother's record (in the main NLSY79 files) that are used to construct mother-based variables on the Child file. These and other useful materials are available either on line at <<http://www.bls.gov/nls/>> or from NLS User Services at CHRR. Details on documentation can be found in Chapter 5 of this guide.

Substantive questions regarding the data collection and assessments for the younger children should be addressed to Paula Baker at 614-442-7375 (baker.21@osu.edu). Questions regarding the Young Adult component of the study may be addressed to Canada Keck at 614-442-7377 (keck.2@osu.edu). General questions relating to survey content or the utility of the data set for specific research topics may be addressed to Frank Mott at 614-442-7378 (mott.1@osu.edu).

Questions about the availability and cost of public use materials should be addressed to the NLS User Services Office at the Center for Human Resource Research, 614-442-7300 (usersvc@postoffice.chrr.ohio-state.edu). The Child and Young Adult data are available as a free download online from <<http://www.bls.gov/nls/>>. User comments regarding any aspect of this survey, including suggestions for additions or deletions, are welcomed.

## **Overview of the NLSY79**

The National Longitudinal Survey of Youth 1979 cohort (NLSY79) is a multi-purpose panel survey that originally included a nationally representative sample of 12,686 men and women

who were all 14 to 21 years of age on December 31, 1978. Annual interviews have been completed with most of these respondents since 1979, with a shift to a biennial interview mode after 1994. This user's guide focuses on information about the children of the women in the NLSY79 Round 20 (R20) survey conducted in the year 2002. As of the 2002 interview round, the NLSY79 women had attained the ages of 37 to 45. The children of these female respondents as of 2002 are mostly below the age of 27 and are estimated to represent about 90 percent of all the children ever to be born to this cohort of women.

Sponsored by the U.S. Department of Labor, the NLSY79 contains extensive information about the employment, education, training, and family experiences of the respondents. The survey originally included substantial oversamples of African-American, Hispanic, economically disadvantaged white, and military youth. Reflecting budget constraints, the latter two oversamples have been largely deleted from the sample. The remaining sample, however, retains its national representation. With appropriate weights, the NLSY79 may be considered as representative of the living members of a national sample of men and women who were 14 to 21 years of age on December 31, 1978. With appropriate weights, the children of the female respondents in this sample may be considered a representative sample of children who have been born to this national sample of women. Readers seeking more detail about the NLSY79 main Youth sample of men and women are referred to the current edition of the *NLS Handbook* and its associated *NLSY79 User's Guide*.

### **The NLSY79 Child Surveys**

Starting in 1986, the children of NLSY79 female respondents have been assessed every two years. The assessments measure cognitive ability, temperament, motor and social development, behavior problems, and self-competence of the children as well as the quality of their home environment. Since 1988, children age 10 and over have completed personal interviews that have asked about a wide range of their schooling, family, peer-related and other attitudes and behaviors.

Starting in 1994, a different type of interview was initiated for the older children of the NLSY79 female respondents. This data collection, subject to constraints noted in Chapter 3, has focused on NLSY79 "young adult children" age 15 and over as of the end of the relevant calendar year (December 31, 2002 for the year 2002 interview round). In this guide, when these older children are the focus, they are referred to as "young adults." When children below age 15 are referenced, they are termed "younger children." In general, references to the full child cohort will be termed "children" or "children of the NLSY79."

### ***The Child Samples***

The NLSY79 child sample is comprised of all children born to NLSY79 mothers. With the primary support from the National Institute of Child Health and Human Development (NICHD), the children of the NLSY79 mothers have been independently followed and interviewed in various ways starting in 1986. These children have been interviewed and assessed biennially since that date. Since 1988, all of the children age ten and over have completed fairly extensive self-report questionnaires. The content and scope of the child interviews and assessments are discussed in Chapter 2. Starting in 1994, children who have reached the age of 15 by the end of the survey year are no longer assessed but instead

complete personal interviews akin to those given to their mothers during late adolescence and into adulthood. Chapter 3 focuses on the content of the questionnaires administered to these Young Adult children.

### *The Child & Young Adult Data Collection*

Interviews with the NLSY79 younger children are typically conducted in the respondent's home by experienced, specially trained field staff. Reports are obtained from the children and their mothers and by interviewers trained to assess each child and to provide evaluations of their home environment. Interviews with all children through 1992 were conducted primarily in person using paper and pencil. Beginning in 1994, the primary Young Adult and younger child instruments and assessments were administered using computer assisted personal interviewing (CAPI). By 2000, all survey instruments were fully computerized. From 1994 to 1998, the primary mode of data collection for the Young Adults was in-person interview. Beginning in 2000, the primary interview mode for the Young Adults shifted to telephone rather than in-home visits. Historically, the field period of the interviews has largely coincided with the main interview field period, although Young Adult telephone interviewing in 2002 began substantially prior to the younger child interviews. Details about the interviewing procedures for the Child and Young Adult surveys may be found in Chapters 2 and 3 respectively.

### *Sample Sizes: Who Was Interviewed in 2002?*

As of 2002, a total of 11,340 children have been identified as having been born to the original 6,283 NLSY79 female respondents, mostly during the years that they have been interviewed. A modest number were born prior to the 1979 first interview round. Obviously, an unknown number of additional children have been born to women subsequent to their having attrited from the sample. In 2002, a total of 7567 children, including young adults, were interviewed (see Table 1.1). Of these, 3229 were under age 15 and 4238 were interviewed as young adults. In the context of the child interviews, "interviewed" for children under age 15 means that some information was obtained, in one of the Child interview schedules, from either the mother or child in that survey year. From the perspective of the Young Adult sample, a completion is defined as a case in which at least a major part of the Young Adult CAPI interview was completed. A series of flags in the data file (in the "area of interest" called CHILD BACKGROUND) indicate interview and assessment status for both younger children and young adults.

**NLSY79 mothers.** In 2002, of the 3,955 women interviewed, 3,315 were mothers who reported a total of 8,100 children (see Table 1.1). When appropriate weights are applied, NLSY79 women have had on average about 1.9 children, which is estimated to be more than 90 percent of their ultimate childbearing. A large proportion of the childbearing for this cohort is now behind them. Caution is still advised when generalizing from any selected portion of the child cohort.

**Table 1.1. NLSY79 Mother and Child Samples: 1986-2002 Surveys**

Sample Groups	1979	1986	1988	1990	1992	1994	1996	1998	2000	2002
<b>NLSY79 Females</b>										
Interviewed	6,283	5,418	5,312	4,510	4,535	4,480	4,361	4,299	4,113	3,955
<b>NLSY79 Mothers:</b>										
Interviewed		2,922	3,346	3,088	3,325	3,464	3,489	3,533	3,425	3,315
Interviewed; Children also interviewed		2,774	3,196	2,772	2,964	3,212	3,228	3,221	2,934	3,122
<b>NLSY79 Children:</b>										
Born to interviewed mothers		5,255	6,543	6,427	7,255	7,862	8,125	8,395	8,323	8,100
Children not Young Adults						6,622	6,010	5,343	4,438	3,502
Young Adults						1,240	2,113	3,052	3,885	4,598
Interviewed <sup>1</sup>		4,971	6,266	5,803	6,509	7,089	7,103	7,067 <sup>2</sup>	6,417	7,467 <sup>3</sup>
Children not Young Adults						6,109	5,431	4,924	3,392	3,229
Young Adults						980	1,672	2,143	3,025	4,238

NOTE: Sample sizes for all child survey years exclude the 441 female members of the military subsample dropped from interviewing in 1985 and the children born to these women. In addition, sample sizes for 1990 and later surveys exclude female members of the civilian economically disadvantaged, non-black/non-Hispanic subsample, whose children were not eligible for assessment. The exclusion of this sample after 1998 accounts for much of the drop in sample size between 1988 and 1990.

<sup>1</sup> An interview was considered complete if an interviewer was able to directly assess a child, or to obtain information from the mother on the child's background and health.

<sup>2</sup> This total includes 37 children who were assessed or interviewed whose mothers were not interviewed.

<sup>3</sup> This total includes 14 children (age 0-14) who were assessed or interviewed whose mothers were not interviewed and 257 young adult children whose mothers were not interviewed.

Of the 2,328 NLSY79 women who were not interviewed in the 2002 survey round, 441 were members of the military over sample that was dropped after 1984, 890 were from the economically disadvantaged white over sample that was dropped in 1990, and 117 are identified as deceased. Excluding these subsets of respondents means that effective attrition for those who would otherwise be eligible for interview is about 18 percent.

**Children & young adults eligible for interview.** In the first round of the NLSY79 Child survey, all children born to NLSY79 women were eligible to be interviewed. Starting in 1988, children whose usual residence was outside the mother's household were excluded from the sample. This residence restriction, however, applies only to children who are not age-eligible for the Young Adult survey. In 2000 the criteria for both younger children and young adults were restricted (for that survey round only) to exclude a random sample of about 38 percent of the younger children and young adults from the black and Hispanic over samples. This restriction means that while the full set of oversample mothers was contacted in 2000, only about 60 percent of their children under age 21 were part of the fielded sample targeted for interview. In 2002, the oversample cases that were excluded in 2000 were restored to the fielded sample eligible for interview.

Children who are part of the sample of younger children (age 0-14) must reside at least part or full time with the NLSY79 mother respondent in order to be eligible. In 2002, the number of

children reported by mothers interviewed as living at least part-time in the household totaled 3,444.

Young Adult children, with at least one record in the child interview history, are eligible for interview regardless of their residence status. In 1998, the Young Adult interview was limited to youth between the ages of 15 and 20. This age restriction was lifted in 2000.

**Age shift in the child samples.** The age distribution in Table 1.2 underscores the fact that many NLSY79 women are reaching the end of their childbearing years. There has been a gradual change in the mix of the child population from being predominantly a younger child group towards being older, or more of a young adult and even adult population. As of the 2002 survey round, about 5 percent of the overall child sample is over the age of 15 (the “young adults”) and about 20 percent are age 21 and over. Since very few children remain to be born in forthcoming NLSY79 survey rounds, a rapid transition towards an even older child population is evident, with increasing numbers in their 20s and even early 30s. Paralleling this shift, the younger component of the overall sample will be increasingly from middle class households, as they will have been born to women at older ages. This trend implies that within-sample analyses in which comparisons are made between children at different ages need to be done with caution.

Table 1.2 shows that relatively large numbers of children at all ages below 25 were interviewed in the 2002 survey year. Whereas at one time a large proportion of the children had been born to adolescent mothers, in 2002 fully 83 percent of all the children had been born to women age 20 and over. Young adult children comprise about 30 percent of children born to adolescent mothers in the NLSY79. Users are reminded that the 2000 data collection excluded about 38 percent of the children (under age 21) of the minority oversamples, which resulted in 48 percent of the total sample being minority in 2000 compared with 54 percent in 2002. The 1998 data collection was limited to all eligible children under the age of 21 as of the date of interview. Earlier rounds included all age eligible children, subject to the fact that women in the military oversample were dropped from the interview process after the 1984 survey round and the economically disadvantaged white oversample with the 1990 data collection round. The sample nonetheless retains sufficient numbers of children from these categories to maintain its full national representation. Appropriate weights are available in each year to adjust the un-weighted sample cases for the minority oversamples and year-to-year sample attrition. A detailed discussion of the sampling weights can be found later in this chapter.

**Sample limitations.** Table 1.3 suggests one other caveat for studies that focus on the consequences of earlier, adolescent childbearing for this cohort of women. A modest proportion of the children (679 of the 7,467 interviewed in 2002) were born prior to the first NLSY79 interview round. If essential explanatory inputs for analysis include pre-1979 points (e.g., employment status in 1977 or early paternal presence in the home), sample size may be temporally constrained because of this left-censoring problem—the unavailability of some data elements for the pre-survey period. All such cases fall in the upper young adult ages, and could affect analyses for young adult children who are 24 or older in 2002.

**Table 1.2. Age of Child by Age of Mother at Birth of Child: NLSY79 Children and Young Adults Interviewed in 2002**

Child Age	Age of Mother at Birth of Child																				Total		
	≤17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36		37	38+
LT 1																				1	9	34	44
1																			1	6	17	44	68
2																		1	25	32	23	32	113
3																		20	25	18	21	23	107
4																7	23	29	34	27	21	33	174
5															2	36	29	33	30	26	11	7	174
6														3	31	33	34	26	22	8	14	5	176
7														31	25	44	38	25	14	16	15	3	211
8												3	42	43	42	36	28	30	14	17	1		256
9											3	47	38	50	51	38	25	21	22	3			298
10										4	40	51	50	44	49	26	13	15	3				295
11										50	52	59	42	41	44	28	27	6					349
12							1	44		55	55	55	48	46	36	31	3						374
13								40	44	59	58	54	43	34	33	8							381
14 & Ch							11	37	34	31	27	34	16	12	7								209
14 & YA						7	35	32	38	50	42	27	32	13									276
15					7	40	70	51	44	50	58	42	34	3									399
16				7	56	73	65	59	57	49	41	41	7										455
17			6	39	62	53	56	42	46	62	38	7											411
18		3	44	58	57	54	50	61	47	38	3												415
19	4	40	53	52	57	59	53	48	38	2													406
20	27	42	63	56	53	60	55	48	6														410
21	50	43	62	59	44	33	44	4															339
22	63	45	45	59	53	40	4																309
23	54	37	47	34	46	6																	224
24	64	29	43	36	4																		176
25	70	32	30	4																			136
26	74	35	7																				116
27-31	101	3																					104
Total	545	325	402	406	443	430	444	421	402	450	417	420	352	320	320	287	220	206	190	154	313	181	7467

Note: Child age for children under 15 is measured as of mother's interview date (see C00047.46) and may differ from age at date of child assessment. For children whose mothers were not interviewed in 2002, age at Child Supplement interview date (C00070.48) was used. Age of children 15 and over (young adults) is measured at their young adult date of interview (see Y14343). Age of mother at birth of child is found in the variable C00070. in the CHILD BACKGROUND area of interest of the child data file.

**Table 1.3. Child’s Birth Year by Age of Mother at Child’s Birth: NLSY79 Children and Young Adults Interviewed in 2002**

Child Birth Year	Age of Mother at Birth of Child																			Total					
	≤17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		36	37	38+		
1970	1																							1	
1971	2																								2
1972	5																								5
1973	22																								22
1974	41																								41
1975	77	18																							95
1976	69	40	20																						129
1977	73	28	48	24																					173
1978	67	39	44	34	27																				211
1979	67	51	46	48	55	28																			295
1980	74	45	62	59	47	42	28																		357
1981	30	44	62	68	56	54	55	20																	389
1982	17	48	52	46	55	59	48	63	31																419
1983		12	50	58	60	55	52	57	48	26															418
1984			18	49	60	55	63	46	43	59	27														420
1985				20	62	73	61	58	57	49	40	29													449
1986					21	51	64	49	45	43	56	50	31												410
1987						13	58	50	52	74	59	38	42	16											402
1988							15	58	58	57	47	45	33	30	19										362
1989								20	55	62	66	70	53	37	41	20									424
1990									13	63	50	52	46	39	32	29	14								338
1991										17	51	67	34	50	44	29	23	13							328
1992											21	44	53	48	56	40	17	21	10						310
1993												25	42	43	52	31	27	19	26	5					270
1994													18	40	28	41	34	30	11	23	5				230
1995														17	28	33	33	26	16	12	19	5			189
1996															20	40	32	35	22	20	11	7			187
1997																24	32	29	37	24	14	17			177
1998																	8	21	30	22	23	31			135
1999																		12	30	25	22	24			113
2000																			8	18	18	37			81
2001																				5	20	43			68
2002																						17			17
Total	545	325	402	406	443	430	444	421	402	450	417	420	352	320	320	287	220	206	190	154	132	181			7467

The increasing heterogeneity of the child sample may also be noted in other ways from Table 1.2 and Table 1.3. For example, analyses focusing on children in the adolescent age range of ten to nineteen can now include a substantial number of children who have been born to mothers who were age 20 and over at the birth of the child. Having noted this increase in sample heterogeneity over the years, the user should remain mindful that the oldest and youngest children in the sample are likely to come from families that differ in their socio-economic characteristics. However, it is also becoming increasingly reasonable to generalize from the NLSY79 sample of children to broader representations of selected U.S. child populations; overall, it is worth reiterating that as of this date, the cohort of women have completed about 90 percent of their childbearing. The younger child sample encompasses 3,970 of the 7,467 children and young adults interviewed in 2002, or more than half of the child sample.

### *Sample Changes over Time*

The increasing heterogeneity of the child sample over time may be noted from Table 1.4. This table summarizes the age mix as well as the race/ethnic mix of the child sample as it moves forward in time from 1986, the first year of the child interviews, to 2002. Over time, there is a gradual transition towards an older average age at interview. Notwithstanding this increase in age, the *overall* sample has actually changed very little over time in its racial and ethnic makeup. There has been some counterbalancing between higher minority birthrates and the reality that a higher proportion of the births in recent years are to older, white women. The reader may also note from Table 1.4 that sample size variations over the years have been considerable, largely reflecting the variations in data collection already noted; the decline from 1988 to 1990 largely reflected the removal of the economically disadvantaged white oversample. The slight decline from 1996 to 1998 was related to the capping of interviews in that year only at age 20; and the decline from 1998 to 2000 reflected the one time exclusion of a part of the black and Hispanic oversamples. In the 2002 interview round, there are no age or other sample exclusions, which accounts for the increase in sample size between 2000 and 2002. This increase is most evident in the young adult ages as the larger age cohorts continue to shift from child to young adult.

**Table 1.4. NLSY79 Child Sample Sizes by Age and Race/Ethnicity: 1986–2002**

	1986	1988	1990	1992	1994	1996	1998	2000	2002
Total Interviewed	4971	6266	5803	6509	7089	7103	7067	6417	7467
<b>By Age<sup>1</sup></b>									
Birth to 9 Years	4676	5380	4508	4430	4154	3480	2978	1912	1621
10 to 14 Years	294	851	1158	1700	2084	1951	1996	1480	1608
15 Years & Older	1	35	137	379	851	1672	2143	3025	4238
<b>By Race/Ethnicity</b>									
Hispanic	937	1158	1304	1483	1546	1520	1550	1193	1625
Black	1604	1895	1994	2133	2350	2330	2229	1914	2412
Non-black/non-Hispanic	2430	3213	2505	2893	3193	3253	3288	3310	3430

<sup>1</sup> Starting in 1994, children who are age 15 by December 31<sup>st</sup> of the interview year are interviewed as young adults. They are counted in this table as 15 years and older though the chronological age at the time of the actual interview might be 14 years for some respondents. Age for children under the age of 15 refers to their age at their mother's interview date.

### *Selecting an Age Variable: A Cautionary Note*

The NLSY79 Child and Young Adult data files include several distinct child age variables at each survey point. The most appropriate age variable to use may depend on one's research objectives. All the created child age variables in the CHILD BACKGROUND area of interest are computed in months, regardless of whether they refer to children who are currently 0-14 or young adults who are now 15 and older. The codebook, however, displays these "age in months" variables in grouped ranges for ease of viewing. The "age of child at mother's interview date" variables that are assigned to the CHILD BACKGROUND area of interest are created for all children, regardless of age. Also, children who are currently young adults are still represented in the variables that indicate age at assessment date. These variables describe the age of the (now) young adult at the time s/he was assessed in prior survey rounds.

The variable that describes the mother's age at the birth of the child is computed in years (MAGEBIR) as is the mother's age at interview date (AGEMOM) which is in the FAMILY BACKGROUND area of interest. The ages for young adult children, which are available in the Young Adult areas of interest, are also computed in years (e.g., AGE1B, AGEDEC, AGEINT). Users are encouraged to use the created age variables rather than any age variables that are direct pick-ups from the questionnaires in the various rounds.

**Age variables for younger children.** There are four relevant age variables for younger children. In most but not all instances, the values for these age variables will be the same. Unlike the age variables for the young adults, these age variables are computed in months, so users who prefer a variable in which the unit is in "years" will need to do a simple conversion. One principal child age variable references the age of the child as of the mother's interview date. Another created age variable is linked to the date the Mother Supplement was administered. This variable, termed "Child age at mother supplement date," is appropriate to use when one's research utilizes an assessment that was administered as part of the Mother Supplement questionnaire. Similarly, there is a child assessment age based on the date the interviewer-administered assessments were given. Finally, there is a PPVT age variable that references the date that the child completed the PPVT. All of these issues are clarified further in Chapter 2.

Users should be aware that over the interview years occasional revisions have been made to a child's date of birth if it was found to be in error. However, the questions and assessments administered to a child were contingent on the child's age as specified at the time. For a variety of reasons, no attempt has been made to alter the historical age record when a date of birth was revised. Thus, if one is using age-sensitive information from prior interview points, two options are often possible; one may recreate an age variable based on the most recent date of birth of child in conjunction with the interview date in that year. The second option is to use the set of age variables from that year, a variable that will be consistent with all the other information gathered from the child in that year. In most instances, this latter option is probably the preferred solution. Finally, in almost no instance would it be appropriate to simply decrement a child's age by the number of years between the most recent interview and the interview round of interest. This can often lead to incorrect estimates for the reason noted above. Additional information about some of these issues as well as the file location of the appropriate age variables is discussed further in Chapters 2 and 3.

**Young adult age variables.** There are two young adult age variables most appropriate for use. In contrast with the variables for the younger children, these are computed as age-in-years. One references the young adult's age at his or her interview date, and is the variable that most users would access. The second is an age that references the last day of the calendar year. This variable is included because December 31 of a given reference year defines the eligibility of a child for inclusion in the young adult sample. Starting in 1994, a child must be 15 or older as of that date to be included in the young adult sample. This is the reason that the tables in this report that provide child age as of an interview date split the 14-year-old group between a child and young adult component. The age at end of year variable can also be useful for defining a sample according to an unchanging age cohort as of any interview year. Interview dates are rarely exactly two years apart; an individual who is age 20 at one interview point, while typically 18 at the preceding interview, might possibly have been 19 or 17.

### **Patterning of Child Interview Frequency**

This section provides sample sizes for the number of times younger children and young adults of different ages have been interviewed over the life course of the survey. Given that the child interviewing process began with the 1986 interview round and has continued on a biennial basis through 2002, the maximum number of interviews a child respondent could have to date is nine<sup>1</sup>. Clearly, the content varies considerably between the Child and Young Adult interviews, partly because in recent rounds only younger children were assessed, and partly because many of the questions are life cycle specific. Many questions that might be relevant for an eight- or a fourteen-year old might not be appropriate for an older adolescent. Additionally, there have been some changes in questions and question wording over time that suggest that researchers who are using these data in a longitudinal manner need to carefully review the content of the questions they are using. This issue is considered in various ways in the chapters that follow.

The Child and Young adult surveys are characterized by inherently different question structure, format of data collection, and indeed potentially different research agendas. It is therefore useful to present separately the sample sizes for younger and older children, even though the ultimate research agenda in many instances may join these two sample types. Table 1.5 presents the number of interviews completed by children ever interviewed between 1986 and 2002. Table 1.5 also references December 31 of each relevant survey year rather than the survey date because the age determination for inclusion as a young adult rather than a younger child was the age as of the end of the calendar year. This method of computing age avoids a need to split the fourteen-year old age group between a younger child and a young adult component. Whether one uses a survey date or end of year age typically has little impact on the magnitude of age-specific sample sizes. Most estimates of sample size for younger child presented in this volume use child age as of the survey date. This is the reason why sample sizes by age presented across tables may not always be identical.

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<sup>1</sup> NOTE: The maximum number of interview points for a younger child would be eight, since any child who entered the survey at birth would be of young adult age by the 2002 interview date.

**Table 1.5. NLSY79 Younger Children: Number of Interviews by Race/Ethnicity and Age as of December 31<sup>st</sup>, 2002**

Age of Child	Number of Interviews								
	1	2	3	4	5	6	7	8	Total
<b>All Races</b>									
<1 Year	17								17
1 Year	68								68
2 Years	38	53							91
3 Years	15	105							120
4 Years	17	77	54						148
5 Years	18	28	154						200
6 Years	14	24	97	80					215
7 Years	14	26	42	147					229
8 Years	12	21	39	112	100				284
9 Years	13	18	31	60	209				331
10 Years	8	20	24	43	161	122			378
11 Years	12	14	19	29	96	236			406
12 Years	18	5	17	38	61	154	143		436
13 Years	15	16	14	16	43	111	306		521
14 Years	80	16	16	12	34	67	147	161	533
<b>Total</b>	<b>359</b>	<b>423</b>	<b>507</b>	<b>537</b>	<b>704</b>	<b>690</b>	<b>596</b>	<b>161</b>	<b>3,977</b>
<b>Hispanic Mother</b>									
<1 Year	2								2
1 Year	23								23
2 Years	9	13							22
3 Years	3	30							33
4 Years	4	16	8						28
5 Years	6	7	28						41
6 Years	4	7	18	12					41
7 Years	5	6	16	25					52
8 Years	1	9	7	28	9				54
9 Years	2	8	9	17	25				61
10 Years	3	5	7	17	32	19			83
11 Years	6	4	1	5	32	37			85
12 Years	6	3	4	11	15	29	22		90
13 Years	5	2	2	8	7	35	50		109
14 Years	6	3	4	1	3	22	36	25	100
<b>Total</b>	<b>85</b>	<b>113</b>	<b>104</b>	<b>124</b>	<b>123</b>	<b>142</b>	<b>108</b>	<b>25</b>	<b>824</b>

**Table 1.5. NLSY79 Younger Children: Number of Interviews by Race/Ethnicity and Age as of December 31<sup>st</sup>, 2002 (continued)**

Age of Child	Number of Interviews								
	1	2	3	4	5	6	7	8	Total
<b>Black Mother</b>									
<1 Year	6								6
1 Year	8								8
2 Years	15	13							28
3 Years	2	20							22
4 Years	7	15	12						34
5 Years	4	10	28						42
6 Years	4	7	18	18					47
7 Years	3	5	13	33					54
8 Years	5	3	15	21	17				61
9 Years	4	5	10	30	50				99
10 Years	2	1	5	11	41	26			86
11 Years	1	4	5	10	32	47			99
12 Years	5		2	8	23	41	29		108
13 Years	2	5	3	4	14	43	86		157
14 Years	3	4	1	3	12	24	44	46	137
<b>Total</b>	<b>71</b>	<b>92</b>	<b>112</b>	<b>138</b>	<b>189</b>	<b>181</b>	<b>159</b>	<b>46</b>	<b>988</b>
<b>White Mother</b>									
<1 Year	9								9
1 Year	37								37
2 Years	14	27							41
3 Years	10	55							65
4 Years	6	46	34						86
5 Years	8	11	98						117
6 Years	6	10	61	50					127
7 Years	6	15	13	89					123
8 Years	6	9	17	63	74				169
9 Years	7	5	12	13	134				171
10 Years	3	14	12	15	88	77			209
11 Years	5	6	13	14	32	152			222
12 Years	7	2	11	19	23	84	92		238
13 Years	8	9	9	4	22	33	170		255
14 Years	71	9	11	8	19	21	67	90	296
<b>Total</b>	<b>203</b>	<b>218</b>	<b>291</b>	<b>275</b>	<b>392</b>	<b>367</b>	<b>329</b>	<b>90</b>	<b>2,165</b>

Table 1.5 indicates the total number of interviews reported for each of the younger children who have been interviewed at some point since 1986. We use 1986 as the starting point for this cumulative count, as 1986 was the first year that children of the NLSY79 were assessed. As noted above, the greatest number of possible interviews for any child in 2000 would be eight biennial interviews between 1986 and 2002. However, to have eight interviews, a child would have had to have been a newborn whose birthday occurred early in the year (most 1986 interviews occurred early in that year), and have been interviewed at all eight possible survey

points. Only 161 of the younger children age 14 at the end of 2002 fall into that category. However, Table 1.5 shows that much larger numbers of children fall into all the other interview frequency categories. Children who fall into the older age categories as of 2002, but who have completed only a small number of interviews (e.g., 11 year olds with only one or two interview points) have missed some interviews. For example, an 11 year old in 2002 could have six potential completed interviews. Note that there are 91 eleven year olds as of 2002 who have completed four or fewer interviews. The implications of repeat interviewing for these younger children are expanded on in Chapter 2, where the extent of interview repetition is connected with the specific cognitive and socio-emotional assessments that the children complete at various ages.

Table 1.6 extends this interview repetition notion to the young adult component of the survey. Since the young adult interview, which is detailed in Chapter 3, has been ongoing only since 1994, the maximum number of young adult interviews possible by 2002 is five. This maximum would be limited to young adults who are between 23 and 25 years of age as of the end of the 2002 calendar year. It should be recalled that young adults age 21 or over at the *date of the 1998 interview* were not interviewed in that year. This leads to a potential four-year interview gap, between 1996 and 2000, for young adults who are 25 or older as of the end of 2002. From 2002 forward, the expectation is that the young adult sample will include all youth age 15 and over. Also, recall that while the age references the end of 2002, a particular young adult was not necessarily interviewed in that year. Of the 4648 young adults included in Table 1.6, about 91 percent (4238) of the sample respondents were interviewed in 2002. Table 1.6 also shows that there are substantial numbers of young adults who have four young adult interview points and a large number who have had three interviews as young adults since 1994. Cumulatively, across both the child and young adult interviews, there are almost 2000 young adults who have been interviewed every interview round since 1986. In this regard, there are relatively large samples of black, Hispanic and non-Hispanic white (hereafter termed white) young adults who fall in this eight-interview category.

**Table 1.6. Age of YA at December 31<sup>st</sup>, 2002 by YA, Child, and Total Interviews**

Age of Young Adult		Type of Interview													
		Young Adult Interview					Child Assessment				Total # of Interviews				
		# Interviews													
		1	2	3	4	5	0-5	6	7	8	0-5	6	7	8	9
15 Years		402					59	83	260		19	40	83	260	
16 Years		410					41	82	226	61	20	21	82	226	61
17 Years		100	366				45	59	362		13	11	41	105	296
18 Years		104	339				46	48	349		20	13	30	99	281
19 Years		40	110	310			121	339			23	22	58	102	255
20 Years		57	129	289	1		108	368			29	20	61	115	251
21 Years		28	51	116	246		441				37	21	54	112	217
22 Years		27	44	111	229		411				32	26	54	102	197
23 to 25		43	65	74	155	453	790				101	45	83	170	391
26 to 32		21	63	61	204		349				68	50	76	155	
Total All	4648	1232	1167	961	835	453	2403	979	1197	61	362	269	622	1446	1949
Race of Mother	Age of YA														
	15 Years	100					23	29	48		8	15	29	48	
	16 Years	90					12	27	43	8	7	5	27	43	8
	17 Years	32	73				13	19	73		3	4	15	28	55
	18 Years	34	62				10	19	67		5	3	9	34	45
Hispanic	19 Years	10	34	71			31	84			3	6	17	33	56
	20 Years	21	48	50			46	73			11	9	25	35	39
	21 Years	10	17	38	48		113				12	10	17	31	43
	22 Years	4	10	31	43		88				8	5	19	21	35
	23 to 25	13	15	20	33	99	180				29	14	19	41	77
	26 to 32	2	7	17	36		62				10	8	20	24	
Total Hispanics	1068	316	266	227	160	99	578	251	231	8	96	79	197	338	358
	15 Years	115					12	33	70		3	9	33	70	
	16 Years	131					16	33	64	18	5	11	33	64	18
	17 Years	46	100				14	20	112		5	3	11	52	75
	18 Years	47	92				16	11	112		6	7	10	34	82
Blacks	19 Years	17	52	99			52	116			7	11	31	40	79
	20 Years	16	54	95	1		31	135			7	4	19	56	80
	21 Years	8	14	55	84		161				13	5	19	49	75
	22 Years	9	15	55	77		156				11	8	17	51	69
	23 to 25	11	21	32	75	210	349				33	16	38	81	181
	26 to 32	14	38	29	119		200				43	28	40	89	
Total Blacks	1731	414	386	365	356	210	1007	348	358	18	133	102	251	586	659
	15 Years	187					24	21	142		8	16	21	142	
	16 Years	189					13	22	119	35	8	5	22	119	35
	17 Years	22	193				18	20	177		5	4	15	25	166
	18 Years	23	185				20	18	170		9	3	11	31	154
Whites	19 Years	13	24	140			38	139			13	5	10	29	120
	20 Years	20	27	144			31	160			11	7	17	24	132
	21 Years	10	20	23	114		167				12	6	18	32	99
	22 Years	14	19	25	109		167				13	13	18	30	93
	23 to 25	19	29	22	47	144	261				39	15	26	48	133
	26 to 32	5	18	15	49		87				15	14	16	42	
Total Whites	1849	502	515	369	319	144	826	380	608	35	133	88	174	522	932

Table 1.6 shows that most of the young adults have had a number of interviews prior to reaching age 15, and then between one and five interviews since that date. Chapter 2 details the kinds of information that were collected from and about the younger children, and Chapter 3 focuses on the data collection since age 15. The nature of the data collection changes in fundamental ways when a youth transitions from being a younger child to being a young adult. Below age 15, children are administered (or their mother completes) a variety of assessments. At all these ages the mother also provides a variety of information about the child's health, education, and selected other items, that are detailed in Chapter 2. Since 1988, children age ten and over self-administer a set of questions about their own behaviors and attitudes in a variety of domains, including education, family and peer interaction, normative and non-normative attitudes and behaviors.

Starting 1994, once the children reach 15, they complete the Young Adults personal interview designed to address most of the major dimensions of their lives—schooling, employment, family, peer interactions and issues of sexuality, and other behaviors and attitudes that permit researchers to examine in context the experiences of these youth in a holistic manner. A flow diagram that would cross the possible eight survey points for these youth encompassing the 1986 to 2002 period would describe a coherent data collection process that typically follows a child from his or her preadolescent years, describing the child development process in some detail, parallel family and child behaviors and attitudes, and culminate in a kaleidoscope, or moving picture of his later adolescent-early adult transitions to adulthood. Chapter 4 offers an overview of key data elements and suggests some research agendas for which this data set is particularly appropriate. Tables 1.5 and 1.6 clarify the size of the sample that permit one to maximize the panel dimensions of the data set

### **Pooling Sample Sizes**

The panel dimension of the NLSY79 data collection permits one to cumulate sample cases for children at specified ages across survey points, thus attaining rather substantial sample sizes for children at specific ages. Pooling in this manner also can greatly enhance the heterogeneity of the sample for specific research topics. The trade off to this methodology is that the ability to follow a particular age cohort across survey years becomes somewhat more limited, although it is still doable for selected research topics. Table 1.7 highlights potential sample sizes using this approach.

**Table 1.7. NLSY79 Young Adult Children: Sample Sizes for Pooled Age Groups**

Younger Children			
Pooled Age Groups 1986-2002	Total Possible #	Males	Females
0 year olds	2661	1389	1272
1 year olds	3023	1537	1486
2 year olds	3184	1609	1575
3 year olds	3375	1709	1666
4 year olds	3463	1754	1709
5 year olds	3556	1815	1741
6 year olds	3501	1788	1713
7 year olds	3532	1805	1727
8 year olds	3449	1731	1718
9 year olds	3342	1705	1637
10 year olds	3211	1612	1599
11 year olds	2996	1528	1468
12 year olds	2770	1405	1365
13 year olds	2538	1308	1230
14 year olds	1428	713	715
Young Adult Children			
Pooled Age Groups 1994-2002	Total Possible #	Males	Females
14 Year Olds	1055	543	512
15 Year Olds	1849	928	921
16 Year Olds	1747	880	867
17 Year Olds	1479	743	736
18 Year Olds	1385	662	723
19 Year Olds	1091	531	560
20 Year Olds	1035	486	549
21 Year Olds	681	363	318
22 Year Olds	565	272	293
23 Year Olds	378	194	184
24 Year Olds	323	159	164
25 Year Olds	196	97	99
26 Year Olds	150	77	73
27 Year Olds	72	36	36
28 Year Olds	36	16	20
29 Year Olds	10	7	3
30 Year Olds	3	1	2
31 Year Olds	1	0	1

NOTE: Ages are computed as of survey dates. For younger children, the counts are cumulative from 1986 to the 2002 interview and are based on a child being interviewed in at least one survey year. Young adults are counted if they have been interviewed, from 1994 to 2002 interview, in at least one year. Starting in 1994, children who are 14 at the survey date but who would reach age 15 by the end of the survey year are eligible for the Young Adult survey and are thus counted as young adults. Children, who were age 15 or older in any of the survey years prior to 1994, are not represented in this table unless they were interviewed as young adults from 1994 to the present.

From the perspective of the younger children, it is possible to attain single year of age samples numbering in the thousands for specific research efforts. For example, if one wishes

to examine associations between scores on the digit span assessment and other factors for seven year olds, it would be possible to cumulate a sample of more than 3,000 seven year old children from the first to the current assessment survey year. Because these children would have been born to mothers in all years between 1979 and 1993 (see Table 1.3), the mothers of these children would range in age from their early teens to their early thirties. The relevance of this pooling approach for younger child evaluation, utilizing various assessments, will be considered further in Chapter 2.

Parallel estimates can be found for young adults, even though the magnitude of the sample sizes does not yet reach the level of the younger children. This difference stems from the fact that the young adult interviews have only been on going since the 1994 survey round, so no single year of age cumulative estimate can include more than five points. Nonetheless, the number of cases cumulated in this way for ages 15 to 18 all attain well over 1000 cases. Returning to Table 1.3, it is worth noting that this sample cumulation modestly increases the heterogeneity of these young adult samples. For example, cumulating cases at these early young adult ages expands the age of the mothers at children's birth from mid-adolescence to the late twenties. Of course, using appropriate statistical technology permits one to collapse sample cases across several young adult age groups, building to a very large, quite heterogeneous sample size.

### **Sibling and Cousin Samples**

When the sample selection for NLSY79 was made, all individuals living in the selected households who were between the ages of 14 and 21 on December 31, 1978 were selected for sample inclusion. In many instances, siblings were included in the original sample. This has methodological implications for those who are concerned about the lack of complete independence between all of the NLSY79 cases. From the perspective of the children of the NLSY79, the particular focus here is on the main Youth sisters who are respondents in the sample. The *NLSY79 User's Guide* details this information, so it is not considered extensively here. The focus in this section is on the children who have been born to the female respondents in this sample. From the child's perspective, children of sisters are cousins to each other. Over the course of the survey years, more than 3000 children in the sample have been identified as having an aunt in the main NLSY79 sample. Most of these children have one aunt, but smaller numbers have multiple aunts. While the number of children who are cousins is considerable, the precise numbers available for a particular research project are contingent on the objectives of the research. For example, will the researcher limit the sample to children or women interviewed in only the current survey year or will the researcher include mothers or children interviewed in one or more of the earlier survey rounds?

More typically, researchers utilize the large number of *child* sibling sample cases that have been born to the female respondents. As seen in Table 1.8 (which focuses on the children of women interviewed in 2002), most of the women interviewed have had more than one child, including a rather large sample of women who have had three or more children, as they approach the end of their childbearing years. In addition to multiple births, there are many family units where the two or more children are widely spaced in age, thus enhancing the possibility of exploring the impact of childbearing on children that have been born to the same

mother but at different maternal life cycle stages. This table is limited to women who have been interviewed in 2002 and their children. Larger sample sizes can be generated by incorporating into one's sample women who were not interviewed in the current survey year but who had been interviewed in earlier survey rounds.

**Table 1.8. NLSY79 Women Interviewed in 2002 by Number and Ages of Children and by Race/Ethnicity**

Type of Household (Female)	Age of Child(ren)	Number of Households			
		Hispanic	Black	White	Total
Females with no children		89	197	354	640
Family units 1 or more child					3315
Mothers with 1 child	< 6 years old	18	17	44	79
	6-9 years old	11	22	54	87
	10-14 years old	23	44	99	166
	15+ years old	46	127	142	315
	Total	98	210	339	647
Mothers with 2 children	Both < 6 years old	8	8	27	43
	Both 6-9 years old	4	8	29	41
	Both 10-14 years old	19	11	82	112
	Both 15+ years old	93	160	276	529
	Older 6-9, Younger < 6	11	9	61	81
	Older 10-14, Younger < 6	3	8	21	32
	Older 15+, Younger < 6	11	9	11	31
	Older 10-14, Younger 6-9	15	22	91	128
	Older 15+, Younger 6-9	19	27	22	68
	Older 15+, Younger 10-14	62	79	152	293
Total	245	341	772	1358	
Mothers with 3 or more children	All < 6 years old	0	1	2	3
	All 6-9 years old	0	0	3	3
	All 10-14 years old	2	1	6	9
	All 15+ years old	75	159	140	374
	Oldest 6-9, Youngest < 6	5	5	23	33
	Oldest 10-14, Youngest < 6	12	6	36	54
	Oldest 15+, Youngest < 6	47	53	52	152
	Oldest 10-14, Youngest 6-9	5	12	41	58
	Oldest 15+, Youngest 6-9	57	76	82	215
	Oldest 15+, Youngest 10-14	105	149	155	409
	Total	308	462	540	1310

NLSY79 female respondents who are sisters, as well as children born to those sisters, can be readily identified. NLSY79 female respondents who are sisters and who were resident in the

same household when the sample was selected can be identified by variables on the child file called SISTID1-3 (C00010.00-C00012.00). Children born to a particular respondent all share the same stem as the ID of their mother, with an additional two-digit identifier (01, 02 etc.) that typically (although not in all cases) clarifies their sibling placement.

### **Using the Sampling Weights**

The sampling weights for younger children and young adults (1) adjust the unweighted data for sample attrition of mothers and their children since the first survey round (1979) and the sample reduction due to the loss of the military and economically disadvantaged white oversample and (2) adjust the sample for the over-representation of black and Hispanic youth. For those interested in generating population estimates for prior survey rounds, sampling weights for those survey rounds are available. Using these weights translates the unweighted sample of children into a population that represents all children who have been born by that date to a nationally representative sample of women who were 14 to 21 on December 31, 1978. Beginning in 2002, a revised algorithm was used to compute the sampling weights. For the 1994-2000 survey years, two sampling weight variables are available for each year: the originally released sampling weight and a revised weight using the new algorithm.

Weights are computed only for younger children or young adults who have been interviewed in a given year. *Children not assessed and young adults not interviewed in a given year are assigned a weight of zero for that year.* Table 1.9 lists the complete set of child, young adult, and mother sampling weights.

**Table 1.9. NLSY79 Child, Young Adult, and Mother Sampling Weights**

Reference Number	Variable Description	Question Name	Year	Area of Interest
C00700.04	Sampling Weight of Mother	SAMPWT79	1979	FAMILY BACKGROUND
C05812.	Child Sampling Weight 1986	CSAMWT86	1986	ASSESSMENT 1986
C08007.	Child Sampling Weight 1988	CSAMWT88	1988	ASSESSMENT 1988
C09999.	Child Sampling Weight 1990	CSAMWT90	1990	ASSESSMENT 1990
C11999.	Child Sampling Weight 1992	CSAMWT92	1992	ASSESSMENT 1992
C15089.	Child Sampling Weigh 1994t	CSAMWT94	1994	ASSESSMENT 1994
C15658.	Child Sampling Weight 1996	CSAMWT96	1996	ASSESSMENT 1996
C18012.	Child Sampling Weight 1998	CSAMWT98	1998	ASSESSMENT 1998
C24955.	Child Sampling Weight 2000	CSAMWT2000	2000	ASSESSMENT 2000
C05812.01	Child Sampling Weight – Revised 1986	CSAMWT1986_REV	1986	ASSESSMENT 1986
C08007.01	Child Sampling Weight – Revised 1988	CSAMWT1988_REV	1988	ASSESSMENT 1988
C09999.01	Child Sampling Weight – Revised 1990	CSAMWT1990_REV	1990	ASSESSMENT 1990
C11999.01	Child Sampling Weight – Revised 1992	CSAMWT1992_REV	1992	ASSESSMENT 1992
C15089.01	Child Sampling Weight – Revised 1994	CSAMWT1994_REV	1994	ASSESSMENT 1994
C15658.01	Child Sampling Weight – Revised 1996	CSAMWT1996_REV	1996	ASSESSMENT 1996
C18012.01	Child Sampling Weight – Revised 1998	CSAMWT1998_REV	1998	ASSESSMENT 1998
C24955.01	Child Sampling Weight – Revised 2000	CSAMWT2000_REV	2000	ASSESSMENT 2000
C25240.	Child Sampling Weight – Revised 2002	CSAMWT2002_REV <sup>1</sup>	2002	ASSESSMENT 2002
Y03565.	Young Adult Sampling Weight 1994	YA94WEIGHT	1994	YA COMMON KEY VARIABLES
Y06507.	Young Adult Sampling Weight 1996	YA96WEIGHT	1996	YA COMMON KEY VARIABLES
Y09469.	Young Adult Sampling Weight 1998	YA98WEIGHT	1998	YA COMMON KEY VARIABLES
Y11923.	Young Adult Sampling Weight 2000	YA00WEIGHT	2000	YA COMMON KEY VARIABLES
Y03565.01	Revised Young Adult Sampling Weight 1994	YA94WEIGHT_REVISIED	1994	YA COMMON KEY VARIABLES
Y06507.01	Revised Young Adult Sampling Weight 1996	YA96WEIGHT_REVISIED	1996	YA COMMON KEY VARIABLES
Y09469.01	Revised Young Adult Sampling Weight 1998	YA98WEIGHT_REVISIED	1998	YA COMMON KEY VARIABLES
Y11923.01	Revised Young Adult Sampling Weight 2000	YA00WEIGHT_REVISIED	2000	YA COMMON KEY VARIABLES
Y14350.00	Young Adult Sampling Weight 2002	YA02WEIGHT	2002	YA COMMON KEY VARIABLES

<sup>1</sup> NOTE: The REV suffix refers to the revised algorithm used to generate the sampling weights. This terminology is not applied to the question name for the 2002 Young Adult sampling weight but the revised algorithm was used to compute all child and young adult sampling weights in 2002.

The child sampling weights adjust for sample attrition of NLSY79 mothers and children (including the loss of the military and white oversamples) and for over-representation of black and Hispanic respondents. Each set of cross-sectional child sampling weights is computed by multiplying the mother’s 1979 sampling weight by a factor that is the reciprocal of the rate at which children in particular age/sample-type/sex cells are assessed or interviewed.

Starting with the 2002 child survey round, an updated automated computation procedure was instituted to make the weighting process more transparent for researchers. The set of SAS programs allows users to create custom sets of weights for analyses that require more than cross-sectional weighting information. The automated process was designed both to sum to the same population totals and to follow the same procedures as done previously. Because of slight differences in the results, the 2002 data release contains two sets of cross-sectional

weighting variables: (1) the weights released previously over time from 1986-2000 and (2) a revised set that recreates the original, using the new program for every year from 1986 to 2002. Users should find minimal differences between the two series but are strongly encouraged to check if switching between the two types of weights affects their results.

The 2002 public release contains a complete set of custom child weights for all child survey years in which values are assigned according to the following criteria:

- Each non-interviewed child's weight = 0.
- Each interviewed child's weight is equal to the mother's weight multiplied by the number of children her interviewed child represents.
- Every interviewed child represents him/her self plus the number of non-interviewed, known children, plus the number of children estimated to have been born to non-interviewed mothers. This last set of imputed children is determined by determining the number of years since the mother was last interviewed, and assigning the same number and ages of children born based on what was reported for interviewed mothers of the same sex and race.

In the other NLS cohorts, the cell collapsing code is relatively complex and allows the program to merge almost any set of adjacent cells. In creating the weights or the Child-YA cohort the cell collapsing code is simpler because to date the only collapsing has occurred among the oldest children. Generally cells were collapsed as follows:

- Only the end points are collapsed (oldest and youngest kids)
- The end point is the same for males and females (to follow how it is done prior to the custom weighting program)
- Cells are collapsed if there are less than 10 observed children

Researchers who need to weight individuals who participated in multiple survey rounds (i.e., such as all children who participated in 1988-1998) are referred to the custom weighting program located on the NLS-BLS website: <<http://www.bls.gov/nls>>. We caution users that comparing weighted estimates across years can be risky as the composition of the sample can change in subtle ways depending on who was interviewed.

### **Research Based on the NLSY79 Child and Young Adult Data**

The within and cross generation research possibilities offered by this data set are considerable. They overlap the interests of researchers in a rather wide range of intellectual disciplines. This chapter has highlighted a number of data and sample considerations that are relevant to many research agendas, suggesting strengths and limitations of this panel data set.

Chapters 2 and 3 provide considerable detail about the contents of the younger child and young adult data files. Chapter 4 suggests how the data set can be used for mainstream research topics in sociology, economics, child development, public health, and several other related disciplines. Major strengths of the NLSY79 child data are the panel and intercohort dimensions of the data collections. It is possible to follow large samples of children across much of their lifespan. Chapter 4 focuses on analytical connections over the life course, suggesting a number of potential within and cross-disciplinary research possibilities. In this

chapter, the thrust of the discussion is on longitudinal dimensions that deal directly with the sample sizes that are available for different kinds of longitudinal research, in a generic sense. This discussion looks at three specific data perspectives: the number of cases available across surveys for children of different ages as of the current survey; the possibility for enhancing sample sizes across narrowly defined age groups, by cumulating children of specified ages at different survey points; and the possibilities for sibling and cousin research that exist because the original main respondent sample selection included all individuals in a household that were between the ages of 14 and 21, and the data collection for the children of the female respondents includes multiple interviews with all of the children.

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## **CHAPTER 2: THE NLSY79 CHILD SURVEYS**

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The NLSY79 Child data set contains information about the family background, experiences, and development of the biological children of the female respondents. In addition to the mother's longitudinal history from the NLSY79, the Child surveys provide assessments of each child as well as demographic and other developmental information collected from either the mother or child. This profile includes not only the battery of cognitive and socio-emotional assessments administered since the 1986 survey but detailed reports on the birth history, health, school experiences, family background, attitudes, and quality of the home environment of the sample children.

This chapter discusses the types of data found in the child files and provides information on the data collection methods that have been used in the surveys. At the end of this guide is a detailed listing of the topics covered in each of the child survey rounds (see Appendix H: Child Survey Content, 1986-2002).

In order to use the child survey information effectively it is helpful to understand the instrumentation and methods that have been used in the field to collect the data.

### **Instrumentation**

Multiple field instruments are used to collect information from and about the NLSY79 children. These instruments are used to assess the children and to elicit reports about their health, aptitudes, achievement, attitudes, and behavior. The Child Supplement (CS) in its current format is a CAPI questionnaire administered by the interviewer. It is used by the interviewer to verify age and grade, measure the child's height and weight, complete the interviewer-administered assessments, and to get reports from school agers about their schoolwork, work for pay and religion. A Mother Supplement (MS), given to the mother for each child, contains mother-report assessments and questions about health, school, and family background. A Child Self-Administered Supplement (CSAS), introduced in the 1988 survey, contains questions about family interactions, attitudes, and sensitive behaviors for children 10 and older.

**Prior Rounds.** The Child survey instruments were all in paper format until 1994 when the Child Supplement was converted to Computer Assisted Personal Interview (CAPI). In 2000 all items in the Mother Supplement for children under age four were moved to the Child CAPI Supplement. Some sections on school and family that had previously been in the MS were transferred to the Child Supplement for CAPI administration. The Child Self-Administered Supplement used in 2000 was still the confidential paper self-report aimed at children ages 10-14. The types of questionnaires and their general content for 1986-2000 are outlined in Table 2.1 and Table 2.2 of the 2000 Child-YA Data Users Guide (CHRR, 2002).

**Current Survey Instruments.** In the 2002 survey round, each child interview involved the administration of one Child Supplement, one Mother Supplement and, for children age 10-14, a Child Self-Administered Supplement. In the 2002 survey, the Child Supplement was essentially reserved only for items that involved interviewer contact with the child. The 2002 Child Supplement focused on the interviewer-administered assessments and questions for school agers on classroom activities, teacher practices, homework, work for pay, and religion. In 2002 all items that had been traditionally addressed to the mother, such as schooling, health, and family background were moved into the Mother Supplement, which became a

CAPI instrument for the first time. In 2002 the Child-Self-Administered Supplement (CSAS) was converted from paper to CAPI and given to children who were age 10-14 by December 31, 2002. The CSAS was made available both on laptop and on hand-held PDA (Personal Data Assistant). Table 2.1 gives a detailed list of the contents of the three questionnaires that were used in the 2002 survey.

**Table 2.1. NLSY79 Child Surveys: Instrument Content in 2002**

Child Supplement (CS)	Child Self-Administered Supplement (CSAS)
<p><b>Preliminaries – mother report:</b>                      Age &amp; DOB check/verification                      Enrollment &amp; current grade                      Child Height &amp; Weight</p> <p><b>Interviewer-Administered Assessments</b>                      What I Am Like (SPPC): 12-14 years                      Memory for Digit Span: 7-11 years                      PIAT Math: 5-14 years                      PIAT Reading: 5-14 years                      PPVT: 4-5, 10-11 years</p> <p><b>Child Schooling: 8-14 yrs child report</b>                      Homework                      Classroom activities/teacher practices                      Parent assistance with homework/school plans</p> <p><b>Work for Pay &amp; Religion</b></p> <p><b>Interviewer Evaluation of Testing Conditions</b></p> <p><b>Observations of the Home Environment</b></p> <p><b>Interviewer Remarks</b></p>	<p><b>Child Self-Report for children 10-14 years:</b>                      Parent-Child Joint Activities                      Household Task Expectations                      Rules for Child Behavior                      Contact with father                      Parent-Child Decision-Making                      Parent-Child Interaction                      Parental Consensus                      Child "Moods"/Depression                      School Satisfaction                      Weapons at School                      After-School Activities                      Educational Expectations                      Club Membership                      Attitudes on Gender Roles                      Summer Activities                      Neighborhood Safety                      TV Viewing</p>
Mother Supplement (MS)	
<p><b>Child Background</b>                      School enrollment; Head Start; parent involvement                      Child religion</p> <p><b>Health</b>                      General health status; limiting conditions                      Accidents, injuries, illnesses; hospitalizations                      Menarche &amp; handedness                      Insurance coverage</p> <p><b>Mother Report Assessments:</b>                      The HOME                      How My Child Usually Acts (Temperament): 2-6 yrs                      Motor &amp; Social Development: 2-3 yrs</p> <p><b>School &amp; Family (CASI): 5-14 yrs</b>                      School progress; School ratings                      Educational expectations for child                      Child social relationships</p> <p><b>Behavior Problems Index (CASI): 4-14 yrs</b></p> <p><b>Child Mental Health: 0-14 (CASI 4-14 yrs)</b></p> <p><b>Interviewer Remarks</b></p>	<p>Anti-Social Activities                      Religious attendance                      Friendship Network                      Peer Pressure                      Risk-Taking Behavior                      Alcohol, Cigarette, &amp; Drug Use                      Dating                      Marriage &amp; Childbearing Expectations                      Sex Education; Knowledge                      Time Away from Parents                      Computer Access/Training                      Computer Activities                      Interviewer Remarks</p>

The Child data collection instruments have undergone changes, some of which are documented in this and other users guides from prior rounds as well as in the *NLSY79 Child Handbook: 1986-1990* (Baker et al., 1993). Most of the primary variables found in the child data set are derived directly from one or more survey instruments, e.g., questionnaires or other interview forms. Constructed variables on the Child file that are not based directly on the Child assessments (e.g., pre- and postnatal care, child care, or maternal employment) are derived from information reported by the mothers during their own main NLSY79 Youth interviews. Users are urged to examine the NLSY79 Child data collection instruments and relevant main NLSY79 Youth questionnaires in conjunction with the other documentation that accompanies the data files. On-line documentation for these questionnaires is discussed in Chapter 5. Details on the content of each questionnaire and the mode of administration used in 2002 are discussed in the following section.

**Mother Supplement, 2002.** The Mother Supplement (MS), formerly a paper booklet, is a CAPI instrument administered to the mother in 2002. Table 2.2 describes the content of the MS in 2002 and the age at which each child was eligible for a particular section.

**Table 2.2. Mother Supplement 2002 – Administration Pattern by Age of Child**

	Verify Age & DOB	Background	Health	The HOME	How My Child Acts	Motor & Social Development	School & Family	Behavior Problems	Child Mental Health	Intervr Remarks
Age	0-14 yrs	3-14 yrs	0-14 yrs	0-14 yrs	2 yrs* - 6 yrs	2 yrs* - 3 yrs	5-14 yrs	4-14 yrs	0-14 yrs	0-14 yrs
<1										
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

\* Children born before mother's 2000 interview date. If mother was not interviewed in 2000, then children born before 1/01/2000.

 FI administered

 CASI

 FI Only

The current questionnaire begins with an introduction to obtain information about each child's schooling, religious attendance, and health. The interviewer asks about the child's home environment and temperament and then turns the laptop over to the mother so she can complete a CASI section on her child's school progress, behavior problems, and mental health. Designed to be completed by the mother or guardian for each child, the Mother Supplement contains the following sections:

Preliminaries – short introduction in which the interviewer verifies the name and age of the child to be interviewed and the mode in which the questionnaire will be administered (in-person or telephone).

Child Background – questions on school attendance, Head Start, teacher behavior and classroom activities, parental involvement in school, child's religious attendance, the importance of religion, and a confidential series on the child's progress in school and ratings of school quality.

Child Health – mother reports on the child's general health status, accidents and injuries, illnesses, menses update, handedness, insurance coverage, mental health.

Mother report assessments - The HOME; Behavior Problems Index for children 4-14; and Temperament or "How My Child Acts" for children ages 2 to 6; Motor & Social Development for ages 2 and 3. (Children born after the mother's 2000 interview date (or 1/1/2000 of the mother was not interviewed) were not eligible for Temperament or Motor and Social Development in 2002.)

CASI section – mother reports on child's school progress, educational expectations and social relationships, and mental health; provides ratings of school effectiveness.

Interviewer Remarks – Interviewer indicates which, if any, questions caused problems and rates the mother's attitude about using the CASI section.

The flowchart in Appendix G depicts the general content and pathways of the Mother Supplement in the current survey year.

**Changes to the Mother Supplement.** From 1986-2000 the Mother Supplement (MS) was a paper booklet, self-administered by the mother. In 2002, the paper-and-pencil Mother Supplement was converted to a CAPI instrument. Questions about child school attendance and Head Start that were previously addressed to the mother at the beginning of the Child Supplement (CS) were moved into the Child Background section of the 2002 Mother Supplement. The MS Child Health section now contains the series about limiting conditions, accidents, and injuries that used to be in the Child Supplement. School and family background questions, which were once in the paper Mother Supplement and then in the Child CAPI Supplement, are in the CAPI Mother Supplement.

Mother-report assessments, some of which were in the Child CAPI Supplement for children under age 4 in 2000, were all moved to the Mother Supplement. Three of these mother-report assessments are now administered by the interviewer:

1. The HOME
2. How My Child Usually Acts (Temperament)
3. Motor and Social Development

While most of the Mother Supplement questions were asked by the interviewer, mothers use CASI to self-administer a series of sensitive questions about each child's school progress, school rating, class standing, and educational expectations. They also report on each child's problem behaviors by completing the Behavior Problems Index (BPI) in the CASI section. Some confidential health questions, previously in the CS, are now self-administered in a brief MS section called Mental Health when reporting about children 4 and older.

**Child CAPI Supplement, 2002.** The Child CAPI Supplement (CS) is used by the interviewer to: (1) verify age and grade of the child, (2) weigh and measure the child, (3) give children the interviewer-administered cognitive and socio-emotional assessments, (4) obtain information about the child's current school experience, (5) evaluate the testing conditions, and (6) record observations of the child's home environment. Table 2.3 displays the contents of the CS in 2002 and the age at which a child was eligible for each section.

**Table 2.3. Child Supplement 2002 – Administration Pattern by Age of Child**

Section Name:	Preliminaries – Age Check	Consent, Grade	Child Hgt & Wgt	What I Am Like (SPPC)	Digit Span	PIATs	PPVT	Child Schooling	Work for Pay & Religion	Intv Eval of Testing Conditions	HOME Observations	Interviewer Remarks
Age Range	0-14 yrs	4-14 yrs	0-14 yrs	12-14 yrs	7-11 yrs	5-14 yrs	4-5, 10-11 yrs	8-14 yrs	10-14 yrs*	4-14 yrs	0-14 yrs	0-14 yrs
<1	FI administered		FI administered								FI only	
1	FI administered		FI administered								FI only	
2	FI administered		FI administered								FI only	
3	FI administered		FI administered								FI only	
4	FI administered	FI administered	FI administered				FI administered				FI only	
5	FI administered	FI administered	FI administered			FI administered	FI administered				FI only	
6	FI administered	FI administered	FI administered			FI administered					FI only	
7	FI administered	FI administered	FI administered		FI administered	FI administered					FI only	
8	FI administered	FI administered	FI administered		FI administered	FI administered		FI administered			FI only	
9	FI administered	FI administered	FI administered		FI administered	FI administered		FI administered			FI only	
10	FI administered	FI administered	FI administered		FI administered	FI administered	FI administered	FI administered			FI only	
11	FI administered	FI administered	FI administered		FI administered	FI administered	FI administered	FI administered			FI only	
12	FI administered	FI administered	FI administered	FI administered		FI administered		FI administered			FI only	
13	FI administered	FI administered	FI administered	FI administered		FI administered		FI administered			FI only	
14	FI administered	FI administered	FI administered	FI administered		FI administered		FI administered			FI only	

\* Children ages 10-14 self-administer the Child Self-Administered Supplement (CSAS) as a separate questionnaire on the laptop or PDA.

 FI administered

 FI only

The Child Supplement begins with questions addressed to the mother on the child's current grade, enrollment status, preschool experience and recent health history. In the 2002 survey round, the interviewer administers the following sections to the mother before starting any child assessments:

Preliminaries – short introduction in which the interviewer verifies the name and age of the child to be interviewed and the mode in which the questionnaire will be administered (in-person or telephone).

Child height and weight – either mother report or interviewer measurement.

The interviewer then administers the following assessments directly to children age 4 and older:

Interviewer-administered Child Assessments – What I am Like (SPPC) for children age 12-14; Memory for Digit Span for children 7-11; PIAT Math and Reading subtests for children 5 and older; and the PPVT-R administered to children 4-5, and 10-11.

All interviewer-administered assessments are completed using CAPI software, a process that was introduced into the surveys in 1994. The software presents the interviewer with on-screen facsimiles of the assessment items, stores each response that is entered, and then automatically scores the test. Original materials prepared by the test designers for PIAT Math and Reading Recognition are presented to the child. The PIAT Reading Comprehension and the PPVT are presented to the child on-screen.

After the interviewer-administered assessments are completed, the following schooling section is administered to children age 8-14:

Child Schooling – questions addressed to school age children about reading, homework, classroom activities, and their perception of parental involvement in school.

The Child Supplement concludes with interviewer reports on the child's testing environment and a checklist of conditions observed in the home.

Interviewer Evaluation of Testing – interviewer reports used to gauge the attitude of the child toward testing, the child's general physical condition, and whether there were any events that interfered with assessment or caused premature termination of the session.

Interviewer Observations of the Home Environment – interviewer perceptions of the child-mother interaction and the nature of the child's physical surroundings. Most of the items that comprise the HOME scales are in the mother-report section assessment section of the Mother Supplement. However, selected interviewer observations of the home environment (found in the CS) are used in scoring the HOME assessment.

The 2002 Child CAPI Supplement flowchart in Appendix G-2 illustrates the sequence in which a case proceeds through this questionnaire according to the age of the child.

**Changes to the Child Supplement (CS).** In 2002 virtually all the child background questions that appeared in previous survey rounds in the beginning of the CS (directed to the mother) were moved to the Mother Supplement. The Child Supplement is still the questionnaire in which the interviewer administers child assessments directly to the child. It contains questions about school, directed to older kids, and a section where the interviewer can record any special conditions that might affect testing. It is still the instrument in which the interviewer records observations about the child's home environment.

Changes to the Assessments: Two assessment easels have been eliminated. Children view the PIAT Reading Comprehension subtest and the PPVT on-screen while the interviewer still uses the assessment materials in the standard manner. All assessments, including the PPVT, were administered only in English in 2002. Interviewers were instructed to make comments in the assessments or interviewer remarks section if other languages were used in the interview to facilitate understanding.

Child Schooling raised to age 8: Questions about the child's most recent classroom experiences and homework were directed to children 8 and older.

Work for pay & Religion moved from CSAS: Questions about jobs and religious affiliation that were in the CSAS for children 10-14 in prior rounds were moved to the Child Supplement and administered by the interviewer.

**Child Self-Administered Supplement (CSAS) 2002.** The Child Self-Administered Supplement (CSAS), introduced in 1988, has been used to collect information from children ages 10 years and over on a wide range of topics including child-parent interactions, family decision-making, attitudes toward school, extra-curricular activities, work for pay, peer relationships, dating activities, attendance at religious services, antisocial behavior, and substance use.

In booklet form until 2002, this self-report questionnaire is now administered on laptop and on PDA by children who are 10 to 14 years old by the end of the survey year. The CSAS collects information on: (1) child-parent interactions, (2) family decision-making, (3) attitudes toward school, (4) after school and extra-curricular activities, (5) jobs and employment, (6) peer relationships and dating activities, (7) religious identification and attendance at religious services, (8) birth and marriage expectations, (9) sex education, (10) participation in various delinquent activities, (11) use of cigarettes, alcohol, and other illegal substances, (12) age at initiation of sexual activity (for those 13 or older), (13) risk taking and depression and (14) computer use. Once children reach the Young Adult survey they are asked questions about sexual activity in greater detail. See Table 2.1 for details on the current content of the CSAS.

**Changes in the CSAS.** The content of this supplement has gradually expanded since 1988, the first survey year that it was used. In 1992, the following items and topics were added to the Child Self-Administered Supplement: (1) dates of birth and usual residence of any children born to the NLSY79 children age 13 or older, (2) expanded categories on the decision-making questions, (3) parent interaction, (4) parent-child closeness, (5) depression, (6) peer pressure, (7) school rating, and (8) neighborhood safety.

In 1994, with the introduction of the Young Adult survey, the CSAS was limited to children ages 10-14. In that same year, a sequence of questions was added regarding the nature of parent interactions on issues relating to the child. A seven-item series was added that probes into the child's ideas about appropriate roles for boys and girls in the family, with peers, and in school. Also included for the first time in 1994 was a sequence on risk-taking. The substance use series was substantially augmented by the addition of in-depth questions about current use of cigarettes, alcohol, marijuana, and a variety of other drugs. A series of questions about computer use and programming knowledge was also introduced in 1994. The only significant change since 1996 was an expansion, in 1998, of the sequence of questions relating to substance use.

A CSAS confidential report form was used from 1988 to 2000 to collect information on early sexual activity for children 13 and older. In 2000 the questions on the CSAS confidential card about live births were eliminated since this information is now collected as the children become young adults. Starting in 2002, questions about early sexual activity are no longer administered to children under age 15. The following questions, which were asked in the 1988-1998 surveys of children ages 13 and 14, were deleted from the 2002 survey:

- CSASCC2A Have you ever had sexual intercourse? (“had sex”, “made it”, etc.)
- CSASCC2A What grade were you in when you first had sexual intercourse?
- CSASCC2B How old were you when you first had sexual intercourse?

**CSAS on PDA.** In 2002 the Child Self-Administered Supplement was available for the first time on a hand-held personal data assistant (PDA) and on laptop. Children were encouraged to complete the CSAS on PDA while the interviewer continued other parts of the interview either with the mother or siblings on the laptop. If only one child age 10-14 was in the household or the laptop was not being used, that child could complete the CSAS on laptop as soon as the assessments were completed. Since it was necessary to determine ahead of time which children would take the CSAS, all children who might turn 10 during the field period were identified as eligible for the CSAS. This means that some children who were age 9 at the time of the interview, but who would turn 10 by the end of the year, were eligible to start the CSAS. They completed a short mini series on the PDA. A question was added in 2002 on the extent of the child's previous experience using any type of hand-held digital device.

### **Data Collection**

**PAPI and CAPI.** The NLSY79 child interviews were conducted using paper and pencil personal interviewing (PAPI) from 1986-1992. Starting in 1994 the Child Supplement and the entire Young Adult interview were administered using computer-assisted personal interviewing (CAPI). The CAPI questionnaire, administered on laptop computers, allows interviewers to enter responses directly into the computer during the interviews. This computerized mode offers advantages in terms of timeliness of data availability, improved data quality, and the extent to which an interview can be tailored to the particular respondent. In the case of the child survey, the CAPI mode allows for computerized scoring of the assessments and machine calculation of child age. CAPI also enables the interview to utilize pre-loaded information on the child's eligibility for various questions, including menses, and feeds current information from the main Youth interview about the mother and the status of

the father in the household. In 2002 the Mother Supplement was converted to CAPI and in 2002 the Child Self-Administered Supplement was completed by children on hand-held PDA or on laptop.

**Multiple Modes.** Interviews with the NLSY79 children involve mother reports, child reports, interviewer observations, and interviewer administration of assessments according to strict test protocol. The Child interviews are typically conducted in the mother respondent's home by experienced, specially trained field staff. Reports are obtained from the children and their mothers and by interviewers trained to directly assess each child and to provide evaluations of the home environment. Child interviews through 1992 were conducted primarily in person using paper and pencil. Beginning in 1994, the assessments given directly to the child were administered using computer-assisted personal interviewing (CAPI). In the 2000 Child survey 300 cases were completed by telephone interviews with mothers for children under age 4 who were not eligible for interviewer-administered assessments and could be completed without an in-person visit. In 2002, telephone was also used to complete parts of the interview that did not involve interviewer-administered assessments. Also in 2002, a hand-held Personal Data Assistant (PDA) was introduced for use in administering the Child Self-Administered Supplement. Details on each of the three major types of report are listed below:

**Mother Report.** The mother completes the HOME for each child (regardless of age) and the following assessments for each age-eligible child: Temperament (How My Child Acts), and Behavior Problems (BPI). She answers questions posed by the interviewer on Child Background and Family and School and completes a confidential, self-report section on health and behavior problems.

**Interviewer Administered.** Digit Span, SPPC (Self Perception Profile for Children), the PIAT achievement subtests, and the PPVT are administered directly to age-eligible children by the interviewer. School age children (some with help from their mothers) answer questions posed by the interviewer about their current school and classroom. Slightly older children answer questions about work and religion. The interviewer completes a series of observations about the home environment that are tailored for each child age group.

**Child Self-Report.** In 2002 the Child Self Administered Supplement, which had been a paper booklet, was converted for administration on laptop and on a hand-held personal data assistant (PDA). The instrument for both modes of administration have the same content. The laptop/PDA version of the CSAS allowed the child to enter answers directly while the interviewer completed other tasks or interviewed other members of the household. The PDA required the child to read the question on a small screen and enter an answer choice by pressing a stylus on the screen.

**Field Period.** The field period of the Child data collection generally coincides with the survey dates of the main NLSY79 interview of each mother. However the child instruments are not always fielded on a single date. Fielding typically occurs over a period of about six months from late May through November. In the 2000 survey round a very small number of cases were actually completed in the year 2001. Information on fielding dates specific to each CAPI round can be found in the year-specific CHILD SUPPLEMENT areas of interest.

**Child Face Sheet.** This interviewer information sheet, used as a paper aid during the 1988-1996 fieldings, contained information on the child’s ID, name, mother’s sample type (1990 only), Child Supplement interview date, child’s date of birth, child’s age at date of child supplement, PPVT age, school grade, whether child has had menses, interviewer ID, and a grid indicating which assessments should be administered (through 1994). Interviewers continue to utilize this type of information in electronic formats in conjunction with their case management.

**Spanish Translation.** Spanish translations of several child assessment instruments have been made available to respondents with limited proficiency in English. In 1986, a total of 354 children, age eight months or older, were assigned to bilingual interviewers. Of these cases, slightly more than 100 children were actually assessed in Spanish. More than 100 children were assigned to bilingual interviewers in 1988. By 1990, 52 children were assigned to bilingual interviewers, but of this number, only 17 were actually assessed in Spanish. In 1998 approximately 50 children were interviewed in Spanish but most of them were assessed in English. In 2000 the number of children assessed in Spanish declined to fewer than 10. Part of this recent decline results from the higher minimum age of children eligible to be assessed. By the current survey round most of the Spanish language parents would have resided in the U.S. for more than two decades. In 2002 no Child instruments were translated into Spanish, although several bilingual interviewers were assigned to households in which Spanish is a principal language. Users may consult the 2000 Child-YA Data Users Guide (CHRR, 2002) for details on which questionnaire sections and child assessment instruments were translated for administration in Spanish in the 1986-2000 survey rounds.

**Basic Documentation**

Most details related to documentation of the child data appear in Chapter 5 of this guide. However, some basic information about the documentation is useful in understanding the data description that follows.

**Areas of Interest.** Referred to as “record types” in prior surveys, the areas of interest are topical categories used to organize the multitude of questionnaire items and constructed variables in the file. Starting with the 2000 data release, the names have been converted from mnemonics to phrases. Table 2.4 lists the Child areas of interest with a brief description of the types of variables assigned to each topical area. The “SUPPLEMENT” areas of interest are grouped in the table, but in the documentation they occur separately by year.

**Table 2.4. NLSY79 Child Data Files: Child Areas of Interest**

Areas of Interest	Description of Area of Interest
ASSESSMENT 1986-1988	Raw & normed assessment scores; PPVT age; child sampling weight 1986-1988
ASSESSMENT 1990-2002	Raw & normed assessment scores; PPVT age; child sampling weight 1990-2002
CHILD BACKGROUND	Child linkage variables; demographics characteristics; usual residence; father presence; interview status
CHILD CARE	Retrospective child care in first 3 years of life
CHILD SUPPLEMENT 1986	1986 <i>Child Supplement</i> assessment items; health; enrollment; grade level; testing conditions; HOME observations
CHILD SUPPLEMENT 1988-1994	1988-1994 <i>Child Supplement</i> assessments; health; enrollment; grade; Head Start;

	testing conditions; HOME observations
CHILD SUPPLEMENT 1996-2000	1996-2000 <i>Child Supplement</i> assessments; health; enrollment; grade; Head Start; testing conditions; schooling; HOME observations
CHILD SUPPLEMENT 2002	<i>Child Supplement</i> assessments; height & weight; grade; schooling; work; religion; testing conditions; HOME observations
CHILD SELF-ADMINISTERED SUPPLEMENT	<i>Child Self-Administered Supplement</i> questionnaire items; confidential card 1988-2000
FAMILY BACKGROUND	Maternal background: age; highest grade completed; enrollment status; original sample ID and sampling weight
MATERNAL HOUSEHOLD COMPOSITION	Maternal household composition: age, education, and work status of household members
MATERNAL WORKHISTORY	Mother's quarterly employment history linked to child date of birth
MOTHER SUPPLEMENT 1986	<i>Mother Supplement</i> assessments, 1986
MOTHER SUPPLEMENT 1988-1998	1988-1998 <i>Mother Supplement</i> assessments; school and family background
MOTHER SUPPLEMENT 2000	2000 <i>Mother Supplement</i> assessments for children under age 4
MOTHER SUPPLEMENT 2002	2002 <i>Mother Supplement</i> assessments; child background; health; school
PRE/POST NATAL CARE	Prenatal care of child; postnatal care of child; infant health in first year of life

NOTE: NLSY79 young adult children, regardless of age, are represented in all areas of interest except those related to the Child and Mother supplements or to the assessments in the years they were interviewed as young adults.

**Reference Numbers.** Child reference numbers refer to the identifiers, constructed with an initial letter followed by a sequence number, which uniquely identify each individual item on the file. Reference numbers generally start with C for data items from the Child files, Y for young adult variables, and R for the main NLSY79 file. Items in the CHILD SCHOOL SURVEY area of interest are assigned reference numbers prefixed with “S.”

**Question and Variable Names.** Through 1998 the names of variables on the NLSY79 child data set were derived from one of three sources: (1) question names used in the Child, Mother, and Child-Self-Administered supplements described above (CS, or MS, or CSAS), (2) acronyms used to identify the child assessments administered at the time of the survey (e.g., *BPI2000* for Behavior Problems Index-Raw Score, 2000), or (3) mnemonic names for constructed variables that are based on inputs taken from the main NLSY79 survey (e.g., *AGEMOM2002* for Age of mother at interview date, 2002).

Starting in 2000, question names are not bound by deck and column as in the early child surveys. Items from the Mother Supplement or Child Self-Administered supplement are prefixed to indicate the source of the question (MS or CSAS). Some question names from the Child CAPI Supplement carry the CS prefix, but most indicate (with a short abbreviation) the section of the instrument from which each question was derived—e.g., question names beginning with SCHL come from the section of the Child Supplement questionnaire regarding the child’s schooling. The HLTH series designates the child health questions. They also indicate the order in which the question was administered within each section of the questionnaire. Additional details on the question names can be found in Chapter 5.

### **The Child Data**

The NLSY79 Child survey tracks children’s health and growth, abilities, problems, school progress, social experiences, and home environments. Some measures are obtained through mother or child responses to questions posed by interviewers. Assessment data, described later in this Chapter, are collected through mother report and interviewer administration of standard tests directly to the children. Beginning in 1994, Young Adult members of the child sample are no longer assessed but given a questionnaire appropriate for respondents age 15 and older. All the “child” measures for these young adult children remain, however, in the child data files for the periods in which they were interviewed or assessed as children.

The Child data files provide information on the cognitive and socio-emotional development, behavior, health, home environment, school, and family background of the sample children. Reports are recorded on schooling, grade repetition, school behavior and expectations, peer relations, and religious attendance and training for children age 10 years or older. Information for older children is also available on family decision-making, school attitudes, work activities, peer relationships, religious attendance, smoking, alcohol and drug use, and sexual activity, computer use and gender roles. Table 2.5 provides the reference numbers for a set of commonly used variables in the Child file.

The section that follows first outlines the data elements that are *not* related to the child assessments. The data topics are presented in alphabetical order, starting with “AGE” and ending with “SMOKING.” Particular attention is given in this section to some of the scales used to collect information from the NLSY79 children who are entering adolescence.

**Table 2.5. Key Variables on the NLSY79 Child Files: Variable Descriptions and Reference Numbers**

Variable Description	Child Survey Year								
	1986	1988	1990	1992	1994	1996	1998	2000	2002
Identification code of child	*	*	*	*	*	*	*	C00001.00	C00001.00
Identification code of mother of child	*	*	*	*	*	*	*	C00002.00	C00002.00
Age of child (in months) at interview date of mother	C00045.00	C00047.00	C00047.20	C00047.40	C00047.42	C00047.43	C00047.44	C00047.45	C00047.46
Age of child (in months) at child assessment date (CS)	C00065.00	C00068.00	C00070.10	C00070.30	C00070.41	C00070.43	C00070.45	C00070.47	C00070.49
Age of child (in months) at child assessment date (MS)	C00066.00	C00069.00	C00070.20	C00070.40	C00070.42	C00070.44	C00070.46	C00070.48	C00070.50
Age of mother at birth of child	*	*	*	*	*	*	*	*	C00070.00
Age of mother at date of interview	C00365.00	C00377.00	C00382.30	C00382.32	C00382.34	C00382.35	C00382.36	C00382.37	C00382.38
Race of child (mother's racial/ethnic cohort in screener)	*	*	*	*	*	*	*	*	C00053.00
Sex of child	*	*	*	*	*	*	*	*	C00054.00
Date of birth of child (month, day, year)	*	*	*	*	*	*	*	*	C00055.57
Birth order of child	*	*	*	*	*	*	*	*	C00058.00
Interview status of child							C00115.01	C00115.07	C00115.14
Does child have a Child Supplement record							C00115.04	C00115.10	C00115.16
Does child have a Mother Supplement record							C00115.05	C00115.11	C00115.18
Does child 10-14 years old have a CSAS record							C00115.06	C00115.12	C00115.20
Is child eligible for a Young Adult interview this round					C00112.00	C00112.02	C00112.04	C00112.06	C00112.08
Usual residence of child	C00078.00	C00080.00	C00080.20	C00080.40	C00080.42	C00080.43	C00080.44	C00080.45	C00080.46
Highest grade completed by mother as of current interview	C00599.00	C00611.00	C00611.12	C00611.16	C00611.20	C00611.22	C00611.24	C00611.26	C00611.28
Number of household members in household of mother	C01123.00	C01177.00	C01242.00	C01276.01	C01279.01	C01280.01	C19864.00	C24924.00	C25202.00
Number of children of mother in HH of mother	C01143.00	C01198.00	C01262.00	C01276.21	C01279.21	C01280.21	C19883.00	C24943.00	C25221.00
Is spouse of mother present in household of mother	C01117.00	C01200.00	C01264.00	C01276.23	C01279.23	C01280.23	C19885.00	C24945.00	C25223.00
Is partner of mother present in household of mother	C01119.00	C01202.00	C01267.00	C01276.26	C01279.26	C01280.26	C19888.00	C24948.00	C25226.00
Does father of child (living in HH) live in this household	C00091.00	C00097.00	C00102.00	C00107.00	C00111.12	C00111.17	C00111.22	C00111.27	C00111.32
Week # of child birth date from 1/1/78 to current interview	*	*	*	*	*	*	*	*	C02700.00
First survey year of mother after date of birth of child	*	*	*	*	*	*	*	*	C00052.00
Child sampling weight	C05812.01	C08007.01	C09999.01	C11999.01	C15089.01	C15658.01	C18012.01	C24955.01	C25240.00
Mother sampling weight, 1979 (Youth Ref # R02161.)	*	*	*	*	*	*	*	*	C00700.04
Mother sample ID code (Youth Ref # R01736.)	*	*	*	*	*	*	*	*	C00700.01

NOTE: This table displays a small subset of the total number of variables on the NLSY79 Child & YA files.

\* Variables are updated as of the current survey point and therefore maintain the same reference number in each data release.

CS = Child Supplement, MS = Mother Supplement

### *Age & Demographics*

A number of child background variables are provided in the child data files that designate each child's date of birth, birth order, sex, and mother's race. This series of variables is updated in each release to reflect information for all children as of the current survey point, including children who have become young adults. These key variables, assigned to the CHILD BACKGROUND area of interest, are updated to incorporate children born since the last interview. The demographic information is also reviewed in light of mother updates from the main Youth file. Included in this series is an indication of the child's usual residence at the time of the mother's survey. From 1979-1981 and in 1983 and 1985 the child's residence status is based on reports from the mother's household roster. In all other years, child residence information is derived from the child-specific questions on "with whom the child usually lives" in the Fertility section of the main Youth questionnaire. The set of variables in CHILD BACKGROUND also includes a variable that can be used for linking child events with information linked to the mother's survey date:

C0052. 1<sup>ST</sup> SURVEY YEAR OF MOTHER FOLLOWING DATE OF BIRTH OF CHILD

**Age of child.** The NLSY79 Child Data Files contain a number of age-related variables specific to a birth date as well as to the child's age at various developmental or interview points. Variables such as "Age of Child at Interview Date of Mother" or "Age of Child at Child Assessment Date" are assigned to the CHILD BACKGROUND area of interest. The assessment-specific age variables "PPVT Age of Child at Child Assessment Date" are assigned to the ASSESSMENT area of interest, while PRE/POST NATAL contains such variables as "child age in weeks formula feeding data." Table 2.5 presents reference numbers for some of the more commonly used child age variables.

Users are advised to exercise caution when applying age variables in conjunction with the child assessment data. Some *unedited* child date of birth and age variables may appear in the CHILD SUPPLEMENT and MOTHER SUPPLEMENT areas of interest. These items, not available for all children, appear exactly as recorded in the field. Users are generally discouraged from using these items as reported directly from the questionnaires and instead are urged to rely on the child age variables found in the CHILD BACKGROUND or ASSESSMENT area of interest. The discussion in Chapter 1, titled "Selecting an age variable," offers additional details on the nature of the best age variables.

Most of the child assessments are designed to be administered to select age groups of children. For example, Part D of the Motor and Social Development Scale is intended for children 10–12 months of age, while PIAT Math is administered to children whose PPVT age is 5 years or older. Since assessment dates are not always the same for the Child Supplement and the Mother Supplement, users should apply the age variable specific to the supplement that was used to administer the particular assessment. In 2000 this issue became somewhat more complex in that two mother-report assessments (the HOME and Temperament) were administered in the Child CAPI Supplement for children under age 4. In all years except 2000, it is advisable to use the Mother Supplement age at assessment (MSAGE) for these two measures, but in 2000 the Child Supplement (CS) age was more appropriate for children under age 4.

Information on a child's date of birth from the *Children's Record Form (CRF)*, an instrument used with the main NLSY79 until recent rounds, was the source of birth date information for the *Child Supplements*. Beginning in 1988, a *Child Face Sheet* was introduced as an aid to interviewers in the calculation of child ages. This instrument contained a preprinted child birth date or a place for the interviewer to record the child's date of birth from Part A of the *CRF* and provided a place for calculating child age and PPVT age in reference to the *Child Supplement* interview date. This paper *Face Sheet* was replaced in 1994 by a CAPI feature that computed child age so that interviewers could anticipate which assessments would be administered.

A child's birth date may occasionally be altered on the basis of new information received from the mother in conjunction with the internal evaluation procedures carried out at CHRR. Thus, in a small number of cases, date of birth and child age information may not be completely consistent across all survey rounds. Appendix 5-NLSY79 Supplemental Fertility File Documentation, in the *NLSY79 Codebook Supplement*, discusses cases in which child birth dates were edited.

**Age of mother at child's birth.** The child file contains a key age variable that indicates the age of the mother in relationship to each of her children: "Age of Mother at Birth of Child." (Table 1.2 depicts the distribution of the age of the child by the age of the mother at the birth of the child.) This maternal age variable is assigned to the CHILD BACKGROUND area of interest. A constructed variable that indicates, for each main Youth survey year, the age of the mother at the birth of her *first child* can be found in the FERTILITY & RELATIONSHIPS area of interest in the main Youth file and can be linked to the child file by case ID.

### ***Child Activities***

Unless indicated otherwise, the items about activities addressed to children 10 and older are assigned to the CHILD SELF-ADMINISTERED SUPPLEMENT area of interest.

**After school and summer.** Beginning with the 1988 child survey, children age 10 and older are asked to enumerate the kinds of activities they engage in after school. They are also asked where they go after school, including home, another person's home, community or sports facility, job, mall or after school facility. Children 10-14 are also asked about their activities on a typical summer day. These variables can be found in the CHILD SELF-ADMINISTERED SUPPLEMENT area of interest

**Computer use.** Starting with the 1994 survey round, children age 10 and older are asked a series of questions on their access to a computer at home and at school, and the extent of their computer use. They are asked whether they use a computer to do school work, write papers, correspond, play games and other recreational uses, access the internet, or search for information. The children are asked who helped them learn how to learn computers and whether they themselves have had any special training. Questions about computer use related to work, asked in the YA self-report series, are *not* asked of children under age 15. Young Adults are asked about accessing the internet while children 10-14 are asked about "surfing the net" and access to "bulletin boards." The child computer questions are assigned to the CHILD SELF-ADMINISTERED SUPPLEMENT area of interest.

**Friends and dating.** In all survey rounds except 1986, children 10 and older have been asked about their friendships, whether they feel lonely, and how much pressure they feel from friends to engage in anti-social behavior. They are asked how often (if ever) they go out on dates, at what age they started, and whether there are any rules in the family about dating. If there are rules, they indicate how much say they have in making such rules and whether they argue with their parents about dating or parties. Children completing the Child Self Administered Supplement are asked to express the degree to which they agree with this statement: “It is ok for a girl to ask a boy for a date.” The pattern of administration by survey year for these items on friendship and dating can be found in Appendix H: Content of the Child Surveys. Questions about dating are asked in greater detail once the child becomes part of the Young Adult cohort.

**TV viewing.** Questions on television viewing are posed to mothers for each of her children in the HOME sections of the Mother Supplement (and in the Child Supplement in the 2000 survey). Mothers report the number of hours each child watches television, the number of hours the TV is on in the home, and for children 3 and older, the amount of TV viewing on a typical weekday as well as each weekend day. Children age 10 and older also indicate how much time they spend watching TV on a typical weekday, typical Saturday, and typical Sunday. Children 10 and older also report about family rules governing TV viewing and how much they share with their parents about what they watch.

Selected questions on TV viewing are included in the computation of the HOME scores, but in different ways according to the age of the child. For children ages 3-5 a question estimating the number of hours the TV is on is used in the total HOME score and emotional support subscale score. The total and cognitive stimulation HOME scores for children ages 6 and older only include the single TV question about whether the child discusses programs. These mother-report items as documented for the 2002 survey round are listed below and can be found in the CHILD and MOTHER SUPPLEMENT areas of interest, depending on the age of the child. The recoded items, actually used in scoring the HOME, are listed here:

- C25088. (RC1B7) RECODE: (3-5 YRS): NUMBER OF HOURS PER DAY TV IS ON IN HOME
- C25120. (RC1C20) RECODE: (6-9 YRS): DO PARENTS DISCUSS TV PROGRAMS WITH CHILD
- C25147. (RC1D19) RECODE: (10-14 YRS): DO PARENTS DISCUSS TV PROGRAMS WITH CHILD

Two items related to TV in the child assessment files are incorporated into the computation of the Temperament scales for children ages 4 to 6 years: (1) how often child turns off the TV with no protest (question ACT-C05 in 2002) and (2) how often child obeys when told to turn off the TV (question ACT-C06 in 2002). These two items are assigned to the MOTHER SUPPLEMENT areas of interest.

**Volunteer and community service.** Children ages 10 and older have been asked, starting with the 1994 survey, about volunteer work or community service after school. These questions, in the CHILD SELF-ADMINISTERED SUPPLEMENT, had only two response choices of “yes” or “no” through 1996. In 1998 they were converted from a dichotomous format to a 3-point scale to gauge the frequency with which the children perform volunteer activities.

Starting in 1996 in the Child Supplement, school agers are asked to estimate how often either parent volunteers at their school. Mothers of school age children are also asked about parent volunteer activities related to the child’s classroom or school. Through 1998 and again in 2002 these mother-report questions about school involvement that are addressed to mothers are found in the MOTHER SUPPLEMENT area of interest. (Only in 2000 are these items in the CHILD SUPPLEMENT area of interest.) Young adults answer a series of questions about community service in the young adult questionnaire.

**Work for pay.** Children 10-14 are asked if they do any work for pay, not counting jobs around the house. They list the kinds of jobs and the amount they work and usually earn in a week. In 1990 and 1992 children simply answered whether they worked or not. In 1994 children who worked for pay chose from a short list of employment categories. The code categories on this question series have been expanded, starting in 1996, to include babysitting, house cleaning, paper route, yard work for neighbors, house-sitting, fast food work, farm work, clerk or office work, pet care, and construction.

***Child Alcohol Use - Drinking***

The child survey includes several questions for children ages 10 and older on alcohol consumption. Introduced in 1988, this series asks whether they have ever consumed alcohol, whether they drank in the past three months, their age at first use, and the number of times in the past year they got drunk. Table 2.6 provides the child reference numbers of the alcohol use questions asked of the NLSY79 Children. The pattern of administration of these questions on drinking can be found in Appendix H: Content of the Child Surveys.

**Table 2.6. NSY79 Child: Alcohol Use Questions for Children Ages 10 and Older**

Year	Eligible ages	Reference number
1988	10 and older	C07325. - C07336.
1990	10 and older	C09442. - C09453.
1992	10 and older	C11396. - C11407.
1994	10–14	C13692. - C13713.
1996	10–14	C15915. - C15936.
1998	10–14	C19321. - C19356.
2000	10–14	C22176. - C22211.
2002	10-14	C27697. - C27703.

CHRR adapted forms of the NLSY79 main alcohol questions for the 1988 Child survey for 10 and older. NIAAA was involved in the development of many of the Youth alcohol items. Questions from past NHIS surveys were also incorporated that asked respondents:

- whether they had ever consumed alcohol,
- whether they had consumed alcohol in the past three months,
- their age at first use, and
- the number of times in the past year the child had gotten drunk.

In designing the alcohol (and related deviant behavior and substance use) CHRR staff were advised by NIDA staff, including James Colliver and Andrea Kopstein, Survey and Analysis Branch, Division of Epidemiology and Prevention Research, SAMHSA, and Lloyd D. Johnston. In choosing the question format for the older children instruments, the following studies were reviewed: (1) National Youth Survey (NYS) conducted in 1976, 1977, 1978, 1979, 1980, 1983, and 1987 and sponsored by the National Institute of Mental Health; (2) the National Household Survey of Drug Abuse (NHSDA), sponsored by the Office of Applied Studies at the Substance Abuse and Mental Health Services Administration; and (3) the school-based Youth Behavior Risk Surveys (YSRB), conducted every two years starting in 1991, and sponsored by the CDC.

Beginning in 1994, when the NLSY79 children age 15 and older moved into the young adult cohort, a more extensive sequence about alcohol use was introduced. The young adult series about alcohol use has some questions adapted from the Child Self-Administered Supplement but most of the young adult questions more closely resemble the main NLSY79 alcohol use questions. See Chapter 3 for the content of the Young Adult questionnaire.

### ***Child Attitudes***

The NLSY79 Child surveys contain a range of attitude information from both the child's and mother's perspective. For the younger children (not young adults) these questions are administered primarily in the Child Self-Administered Supplement (CSAS), completed by children 10 years of age and older. Mothers also report on their children's attitudes and prospects. Mother-report items have, from 1988 to 1998, been asked in the Family & Schooling section of the Mother Supplement.

In 2000 the more sensitive items were moved into the Computer Assisted Self-Interview (CASI) portion of the Child CAPI Supplement that is directed to the mother. In 2002 these same questions are in CASI format in the Mother Supplement. She responds, in CASI format if preferred, to questions that ask her to think about how things are going in her child's life and to rate (1) how much trouble it has been to bring up this child, (2) the child's health, (3) the child's relationships with friends, siblings, and with her, (4) and her child's feelings about him or herself.

Each round of the NLSY79 Young Adult survey includes a questionnaire section devoted to attitudes. The details of these young adult items are explained in Chapter 3, which also contains an overview of comparables scales addressed to NLSY79 mothers (Table 3.6). Readers who are not experienced with the NLSY79 mother data will find that main Youth respondents have been administered several scales, a number of which parallel those administered in the Child and Young Adult Surveys, such as the Rotter, the Rosenberg Self-Esteem Scale (Rosenberg, 1965), sociability and Pearlin Mastery Scales (Pearlin and Schooler, 1978; Pearlin et al., 1981), neighborhood quality, attitudes toward women working (family attitudes), and the Center for Epidemiologic Studies Depression Scale or CES-D (Radloff, 1977). More information about the attitude scales in the main Youth for NLSY79 mothers can be found in Chapter 4 of the *NLSY79 User's Guide*.

**Gender roles.** Children 10-14 respond to a series of questions on whether girls should be treated differently than boys. This scale appears in the Child Self-Administered Supplement (CSAS).

**Risk behavior.** The NLSY79 Child Administered Supplement (CSAS) asks about the child's attitude toward risky behaviors and planning for the future. The six CSAS (Q.49) ratings of propensity for risk taking ("feelings toward yourself") items were taken from Section F. (Social-Psychology) of the American Teenage Study, which contains 25 items that were intended to create at least 3 distinct scales.

**Expectations and aspirations.** NLSY79 Children ages 10 and older have been asked a repeat question series about when they expect to marry and when they expect to have children. Mothers of children who are at least school age are asked to rate each child's prospects for the future and to estimate how far they think their child will go in school. Through 1998 and again in 2002 these questions, posed in the Mother Supplement, were assigned to the MOTHER SUPPLEMENT areas of interest. In 2000 the future prospects questions were moved to the Child CAPI Supplement and then back to the Mother Supplement in 2002. Young Adults have also been asked about expectations at age 35 and prospects for separation and divorce (see Chapter 3).

**Neighborhood safety.** In 1992 a question was added to the Child Self-Administered Supplement for children 10 and older about how safe they felt walking and playing in their neighborhood. That same year mothers were first asked to rate their neighborhood as a place to raise children. They were also asked to assess the quality of the neighborhood on a number of dimensions, similar to those also addressed to young adults starting in 1994. The NLSY79 neighborhood quality series, which has continued through the current survey round, is taken from the National Commission on Children Parent & Child Study, 1990 Parent Questionnaire, p.7 (V32, V34-V41).

### *Child Care*

A range of both cross-sectional (past four weeks) and retrospective child care information is available in the NLSY79. The mother-report child care sections from the main NLSY79 surveys provide the types of current child care arrangements used for each child in the household, the overall family expenditure for current care, and a retrospective of child care experiences during the first three years of life for all children (of at least 1 year of age) born to the respondent. Only the retrospective information about the first three years of each child's life appears on the Child files. The other cross sectional child care information can be extracted from the main Youth files and merged.

The child-based child care variables that are assigned to the CHILD CARE area of interest (child reference numbers C03564. - C03590.) provide a cumulative updated profile of the child care experiences in the first three years of life for children of at least one year of age. (While child care information was not collected in the 1990 main Youth survey round it was updated in 1992, and in subsequent rounds for mothers not interviewed in 1992.) Note that children who were less than three years old at the date of the current main Youth survey will not have a complete 3-year child care retrospective for the first three years of life until the next release of the Child data.

Child care information in the 1984 and 1985 NLSY main Youth surveys describes child care arrangements used in the past four weeks for the youngest child by parents who were either employed, in school, or in training at the survey date. Location and type of primary and secondary care, hours of use, nature of payment and grandmother care are reported in 1984. Location, type, payment, detail on group arrangements, and hypothetical care are available for 1985. In both years, respondents who are not currently employed but who have an employed spouse report limited information on location and type of care. The retrospective information collected in 1986 and the current child care information collected between 1984 and 1988 relate to different universes of children and utilize different child care definitions. These distinctions are clarified further in the topical section titled “Child Care” in the current *NLSY79 User’s Guide*. Additional child care information was also collected in the 1982 and 1983 main NLSY79 surveys. The child care data from these two years can be found on the NLSY79 main Youth file.

Users are reminded that the child-based variables drawn from the mother’s retrospective child care record have no noninterview values assigned. Since the variables reference each child, the inputs do not necessarily come from any single interview year.

### ***Family Background***

**Age of mother.** The child file contains two variables that indicate the age of the mother in relationship to her child, e.g., ‘Age of Mother at Birth of Child,’ ‘Age of Mother at Birth of 1st Child.’ The creation procedures for age of mother variables present on the NLSY79 Child File are based on the mother’s 1979 NLSY79 date of birth. (Table 1.2 depicts the distribution of the age of the child by the age of the mother at the birth of the child.) The variables that indicate the age of the mother at each interview date are assigned to the FAMILY BACKGROUND area of interest while the “Age of Mother at Birth of Child” variable is found in CHILD BACKGROUND.

**Mother’s sample ID & sampling weight.** Two key variables from the mother’s main Youth record appear in the FAMILY BACKGROUND area of interest: (1) the mother’s original sample identification category (whether she was in one of the cross-sectional samples or special oversamples) and (2) her 1979 sampling weight. Individual case weights are assigned for each year so that group population estimates can be produced when using tabulations. The assignment of individual respondent weights involves various types of adjustment, with additional considerations necessary for weighting of NLSY79 Child data. For information on the construction and use of the NLSY79 sampling weights, consult Chapter 2 of the *NLSY79 User’s Guide*. Details on the nature of the original NLSY79 sample identification code for the main Youth respondents can also be found in the *NLSY79 User’s Guide* (question S24Q01, R01736.).

**Family education and competence.** This series of variables describes the educational background of the child’s mother at each of the mother’s interview dates. Maternal enrollment status and highest grade completed by the mother at each date of interview are constructed for each main Youth survey round and assigned to the FAMILY BACKGROUND area of interest. Variables that summarize the education of the mother’s spouse or partner as well as the other adult members of the household are discussed below with the MATERNAL HOUSEHOLD COMPOSITION variables. Table 2.5 only includes

key variables related to the child survey rounds starting with 1986. There are several cross-sectional variables in the child data files that are based on the mother's history from her interviews *prior* to 1986 (the first child assessment year) and for "non-child" survey years since 1986.

**Maternal household composition.** Since the children eligible for interview in the survey are living at least part-time with their mothers, the mother's main Youth household record is used to describe the cross-sectional composition of the child's household. Constructed cross-sectional variables describe the people living in the child's mother's household in each survey round. Variables include number of family members, family units, children and adults present at date of interview. The family unit includes members related by blood, marriage, or adoption who share the same household. The household unit additionally includes others living in the same residence as the respondent. There are also indicators of whether a spouse, partner, mother, or father of the child's mother is present as well as the number of household members present in various age ranges. These household and family variables are created from the yearly household enumeration roster. As this information is provided for all survey dates, some variables describe the composition of the mother's household prior to the birth of a particular child. Variables referring to whether a spouse or partner is present in the household are based strictly on the main Youth household record, not on the marital section of the main Youth questionnaire. The "0" or "no" category for the "spouse present" variables in this series includes responses from both ever married and never married mothers. The variables describing the number of children of the mother are based on a count of biological, adopted and stepchildren in the total. They are *not* limited to children born to the mother.

**Religion.** Starting with the 1988 Child survey, children ages 10 and older are asked their religious affiliation and how often they attend religious services. They are also asked if they usually attend with their parents, if they would attend without their parents, whether many of their friends attend services, and the extent to which their friends attend the same services. In 1998 the format for the affiliation question was changed to a code-all (or mark-all) format that allowed multiple choices. The "other" verbatim responses were recoded into existing categories wherever possible and other categories added to capture responses that did not match the choices offered.

**Siblings and aunts.** Some respondents in the original NLSY79 main sample were related either by marriage or family. A series of identification codes is included in the child file that identifies the child siblings and the interviewed spouse and sisters of each child's mother if they were part of the original NLSY79 sample selected in 1979. The sibling identification codes (CSIBID01-10), the mother's spouse ID (SPOUSEID) and the mother's sisters IDs (SISTID1-SISTID4) are assigned to the CHILD BACKGROUND area of interest.

### ***Health***

The child survey has regularly collected a range of detailed information on each child's current health conditions and health history. Table 4.4 in Chapter 4 gives an overview of the types of reports of physical development, and mental health asked over the survey rounds for children and young adults.

**Accidents and injuries.** Questions about child accidents and injuries were asked beginning with the 1988 survey. Mothers report: 1) whether the child had an accident in the past 12 months that required medical attention, and 2) whether the child ever had an accident (not necessarily in the past 12 months) requiring hospitalization. If the mother answers yes to either of these questions, she is asked the specific month and year of the three most recent accidents. The way that these questions have been framed means that information is available for varying time periods for different children. Some researchers interested in linking these events with maternal work history have organized the data into quarters to deal with the seasonal patterns in accident rates (Currie and Hotz, 2001). The NHIS series on accidents and injuries was the source of the NLSY79 child questions (see above).

**Birth histories.** On a regular basis, the NLSY79 has collected pre- and postnatal care information from the sample women as they became mothers. Fertility questions in the main Youth interview ask about all pregnancies/live births, a cumulative inventory of all children reported, and contraceptive methods used. NLSY79 mothers report on their health and behavior during each pregnancy. Pre- and postnatal practices are detailed below under “Prenatal and infant care.”

**Handedness.** Beginning in 1996, the mother answers several questions about whether the child is right-handed or left-handed. These questions are assigned to the CHILD SUPPLEMENT area of interest through 2000 and to the MOTHER SUPPLEMENT area of interest in 2002. The Motor and Social Development assessment also contains a number of related items related to when the child held an object in one hand. Handedness questions can also be found in the Young Adult HEALTH area of interest.

**Health care access/Medical visits.** Details concerning use of the medical system include the presence, number, and type of accidents, injuries, or illnesses requiring medical attention in the past 12 months; hospitalization history in the past 24 months; timing of last routine health and dental checkups; and coverage by and type of health insurance. The health services questions are featured in the Child Core of the National Health Interview Survey (NHIS).

**Health insurance.** From the first Child survey in 1986, mothers have been asked in the CHILD SUPPLEMENT whether each child is covered by health insurance, not including public assistance, provided either by an employer or by an individual plan. They are also asked whether Medicaid covers each child’s health care. Starting in 1994, mothers of young adult children in the household are asked this same set of questions in the fertility section of the main Youth questionnaire. These items are assigned to the BIRTH RECORD areas of interest in the main Youth file and can be linked to specific children by use of the child ID. There are also limited questions about the respondent’s health plan related to children in the HEALTH area of interest of the main Youth file. The child health insurance questions are currently in the Family Section of the National Health Interview Survey (NHIS).

**Health assessments.** The child assessment data collection includes a number of questions and scales designed to capture child health information and to measure the child’s temperament, motor and social development, and behavior problems. This information is obtained from the mother. The How My Child Usually Acts/Temperament scale forms a measure of temperament or behavioral style over the past two-week period for each child

under age seven. The Motor and Social Development Scale measures motor-social-cognitive development for children under age four. The Behavior Problems Index elicits mother ratings of children four years of age or older in areas of problem behavior such as hyperactivity, anxiety, dependency, aggressiveness, and peer conflict. These child health assessments were originally all in the paper self-administered booklet called the Mother Supplement. In 2000 the questions related to Temperament, Motor & Social Development were moved to CAPI format and administered in the Child Supplement. Data items related to the individual assessment responses are therefore found in the MOTHER SUPPLEMENT areas of interest for 1986-1998 and in both the CHILD SUPPLEMENT and MOTHER SUPPLEMENT areas of interest in 2000. In 2002, all the child health items (except height and weight) are in the MOTHER SUPPLEMENT area of interest.

**Health conditions.** The mother is asked to report on the child's health history and medical treatment in the last twelve months. The National Health Interview Survey (NHIS) was the principal source for various NLSY79 child health questions. The limiting conditions questions are featured in the NHIS Child Core. (The NHIS is a multi-purpose health survey conducted by the National Center for Health Statistics [NCHS], Centers for Disease Control and Prevention [CDC], and is the principal source of information on the health of the civilian, noninstitutionalized, household population of the United States.) The questions on limiting health conditions can also be found in the NHES Parent questionnaire section on family involvement in education (i.e., PJ3. Does CHILD have any physical, emotional, or mental condition that limits or interferes with his/her ability to do regular schoolwork? To take part in sports, games, or other activities with children his/her age?). In 2002, questionnaire design improvements allow users to identify potentially unrelated limiting conditions when multiple conditions are reported. Through 2000, a mark-all item was accompanied by a single follow up. The duration and onset of separate conditions can now be examined.

**Height and weight.** The child's height and weight at the time of interview are measured either by the interviewer or recorded as reported by the mother. These items appear in each year-specific CHILD SUPPLEMENT area of interest.

**Immunization.** In the fertility section of the 1986-1990 main Youth questionnaire, mothers were asked to report on the types of shots administered to each child. Users should note that only the subset of immunization questions (DPT/oral polio and measles) most comparable across these survey years is included in the Child file. The questions used to construct the immunization variables were not asked after 1990 and therefore children born since that time have been assigned a missing value on these variables. The NLSY79 child series on shots is in the Immunizations section of the National Health Interview Survey (NHIS).

**Menses.** Starting with the first child survey year, mothers are asked about whether their daughter has started menstruation and the date and age of menses.

**Mental health.** At each survey point the mother is asked whether in the past 12 months her child has been referred for professional assistance with a behavioral, emotional, or mental problem or made any visits to a psychiatrist, psychologist, or counselor. She is also asked about use of medication to control the child's activity level or behavior. Comparable

questions continue to be asked of the young adults, allowing researchers the opportunity to continue examining health issues into adulthood.

**Prenatal and infant care.** Maternal prenatal care information and health-related characteristics are provided on the NLSY79 Child and Young Adult file. Information derived from mother reports in the fertility section of the main NLSY79 youth questionnaire is linked to each individual biological child. The following information is available for most children in the file: prenatal doctor visits, maternal alcohol/cigarette/drug use during pregnancy, other prenatal behaviors (vitamin intake, salt intake, etc.); amniocentesis, ultrasound performed; was child born early or late; cesarean birth; mother's weight gain during pregnancy; child's birth size; length of hospital stay; well baby/sick baby health care in first year; was child breast fed; other infant feeding practices. The child pre and postnatal data are assigned to the PRE/POST NATAL area of interest in the data files.

Users who attempt in-depth analyses based on the pregnancy and postnatal information should review the Fertility Section of the main Youth questionnaire to see when certain questions were asked for specific children of specific ages. For example, while birth weight was reported in 1983 for all children born as of that date, certain feeding questions were applicable only to a subset of children. Feeding questions about solid foods, which may have been inappropriate for an infant in 1983, were updated in 1984 or 1985, depending on the developmental stage of the child at each interview date. Also, unlike the series of child illness questions asked of the mother starting in the 1984, the 1983 interview schedule refers to illnesses experienced by the youngest child in the first year only if the child had been hospitalized (see Section 10, Q. 40A and B, pages 10-105 of the 1983 NLS main Youth questionnaire). Users interested in maternal and child health information related to pregnancy and birth in the NLSY79 should consult the report titled *Maternal Child Health Data from the NLSY*, by Mott and Quinlan (1991), which can be downloaded at <ftp://ftp.chrr.ohio-state.edu/usersvc/Child-Young-Adult/> or requested from CHRR User Services.

### ***Maternal Employment***

Each release of the Child data contains an updated series of quarterly employment variables that describes the mother's work history from one year prior to each child's date of birth up through the first five years following the birth (or the mother's most recent interview date). These variables are measured in 13-week intervals and are constructed from the main Youth work history data file that provides a weekly record of the labor force activity of each respondent from January 1, 1978, through the current survey date.

The following child-specific work history variables are constructed for up to 24 quarters in the child's life: weeks and hours worked; number of jobs held; number of weeks in the military; hours, occupation, industry, and pay at main job; earnings at all jobs. The first five variables in the series refer to all jobs held by a mother, and the next set provides details on the duration and nature of the "main" job in each quarter, defined as the job at which the mother worked the most hours. Only the 13-week intervals of a child's life that are complete within the 1978-2000 time frame receive valid values. Children born prior to 1/1/1978 can be identified by a value of "0" on C2700., "WEEK # OF DATE OF BIRTH OF CHILD FROM 1/1/78 TO CURRENT DATE OF INTERVIEW." This variable is included for users who wish to link the child's birth date with other event on the main file. The complete set of

quarterly maternal employment variables is assigned to the MATERNAL WORK HISTORY area of interest. Users interested in greater detail on the NLSY79 work history data should consult the *NLSY79 User's Guide* at <<http://www.bls.gov/nls/79guide/nls79usg.htm>>.

### *Parenting*

A number of items are used in the Child surveys that are designed to measure aspects of the relationship of parents and children. Drawing on other studies in which scales of parent-child interaction and parenting were used, the Child survey introduced in 1994 the following types of measures: (1) parental monitoring, (2) emotional relationship with parents, (3) parent-child interaction in discussion and activities, and (4) child perception of the degree of parent involvement. Details on the parenting items found in the survey are outlined in Table 2.7, which is adapted from a study based on the NLSY79 Child data (Joshi et al., 1998). While several of these items are asked as part of the HOME sections of the questionnaire, many of them are *not* included as part of the HOME scale.

**Table 2.7. Parenting Items in the NLSY79 Child 1994-2002**

Variable	Question(s)
<b>1. Engagement in Parent-Child Activities</b> <i>a. Monthly Activities</i> (Child rating)	Within the last month have you and your parent(s)... (Yes/No) <ul style="list-style-type: none"> <li>• Gone to the movies together</li> <li>• Gone out to dinner</li> <li>• Gone shopping to get something for you, such as clothes, books, records, or games</li> <li>• Gone on an outing together, like to a museum or sporting event</li> <li>• Gone to church or religious services together</li> </ul>
<i>b. Weekly Activities</i> (Child rating)	Within the last week have you and your parent(s)... (Yes/No) <ul style="list-style-type: none"> <li>• Done things together such as build or make things, cook, or sew</li> <li>• Worked on schoolwork together</li> <li>• Played a game or a sport</li> </ul>
<b>2. Ratings of Parental Time/Involvement</b> <i>a. Amount of Time</i> (Child rating)	Please think about the time you spend with each of your parents. Do you think your parents spend enough time with you? (Spends enough time with me, wish s/he spent more time with me, spends too much time with me)
<i>b. Miss Activities that Are Important</i> (Child rating)	About how often does each parent miss the events or activities that are important to you? (Misses events a lot, sometimes misses events, almost never misses events)
<b>3. Parent-Child Discussions</b> <i>a. Talk Over Decisions</i> (Child rating)	How often does each of your parents talk over important decisions with you? (Often, sometimes, hardly ever)
<i>b. Listen to Children in Discussions</i> (Child rating)	How often does each of your parents listen to your side of an argument? (Often, sometimes, hardly ever)
<i>c. Ability to Discuss Things</i> (Child rating)	How well do you and each of your parents share ideas or talk about things that really matter? (Extremely well, quite well, fairly well, not very well)
<b>4. Parental Monitoring</b> <i>a. Parents Knowledge of Where Children Are</i> (Child rating)	About how often does each parent know who you are with when you're not home? (Often, sometimes, hardly ever)
<i>b. Parents Knowledge of Where Children Are</i> (Mother rating)	About how often do you know who your child is with when s/he is not at home? Would you say you know who s/he is with ... (All of the time, most of the time, some of time, only rarely)
<b>5. Emotional Relationship with Parents</b> <i>a. Feelings of Closeness to Parents</i> (Child rating)	How close do you feel to each of your parents? (Extremely close, quite close, fairly close, not very close)
<i>b. Feelings of Closeness to Parents</i> (Mother rating)	How close does your child feel toward you? (Extremely close, quite close, fairly close, not at all close)

NOTE: All questions asked of children age 10-14 in the Child Self-Administered Supplement (CSAS), except for the mother rating of child's emotional relationship with parents (5b above). This question is administered in the Mother Supplement from 1994-1998, in the Child Supplement in 2000, and back in the Mother Supplement in 2002. Table adapted from Joshi et al., 1998.

**Child discipline.** A series of items related to child discipline are addressed to the mother in the HOME sections of the Mother Supplement. These items, derived from the National Survey of Families and Households (NSFH; 1988, M306, Q.306), ask: "Sometimes children behave well and sometimes they don't. Have you had to spank (CHILD) when (he/she) behaved badly in the past week?" The following questions are also used in the NSFH (1882-

1883 M307, Q.307): “About how many times have you had to spank (CHILD) in the past week? (NSFH/1 October 88 Page M-186).

**Father presence and contact.** In the main Youth interview, the mother reports, for each child, whether the child’s father is living in the household, and if not, the frequency of contact, the distance of his residence, and when he left the household or died if not living. These questions are asked in the Fertility section of the main Youth questionnaire. Users should note that, due to an oversight, the parent presence/visitation question (Q.19) in the 1991 main Youth Fertility section was only asked about children born since the last interview. The documentation currently describes these items as follows:

R35564.00 FATHER/MOTHER OF 1ST CHILD LIVE IN HOUSEHOLD? 91 INT  
R35570.00 FATHER/MOTHER OF 2ND CHILD LIVE IN HOUSEHOLD? 91 INT  
R35576.00 FATHER/MOTHER OF 3RD CHILD LIVE IN HOUSEHOLD? 91 INT

The restriction in 1991 on the universe of children means that there is incomplete data for “Does parent of child live in HH” for all children for all years. If the mother was interviewed subsequent to 1991, information for those children may potentially be recovered based on reports of when he left/died (if not living). Comparing those dates with the 1991 interview date should allow the user to determine, in most cases, whether a given child’s other parent was in the household at the time of the 1991 interview. Data loss would occur primarily for children who have a father who moves in and out of the household repeatedly. Users are reminded that rather than an event history, the father-child contact information is an indication of his residence situation at the time of the mother’s interview.

**Family rules.** The questions on family rules that were introduced in the 1988 NLSY79 Child survey round were adapted from the National Survey of Children, Wave 2 1980. Users interested in details on this survey and its content are directed to Child Trends: <<http://www.childtrends.org>>. Questions about family rules are answered by NLSY79 children ages 10-14 in the Child Self-Administered Supplement (CSAS).

With the exception of variations in response choices, the following questions were taken directly from the National Survey of Children, Wave 2 (Spring 1981), Section C: Child Questionnaire, items 58-61: CSAS questions 3a-3d (child expected to help around house), Q.4a-4d (existence of rules about watching TV, parent knowledge of child’s whereabouts, homework, and dating), Q.5 (how much say child has in the previous rules), and Q.6 (how often child and parents argue about the rules). The differences in response choice scoring are as follows:

NLSY79 1988 CSAS Q.3a-d (expected to help around house) and Q.4a-d (rules) are scored 1=yes, 0=no; NSC items 58a-d and 59a-d are scored 1=yes, 2=no.

NLSY79 1988 CSAS Q.5 (how much say in rules) was scored on a 4-point scale and presented in order of 4=a lot of say to 1=no say at all. This was a simple reversal of the NSC scoring for the same question (item 60, also a 4-point scale) presented in order of 1=a lot of say to 4=no say at all.

NLSY79 1988 CSAS Q.6 (argue about rules) was scored (3-point scale) 1=hardly ever, 2=sometimes, 3=frequently. This represented somewhat more of a change from the NSC item 61 (3-point scale) 1=frequently, 2=occasionally, 3=hardly ever.

In 1990, a change was made to CSAS items 5 and 6. Rather than two global questions about the child's influence and arguments with parents about rules, CSAS items 5 and 6 were expanded to Q.5a-5d and Q.6a-6d. The updated items inquired specifically about each of the four categories of rules asked about in Q.4a-4d. The response choices for the expanded items were kept consistent with previous scoring.

In the 1988-1994 CSAS (and the corresponding NSC wave 2 item), a conditional skip follows question 4d. If child answered "no" to all four items 4a-4d (i.e., the child reported none of the four categories of rules were in force in the household), the question flow skips over items 5 (child's say in the rules), and 6 (arguments about the rules). This skip was dropped from the CSAS beginning in 1996.

**Child "moods" and depression.** The depression or child "moods" items in the NLSY79 Child CSAS questionnaire came from the National Commission on Children, Parent & Child Study. The specific source for these questions can be found in the 1990 NCC Parent & Child Final Questionnaire and Codebook for Children, question V432. (Several other parent-child interaction questions in the CSAS were also drawn from this instrument: V322, V323, V339, V307 for example on spending time with each parent, parent missing activities, peer pressure.)

**Parent-child interaction.** The questions on parent-child interactions that were introduced into the NLSY79 Child survey in 1996 were developed with the assistance of Robert Emery, University of Virginia. Three of the parental agreement items were derived from scales developed in the Stanford Divorce Study that measure (1) How often do your parents get along well, (2) How often do they agree about rules, and (3) How often do your parents argue (Buchanan, Maccoby, & Dornbusch, 1991). The other parental agreement items were taken from instruments prepared for The 1991 American Teenage Survey, a large-scale survey of adolescent sexual behavior. A study using the NLSY79 child parent-child interaction items indicates that parent-child discussions and arguments can be used to discriminate self-esteem and problem behavior trajectories (Bailey, 1996; Carlson, 1998).

### *Schooling*

The NLSY79 Child surveys contain schooling information, linked to each child, for: (1) children assessed during each child survey year, (2) NLSY79 mothers, and (3) members of the mother's household such as spouse, partner, or other adult household members. The types of schooling information available for young adults and their partner or spouse are discussed in Chapter 3. The Child schooling items added in 1996 were drawn primarily from the 1988 National Education Longitudinal Study (NELS88). These questions on parent involvement, teacher style, and classroom practices are addressed directly to children ages 6 and older in 1996-1998 and to children ages 8 and older starting in 2000.

**Enrollment and grade.** Current school enrollment and grade information is collected at each survey point for children ages four years or older. Grade information is gathered for those

children currently attending and, if not currently attending, for those who have ever attended regular school.

**Preschool and Head Start.** Post-1986 child surveys include questions, posed to the mother, for children three years of age or older (under age 9 in 1990) on whether the children attend nursery school or a preschool program or had ever been enrolled in preschool, day care, or Head Start. The Head Start series provides information on age first attended, length of time attending, and how satisfied the child's mother is with the Head Start program. Main Youth respondents interviewed in 1994 were asked if they had attended Head Start as a preschooler (Q3-31, R45317.).

**School experiences.** Starting in 1988, mothers of school-age children (ten or older 1988–1994; five and older starting in 1996) are asked for additional information on their child's schooling experiences. For children attending school, mothers are asked what type of school their child attends. They are asked if the school is “public,” “private,” or “religious,” and whether the second identifies the school as a “school for gifted children,” a “school for handicapped children,” or a “regular public or private school.” In the main Youth interview the mother also gives information on what type of school the child currently attends or last attended with the following categories: 1 Elementary School, 2 Middle School/Intermediate School/Junior High School, 3 High School, 4 Two Year College, Community College, or Junior College, 5 Four Year College or University. Note that she reports this school type information for all children of school age.

The introduction of CAPI in 1998 enabled CHRR to recode verbatim responses to the “other-specify” verbatim responses to these school-type questions. Starting in 2000, the procedure used for documenting the recodes changed so that the school type question (BGN-20-RC) now contains only verbatim recodes for question BKGN-20. (In contrast, the 1998 variable MS98TYPSCHL contained all response values plus recoded “other specify” verbatims.)

Information is also collected for children attending school on: (1) whether the child attends special classes for remedial or advanced work and (2) whether the child has ever repeated a grade and, if so, the reason(s), e.g., the child failed academically (too young or immature, moved to a more difficult school, was truant, frequently absent, etc.). Reasons for not attending school are identified by the mother according to the following categories: expulsion or suspension, physical, emotional, or mental condition, the school was closed, or the child's father would not let the child attend.

**School ratings and satisfaction.** During the child interviews, children ages ten and older report on the characteristics of their school and satisfaction with their school. The rating and satisfaction items, introduced in 1988 for children 10 and over, include the following: (1) most teachers don't know their subjects well; (2) most teachers help with personal problems; (3) most classes are boring; (4) don't feel safe at this school; (5) at this school a person has the freedom to learn, etc. (see q. CSAS023 & CSAS024 in 2002). With the exception of item 1, which is phrased in the affirmative in the main Youth and Young Adult, this scale is the same as one addressed to the mother in 1979. The school rating questions addressed to the child are assigned to the CHILD SELF-ADMINISTERED SUPPLEMENT area of interest. NOTE: Item 1 of this scale was phrased in the affirmative in the 1988 Child survey.

Through 1998 the Mother Supplement contained a series of items rating the children's school as reported by the mother (Q.16 in the MS 1998). In 2000 these questions were moved to the Child CAPI Supplement but in 2002 they are back in the Mother Supplement in the CASI section. In both 2000 and 2002 the school rating series has the same question names: BKG-43A to BKG-43H. The mother-report items in which she grades the school performance can be found in MOTHER SUPPLEMENT through 1998, CHILD SUPPLEMENT in 2000, and back in the MOTHER SUPPLEMENT area of interest in 2002.

**Homework and parent involvement.** In 1996, the schooling section of the survey was augmented for both the children aged 10 to 14 and the young adults. This expansion, which has continued to the current survey round, asks children about the extent of involvement by their parents in homework and the school. The NLSY79 Child questions on parent involvement and time spent on homework can be found in the National Household Education Surveys (NHES) parent questionnaire, section on parent/family involvement in education ("Now I have some questions about CHILD's homework. How often does CHILD do homework at home? Would you say never, less than once a week, 1 to 2 times week, 3 to 4 times a week, or 5 or more times a week?" pg.1). The NLSY79 Child schooling series also solicits information on the frequency of specific teaching and learning activities and the use of certain materials in the classroom.

**Child school survey.** A separate, one-time survey was conducted in 1995-1996 of the schools attended by NLSY79 children (over the age of five) in the 1994 and 1995 school years. The survey collected information about the characteristics of the school, graduation rate, ethnic and gender composition of student body and staff, school policies and practices, and community involvement. Information was also obtained about the child's academic success, social adjustment, participation in school activities, the child's grade level, attendance record, and involvement in special programs. The third part of the survey collected standardized test scores from student transcripts for each child.

The data collection had several components. The Principal Questionnaire, completed by the principal of the school, included information about characteristics of the school, school policies and practices, and school-community interfaces. A second Child Schooling Questionnaire, filled out by school office personnel for each child, included grade, attendance, involvement in special programs and grade level information. Requests for transcripts yielded standardized test scores for about 34 percent of the children.

The Child data file contains 375 Child School Survey variables for a sample of about 3,000 children. Due to confidentiality restrictions, not all the items that were asked in each Child School Survey questionnaire appear on the public file. The original eligible universe of children consisted of those enrolled between grades one and twelve in the 1994-1995 school year. For a few children, enrollment status referred to their 1993-1994 school year, but for most the reference period was the 1994-1995 school year. Children under the age of 15 as of the end of 1994 were eligible for data collection if they were living with their mother; older children could be living either with their mother or in other types of residence. Children also needed to be at least age 5 at the time of interview. An estimated 4,441 children met these eligibility criteria.

For 334 children, information was obtained from more than one school, since the child attended more than one school during the interview window. Additionally, some children were eligible for inclusion in only one of the two years, so the data collection window encompassed only that one school year. The data file includes information for these children for up to two schools. Information collected during the 1995-1996 year could only be collected for schools attended during the preceding two years as the waiver formed signed by the parent only permitted access to records available in the schools the children had attended during that period.

The Child School survey variables are assigned to the CHILD SCHOOL SURVEY area of interest. Unlike all the other Child variables, the school survey variables are identified by reference numbers that begin with the letter “S.” The question names for variables from the Child Schooling Questionnaire are prefixed with a “C” following by the school number (1 or 2), while those from the Principal Questionnaire begin with a “P”. The question items in the file are named according to the sequence in which they appeared in the field questionnaires. Users are encouraged to access copies of the actual instruments on the BLS-NLS Child-YA website or via the CHRR public ftp site: <ftp://ftp.chrr.ohio-state.edu/usersvc/Child-Young-Adult/>.

***Smoking, Drugs, and Antisocial Behavior***

**Cigarette use.** Questions on smoking have been asked in each Child survey round, starting with the 1988 survey. Children 10 years of age and older have been asked about age at first use and extent of cigarette use. (A more extensive set of questions has been asked of NLSY79 mothers and of the children once they became NLSY79 young adults starting in 1994.) Variables related to smoking for NLSY79 children can be found in the CHILD SELF-ADMINISTERED area of interest of the data files. Table 2.8 illustrates the types of questions on cigarette smoking that have appeared in the Child surveys and the years in which they were asked.

**Table 2.8. NLSY79 Child: Smoking and Drug Use Questions for Children Ages 10 and Older**

Topics	1988	1990	1992	1994	1996	1998	2000	2002
Cigarettes	10+	10+	10+	10-14	10-14	10-14	10-14	10-14
Marijuana	10+	10+	10+	10-14	10-14	10-14	10-14	10-14
Inhalants				10-14	10-14	10-14	10-14	10-14
Hallucinogens (LSD, PCD, peyote)						10-14	10-14	10-14
Cocaine (crack)						10-14	10-14	10-14
Uppers or downers (amphetamines)						10-14	10-14	10-14
Other, unspecified	10+	10+	10+	10-14				
Other (LSD, cocaine, uppers, downers)					10-14			
Reference Number	C07325.- C07336.	C09442.- C09453.	C11396.- C11407.	C13692.- C13713.	C15915.- C15936.	C19321.- C19356.	C22176.- C22211.	C27704.- C27724.

**Drug use.** Starting with the 1988 survey, children age 10 and older answer a series of questions on whether they have ever used marijuana and/or other drugs such as LSD, cocaine, etc. If they answer “yes,” they report whether such use occurred in the past three months and how old they were at first use. In 1994 more details were added to the substance use questions, also asked of children aged 15 and older in the Young Adult survey (see Chapter 3). Drug use questions are posed to children in the *Child Self-Administered Supplements* and are assigned to the CHILD SELF-ADMINISTERED area of interest in the child data files. The types of drug-use questions that have been asked in the Child surveys are displayed in Table 2.8.

**Antisocial behavior.** Starting in 1988, the child surveys included questions for children who were ten years of age and older dealing with (1) the extent of each child’s self-reported participation during the past year in various illegal activities such as vandalism, shoplifting, and assault and, as mentioned above, and (2) the extent of use and age of first use of cigarettes, alcohol, marijuana, and drugs. (Table 2.6 details the alcohol use questions posed to NLSY79 Children and Table 2.8 lists the substance use questions.) Children ages 10 and older are asked if they have ever: (1) Stayed out later than parents said, (2) Hurt someone badly enough to need doctor, (3) Lied to parents about something important, (4) Taken something from store without paying, (5) Damaged school property intentionally, (6) Gotten drunk. The CSAS Q.40 (CSAS040A-I) series on “risk behaviors” (“In the last year, about how many times have you...”) were drawn from a larger set of main Youth NLSY79 items that in turn were adapted from previously used self-report delinquency scales. Four of these Child items are the same as items used in Section U: Other Behaviors, from the American Teenage Study Teen In-Home Questionnaire, female version (p.124). (The American Teenage Study, which was funded in 1988 but never fielded, was designed as a five-year national study to provide information about teen health related to sexual activity.) Self-report items on antisocial and delinquent behavior are in the CHILD SELF-ADMINISTERED area of interest in the Child files.

### **The Child Assessments**

The NLSY79 Child surveys contain a wide range of detailed assessment information about the children of female respondents. Since 1986, a battery of child cognitive, socioemotional, and physiological assessments has been administered biennially for age appropriate children. Many of the assessments, and much of the supplemental information about each child, are based on reports from the child’s mother. These reports include child demographic and family background characteristics, health history (both pre- and postnatal), and information on the child’s home environment, including maternal emotional and verbal responsiveness and involvement with her child. Each of the child assessment measures is discussed in detail in this section.

Starting with the 1994 survey, children ages 15 and older are no longer assessed. As explained in detail in Chapter 3 of this guide, these older children complete an interview modeled on the NLSY79 main Youth questionnaire administered to their mothers. Users are reminded that, while young adults are no longer administered the child instruments, they possess a child history represented in the child data file. Data obtained in the surveys during the time the young adult children were under age 15 are included as part of the child files in

such areas of interest as CHILD BACKGROUND and ASSESSMENT 1988. Most young adults, as discussed in Chapter 4, have at least one survey round in which they were assessed as a child.

### *What Assessments Are Used and When?*

The assessments used in the Child surveys were selected on the basis of their validity, reliability, and suitability for use in a large-scale household survey. The selection was designed to accommodate a range of child ages and a broad spectrum of dimensions in the child's development. In the following section, information is presented on the nature of each assessment and how each one is administered and scored. Issues essential to using the current assessment data are highlighted. The following assessments, listed here and then discussed in detail, have been used in the Child surveys:

1. The HOME Short Form - items from the HOME (Home Observation for Measurement of the Environment) Inventory, developed by Bradley and Caldwell, designed to measure the nature and quality of the child's home environment from birth to adolescence.
2. How My Child Usually Acts/Temperament - items from Rothbart's Infant Behavior Questionnaire, Kagan's Compliance Scale and other items from Campos, which combine to form a set of maternal-report scales measuring temperament or behavioral style over the past two-week period for each child under age seven.
3. Motor and Social Development - items drawn from Poe, Bayley, Gesell, and the Denver Developmental Screening Test, which measure motor-social-cognitive development for children under age four.
4. Behavior Problems Index - items from Zill and Peterson's adaptation of the Child Behavior Checklist, developed by Achenbach and Edelbrock, which elicit mother ratings of children four years of age or older in such areas of problem behavior as hyperactivity, anxiety, dependency, aggressiveness, and peer conflict.
5. Parts of the Body - ten items, developed by Kagan, that measure the ability of children aged one or two to identify various parts of their bodies. This assessment was not administered after 1988.
6. Memory for Location - an assessment, developed by Kagan, that measures the ability of children eight months of age through three years to remember the location of an object which is subsequently hidden from view. This assessment was not used after 1988.
7. Verbal Memory - a subtest of the McCarthy Scales of Children's Abilities (Psychological Corporation) that assesses short-term verbal memory of children aged three through six years to remember words, sentences, or major concepts from a short story. Part C, the story, was not used after the 1990 survey. This assessment was not administered after 1994.
8. What I Am Like/Self-Perception Profile for Children (SPPC) - two scales from Harter's Self Perception Profile for Children that measure perceived self-competence

in the academic skill domain and sense of general self-worth for children aged eight and above (12 and above beginning in 1996).

9. Memory for Digit Span - a component of the revised Wechsler Intelligence Scales for Children (Psychological Corporation) which assesses the ability of children seven through eleven years of age to remember and repeat numbers sequentially in forward and reverse order.
10. Peabody Individual Achievement Test (PIAT) Math - (American Guidance Service), a PIAT subtest that offers a wide-range measure of achievement in mathematics for children with a PPVT age of five years or older.
11. PIAT Reading Recognition and Reading Comprehension - (American Guidance Service), PIAT subtests that assess the attained reading knowledge and comprehension of children with a PPVT age of five and older.
12. The Peabody Picture Vocabulary Test-Revised (PPVT-R), Form L - (American Guidance Service), a wide-range test used to measure the hearing vocabulary knowledge of children whose PPVT age is three and above. Administered to children age 4 and 5 or 10 and 11 starting with the 1996 survey round.

### *Changes in the Child Assessments*

Over time there have been changes in the administration of various assessments in the Child surveys. Details on changes in the content, administration, or scoring of particular assessments are discussed in the appropriate assessment-specific sections below. Two assessments, Memory for Location and Body Parts, were administered in 1986 and 1988, but have since been deleted from the data collection effort due to funding constraints. However, the 1986 and 1988 individual items and scores for these two assessments remain in the data file and are available to users. A brief description of these two assessments is included in this chapter.

Not all assessments are fielded in each child survey year. In some instances, assessments are administered only to children for whom no valid score has been obtained during a previous survey. In 1988 a procedure was introduced by which children ages 10 or 11 were designated to complete any assessment for which they were age-eligible in order to establish a representative index group for future analyses. Starting in 1996, the Self-Perception Profile (What I Am Like) is only administered to children ages 12 and over. The McCarthy Verbal Memory Subscale was administered for the final time in 1994. Starting in 2002 very young children are no longer administered assessments, which means that scores are no longer generated for Motor and Social Development, Temperament.

Users are urged to examine the NLSY79 Child and Young Adult data collection instruments in order to understand the assessments that were administered to various age groups and to learn about variations in administration across survey rounds. Printable versions of the child questionnaires are available either from NLS user services or on-line at: <<ftp://ftp.chrr.ohio-state.edu/usersvc>> (see Chapter 5 for details).

### *What Scores Are Computed?*

The NLSY79 Child data files contain summary scores for each assessment measure. For a subset of assessments subscores are constructed. Where available, the user is provided with national norms based on the raw scores. Table 2.9 lists the raw and normed scores that are available in the Child data files for years 1996-2002. (Scores for assessment years prior to 1996 can be found in Appendix K.) The data file includes individual item responses as recorded in the field as well as interviewer reports of testing conditions for each assessment. Edit or imputation “flags” are constructed for selected assessments to indicate where prorations were necessary or where alternate scoring schemes were considered. Scoring procedures are addressed below in relation to specific assessments.

Members of the CHRR staff have examined the assessment data as carefully as possible while preparing the assessment scores for the public use files. Researchers who encounter data or documentation problems with the assessments are encouraged to contact NLS user services. Should a problem be detected, an effort will be made to inform data users by publicizing the issue in the quarterly NLS newsletter, posting updates to the NLSY79 errata website, and by correcting subsequent public releases. Chapter 5 contains details on where users can find such updates.

**Table 2.9. Assessment Scores on the NLSY79 Child File, 1996-2002**

Assessment	1996 Scores			1998 Scores			2000 Scores			2002 Scores		
	Raw	Percentile	Standard									
<b>Total HOME<sup>1</sup></b>		C15566	C15569		C17923	C17926		C25025	C25024		C25310	C25309
0-2 Years	C15550			C17907			C25008			C25293		
3-5 Years	C15554			C17911			C25009			C25294		
6-9 Years	C15558			C17915			C25010			C25295		
10 & Over Years	C15562			C17919			C25011			C25296		
<b>HOME Cognitive Stimulation<sup>1</sup></b>		C15567	C15570		C17924	C17927		C25027	C25026		C25312	C25311
0-2 Years	C15552			C17909			C25016			C25301		
3-5 Years	C15556			C17913			C25017			C25302		
6-9 Years	C15560			C17917			C25018			C25303		
10 & Over Years	C15564			C17921			C25019			C25304		
<b>HOME Emotional Support<sup>1</sup></b>		C15568	C15572		C17925	C17928		C25029	C25028		C25314	C25313
0-2 Years	C15553			C17910			C25020			C25305		
3-5 Years	C15557			C17914			C25021			C25306		
6-9 Years	C15561			C17918			C25022			C25307		
10 & Over Years	C15565			C17922			C25023			C25308		
<b>Temperament</b>												
Activity	C15572			C17929			C25050					
Predictability	C15573			C17930			C25051					
Fearfulness	C15574			C17931			C25053			C25336		
Positive Affect	C15575			C17932			C25055			C25338		
Compliance	C15576			C17933			C25047			C25332		
Insecure Attachment	C15577			C17934			C25048			C25333		
Sociability	C15578			C17935			C25049			C25334		
Difficulty Composite- Abbrev.	C15579			C17936			C25052			C25335		
Neg. Hedonic Tone Composite	C15580			C17937			C25056			C25339		
Friendliness Composite-Abbrev.	C15581			C17938			C25054			C25337		

Assessment	1996 Scores			1998 Scores			2000 Scores			2002 Scores		
	Raw	Percentile	Standard									
<b>Motor &amp; Social Development – All Same Gender</b>	C15582	C15583 C15585	C15584 C15586	C17939	C17940 C17942	C17941 C17943	C25030	C25033 C25031	C25034 C25032	C25315	C25318 C25316	C25319 C25317
<b>Behavior Problems</b>	C15587	C15594	C15601	C17944	C17951	C17958	C24956	C24959	C24961	C25241	C25244	C25246
Antisocial	C15588	C15595	C15602	C17945	C17952	C17959	C24974	C24976	C24978	C25259	C25261	C25263
Anxious/Depressed	C15589	C15596	C15603	C17946	C17953	C17960	C24979	C24981	C24983	C25264	C25266	C25268
Headstrong	C15590	C15597	C15604	C17947	C17954	C17961	C24989	C24991	C24993	C25274	C25276	C25278
Hyperactive	C15591	C15598	C15605	C17948	C17955	C17962	C24994	C24996	C24998	C25279	C25281	C25283
Dependent	C15592	C15599	C15606	C17949	C17956	C17963	C24984	C24986	C24988	C25269	C25271	C25273
Peer Conflict	C15593	C16000	C15607	C17950	C17957	C17964	C24999	C25001	C25003	C25284	C25286	C25288
Trichotomous Items	C15622	C15623	C15624	C17979	C17980	C17981	C24962	C24963	C24964	C25247	C25248	C25249
External Score	C15625	C15626	C15627	C17982	C17983	C17984	C24966	C24971	C24972	C25251	C25256	C25257
Internal Score	C15628	C15629	C15630	C17985	C17986	C17987	C24967	C24969	C24970	C25252	C25254	C25255
<b>Self-Perception</b>												
Scholastic	C15637			C17991			C25059			C25342		
Self-Worth	C15639			C17993			C25060			C25343		
<b>Digit Span</b>	C15641		C15644	C17995		C17998	C25004		C25007	C25289		C25292
Forward	C15642			C17996			C25005			C25290		
Backward	C15643			C17997			C25006			C25291		

<sup>1</sup> Internal norms provided.

**Other child assessment documentation.** Key references related to the assessments are cited at the end of this guide. Users interested in additional research based on the NLSY79 child assessment data are encouraged to access the annotated, on-line NLS bibliography at <<http://www.nlsbibliography.org>>.

Detailed information about the validity of the Child data through the 1992 survey round can be found in the *NLSY79 Children 1992: Description & Evaluation*. Background information on the child assessment data in the initial child survey rounds is discussed in *The NLSY Child Handbook, 1986-1990* (Baker et al. 1993). Both of these documents are available at no charge from NLS user services or on-line at <<ftp://ftp.chrr.ohio-state.edu/usersvc/>> (see Chapter 5).

Tables that describe the Child assessment scores in each survey round, starting with the 1994 data collection, can be found in a series of reports entitled *The NLSY79 Child Assessments: Selected Tables*. These reports display distributions of the raw and normed assessment scores by various child characteristics such as age and race/ethnicity. They are available, starting with the 1994 survey, from NLS user services or on-line at <<ftp://ftp.chrr.ohio-state.edu/usersvc/>> (see Chapter 5).

### ***Which Children Are Assessed?***

In the initial 1986 Child survey round efforts were made to assess *all* biological children of NLSY79 mothers, regardless of their residence status. Starting in 1988 the sample of children eligible for assessment was restricted to children living part or full-time with their mothers.

Table 2.10 displays the number of children interviewed in each survey round from 1994-2002 by single year of age and race/ethnicity. Information on the number of children interviewed in earlier survey rounds can be found in Appendix L. (The age range exceeds 14 years in the table for years prior to 1994, since that marks the first year of the Young Adult interview.) A comparable set of frequencies showing the number of young adults interviewed in each survey year, 1994-2002, can be found in Table 3.1 in Chapter 3.

A number of factors help explain the decline in the numbers of children interviewed in recent survey rounds: (1) diminished child-bearing of the NLSY79 women, (2) aging of the child samples into the Young Adult cohort, and (3) increased attrition rates in recent main Youth surveys. The particularly sharp decline in the overall-level size of the child sample in 2000 reflects the fact that about 38% of the minority child oversamples were excluded from interview in that survey year.

Users should note that the distribution of children interviewed should not be equated with the number of children who completed the assessments. The distributions in Table 2.10 (and Appendix L) simply indicate the number and types of children for whom some child interview information, collected in one of the child instruments, is available.

**Table 2.10. NLSY79 Children Interviewed by Single Year of Age and Race/Ethnicity, 1994-2002**

Child Age at Mother's Date of Interview	1994				1996				1998				2000				2002			
	Hisp	Black	White	Total																
< 1	52	68	153	273	49	46	113	208	36	39	105	180	29	25	55	109	11	10	23	44
1	72	91	193	356	42	56	140	238	35	42	113	190	27	27	59	113	19	16	33	68
2	73	91	187	351	52	80	169	301	49	42	110	201	32	28	103	163	32	21	59	112
3	80	100	240	420	63	80	184	327	39	59	156	254	25	35	97	157	20	26	62	108
4	84	115	228	427	68	82	174	324	57	77	154	288	33	35	102	170	33	34	107	174
5	98	142	211	451	76	91	233	400	62	76	178	316	24	41	130	195	33	35	106	174
6	94	134	226	454	88	120	205	413	72	88	161	321	26	44	126	196	38	44	94	176
7	103	126	216	445	87	134	198	419	77	92	226	395	38	57	175	270	37	45	129	211
8	108	141	218	467	89	125	205	419	80	113	217	410	41	52	140	233	40	71	144	255
9	110	154	243	507	101	128	202	431	88	141	194	423	45	63	201	309	70	66	163	299
10	97	159	193	449	111	138	200	449	98	130	194	422	49	83	195	327	56	83	156	295
11	100	160	188	448	95	146	232	473	100	136	204	440	48	98	170	316	71	78	198	347
12	126	154	165	445	88	147	171	406	105	140	197	442	57	81	175	313	74	102	198	374
13	86	156	145	387	98	155	178	431	100	137	223	460	56	92	170	318	82	129	172	383
14	80	144	131	355	56	63	73	192	37	64	81	182	39	53	111	203	46	62	101	209
Total	1363	1935	2937	6235	1163	1591	2677	5431	1035	1376	2513	4924	569	814	2009	3392	662	822	1745	3229

NOTE: Child age in this table is measured as of the mother's interview date and may differ from the age at which the child was assessed.

For information on exactly which children completed assessments in 2002, users will need to turn to Table 2.12 which provides the number of children with valid scores for each assessment in that survey year. Comparable tables of assessment completion rates for years prior to 2002 appeared in past Child Data Users Guides. Users interested in copies of those tables will need to contact NLS User Services.

Some assessments are completed only once by a child at the first time he or she becomes age-eligible. Others are completed at each survey point by all age-eligible children. With the exception of SPPC, at *each* survey, ten- and eleven-year olds complete all assessments for which they are age-eligible, regardless of whether or not they had previously completed the assessment(s). This “index” group of children will ultimately represent a large, more fully representative sample for analysis. Table 2.11 contains details on the ages at which children were administered particular assessments. This table also summarizes changes in administration patterns.

**Table 2.11. NLSY79 Child: Variations in Ages of Children Eligible for Assessment by Survey Year**

Assessment	Eligible ages <sup>1</sup>								
	1986	1988	1990	1992	1994	1996	1998	2000	2002
Parts of the Body	1-2	1-2	—	—	—	—	—	—	—
Memory for Locations <sup>2</sup>	8 mos-3 yrs	(8 mos-3 yrs)	—	—	—	—	—	—	—
McCarthy Verbal Memory Subscale <sup>2</sup>	3-6	(3-6)	(4-6)	(3-6)	(3-6)	—	—	—	—
What I Am Like (Self-Perception Profile)	8 and older	8 and older	8 and older	8 and older	8-14	12-14	12-14	12-14	12-14
WISC-R Digit Span Subscale <sup>2</sup>	7 and older	10-11 (7 and older)	10-11 (7 and older)	10-11 (7 and older)	10-11 (7-14)	7-11	7-11	7-11	7-11
PIAT Math and Reading	5 and older	5 and older	5 and older	5 and older	5-14	5-14	5-14	5-14	5-14
PPVT-R <sup>2</sup>	3 and older	10-11 (3 and older)	10-11 (3 and older)	3 and older	10-11 (3-14)	10-11 (4-14)	4-5, 10-11	4-5, 10-11	4-5, 10-11
HOME environment	All ages	All ages	All ages	All ages	0-14	0-14	0-14	0-14	0-14
Temperament	0-6	0-6	0-6	0-6	0-6	0-6	0-6	0-6	2-6*
Motor & Social Development	0-3	0-3	0-3	0-3	0-3	0-3	0-3	0-3	2-3*
Behavior Problems Index	4 and older	4 and older	4 and older	4 and older	4-14	4-14	4-14	4-14	4-14

<sup>1</sup> Age in years unless otherwise noted.

<sup>2</sup> Parentheses indicate age eligibility for children with no previous valid score. 2Parentheses indicate age eligibility for children with no previous valid score. For example, in 1996, all 10- and 11-year-olds were eligible for the PPVT-R; a 6-year-old with no previous score was also eligible, but a 6-year-old with a previous valid score from 1994 or an earlier survey was not eligible.

\* Children born before the R19 (2000) interview or 1/1/2000.

NOTE: Beginning in 1994, assessments were no longer given to children who reach age 15 by the end of that calendar year.

Beginning in 1994, children age 15 or older by December 31 of the interview year were no longer given any of the assessments. The data collected for these children as they enter adulthood are discussed in Chapter 3.

Users can rely on the child sampling weights to determine which children have assessment information in any given survey year. Cases restricted to where a child sampling weight is greater than zero will yield a sample of assessed children in that year. However, these assessed children will not necessarily have a valid score on any particular assessment in that year. A series of flags was introduced in 1998 to indicate the child’s interview and assessment status. In 2000, the interview status series was simplified to identify children interviewed, whether the child’s mother was interviewed, and an indication as to whether each type of child field instrument was administered. In 2002 the following child interview status variables were created:

Reference Number	Variable Description	Question Name
C00115.14	INTERVIEW STATUS OF CHILD R20-2002	CINTRV2002
C00115.15	INTERVIEW STATUS OF MOTHER R20-2002	MINTRV2002
C00115.16	DOES CHILD HAVE A CHILD SUPPLEMENT RECORD R20-2002	INCSUP2002
C00115.17	COMPLETION STATUS OF CHILD SUPPLEMENT R20-2002	CSCOMP2002
C00115.18	DOES CHILD HAVE A MOTHER SUPPLEMENT RECORD IN 2002?	INMSUP2002
C00115.19	COMPLETION STATUS OF MOTHER SUPPLEMENT R20-2002	MSCOMP2002
C00115.20	DOES CHILD HAVE A CHILD SELF-ADMINISTERED SUPPLEMENT RECORD R20-2002?	INCSAS2002
C00115.21	COMPLETION STATUS OF CHILD SELF-ADMINISTERED SUPPLEMENT R20-2002	CSASCOMP2002
C00115.22	NUMBER OF DAYS BETWEEN CHILD SUPPLEMENT AND MOTHER SUPPLEMENT INTERVIEWS	CSMSINTERVAL2002
C00115.23	SEQUENCE OF CHILD SUPPLEMENT AND MOTHER SUPPLEMENT INTERVIEWS	CSMSORDER2002

### ***Assessment Completion Rates***

Table 2.12 provides estimates of the number of children who were administered each assessment in 2002 and the completion rate for each assessment. (Similar completion rate tables can be found for prior survey rounds in their respective users guides.) The number of children undertaking and completing each assessment continues to be substantial, including reasonably high numbers of black, white, and Hispanic children available for separate analyses by race/ethnicity. Sufficient sample sizes are particularly important for those assessments where there are major differences in outcome by race, or more importantly, where the linkages between critical explanatory inputs and assessment outcomes vary by race/ethnicity.

Table 2.12 shows that, for the most part, the percent of children receiving valid scores is quite high, frequently over 90 percent. Variations in completion rates by race/ethnicity are generally quite modest. A more detailed discussion of assessment completion rates for the Child surveys can be found at the end of this chapter.

**Table 2.12. NLSY79 children with valid assessment scores: Children ages 0-14 assessed in 2002**

Assessment	Child age	All children		Race/ethnicity					
				Hispanic		Black		Non-black/ Non-Hispanic	
		Valid	%	Valid	%	Valid	%	Valid	%
<b>Child home environment</b>									
The HOME Inventory	All ages birth-14	3,078	95.3	627	94.7	784	95.4	1,667	95.5
	< 3 years	148	67.0	42	68.9	32	69.6	74	64.9
	3–5 years	441	96.3	83	95.4	89	92.7	269	97.8
	6–9 years	924	98.5	181	98.9	222	98.7	521	98.3
	10 to 14 years	1,565	97.1	321	97.0	441	96.9	803	97.2
<b>Child motor/social/emotional development</b>									
Temperament Scale*	2–6 years	718	97.7	151	97.4	152	97.4	415	97.9
Motor and Social Development Scale	Under 4 years	211	95.9	51	96.2	46	97.9	114	95.0
Behavior Problems Index	4 to 14 years	2,872	99.1	571	98.4	738	98.5	1,563	99.7
Self-Perception Global	12 to 14 years	872	91.0	184	92.0	271	94.1	417	88.7
Self-Perception Scholastic	12 to 14 years	872	91.0	184	92.0	271	94.1	417	88.7
<b>Child cognitive development</b>									
WISC-R Digit Span Subscale	7–11 years	1,307	93.6	250	91.6	333	97.4	724	92.7
PIAT Math	PPVT ages 5-14	2,487	91.9	491	90.3	669	94.5	1,327	91.3
PIAT Reading Recognition	PPVT ages 5-14	2,491	92.1	492	90.4	672	94.9	1,327	91.3
PIAT Reading Comprehension	PPVT ages 5-14	2,469	91.3	485	89.2	670	94.6	1,314	90.4
PPVT-R	PPVT ages 4-5 and	294	88.8	51	82.3	59	88.1	184	91.1
	PPVT ages 10-11	585	93.3	114	90.5	151	96.8	320	92.8

\* The Temperament scale score reported is “Compliance,” administered for children ages 2-6. Scores for other temperament subscales are computed and available in the data file for subgroups of more restricted age ranges.

NOTE: Of the 8,100 children born to mothers interviewed in 2002, 3,229 children ages 0-14 were living in the household of an eligible mother or were otherwise known to be available, and were interviewed and assessed in 2002. The % valid column indicates children with a valid score of those eligible for a particular assessment. Mother Supplement completion rates increased in 2002 due to CAPI administration of the mother-report assessments. Children who reached age 15 by the end of 2002 were not eligible for assessment. The Black and Hispanic child oversamples dropped in 2000 were reintroduced into the sample in 2002.

### ***The HOME-SF (Home Observation of the Environment - Short Form)***

The Home Observation Measurement of the Environment-Short Form (HOME-SF) is the primary measure of the quality of a child’s home environment included in the NLSY79 child survey. It has been extensively used as both an input in helping to explain other child characteristics or behaviors and as an outcome in its own right—for researchers whose objective is to explain associations between the quality of a child’s home environment and earlier familial and maternal traits and behaviors.

The HOME-SF is a modification of the HOME inventory (Caldwell and Bradley 1984, 1992), a unique observational measure of the quality of the cognitive stimulation and emotional support provided by a child's family. The HOME-SF is about half as long as the original HOME Inventory, an adaptation necessitated by survey time and cost constraints. More than half of the HOME-SF's items are multi-response maternal reports that were reworded, with the assistance of the instrument's designers, from the original HOME Inventory's dichotomous observer ratings.

A complete listing of the HOME-SF items appears in Appendix A. From 1986-1998 all mother-report HOME items were located in Section 1 of the *Mother Supplement*. In 2000 the HOME items designed for children under age four were all moved to the Child CAPI Supplement. All the mother report HOME items were consolidated in the Mother Supplement in 2002, once it was converted to CAPI. The HOME items based on interviewer observation appear in the *Child Supplement* for all survey years.

The HOME-SF is divided into four parts: one for children under the age three; a second for children between the ages of three and five; a third for children ages six through nine; and starting with the 1988 survey round, a fourth version for children ten and over. At several survey points, as mentioned, the set of questions in the HOME sections of the survey was expanded, but these added items are not part of the total HOME score or subscores.

Betty Caldwell designed the Infant version of the original HOME Inventory and, with Robert Bradley, developed the Preschool and School Age versions. Bradley and Caldwell reviewed and approved the final draft of the Infant, Preschool, and Elementary HOME-SF versions used in the 1986 Mother and Child Supplements of the NLSY79, and Bradley was involved in a 1988 review of what has now become known as the HOME-SF to distinguish it from the original.

**Changes in the HOME.** The following changes have been made to the HOME sections in recent years. In 1988 a version of the mother-report HOME was added for children 10 and older. In 1986 one set of items was used for all children ages 6 and older. Beginning with the 1992 *Mother Supplement*, code categories were added to the questions on the relationship of the child's father/father-figure to the mother, and a category was added to the parent efficacy question for older children. Three questions on the following topics were added to the School & Family section (Section 5) of the *Mother Supplement* in 1992: (1) rating of child's current school, (2) rating of the child's general well-being and prospects, and (3) degree of parent knowledge about child's friends. These questions are now completed by mothers for all their children of school age. In 1996 and thereafter the minimum child age for these schooling questions was lowered from age 10 to 5 years.

Beginning with 1994, one additional sequence was added to the HOME assessment to measure child-parent closeness. Mothers are now asked how close each of her children feels to her, to the child's biological father, or to his/her stepparents (e.g., see Q16a for children under the age of three). In 1996, check questions asking if the child ever sees his or her father were dropped. *Neither this change nor any of those made in previous years affect the HOME score or subscores in any way. The components of the HOME scores have remained unchanged since 1986.*

In 2000 only, the HOME questions addressed to the mother for children under the age of 4 years were moved from the paper Mother Supplement to the Child CAPI Supplement. In 2002 all the mother report HOME items are back in the Mother Supplement. While the question format was slightly altered for CAPI administration, the content of these items remains the same.

**Scoring the HOME.** The total raw score for the HOME-SF is a simple summation of the recorded individual item scores and it varies by age group, as the number of individual items varies according to the age of the child. The procedure used to recode non-dichotomous responses into a 1,0 form is documented for the year 2002 in Appendix A. The data transformation process used in all survey years was essentially the same.

The total HOME-SF score and the two subscores have one implied decimal place. For example, a score of 30 in the public data file is really 3, and so on. In addition, total scores were imputed for children where one or more of the component items had inadvertently been left unanswered. The imputation procedure assigns an average value, derived from all those items that had been completed, to each of the unanswered items. Proration flag variables specify the number of items that require imputation for the different age groups; a score of zero on this proration flag variable means that all individual component items were answered. For the two subscores specified below, a more stringent proration rule was followed: scores were derived only for cases where no more than one item was missing.

**Recoding of HOME Items.** Prior to constructing an overall score and the two subscores for the HOME-SF, all of the individual items were translated into dichotomous zero-one variables and then appropriately summed. The precise recoding used in computing the HOME scores can be found in Appendix A-2. The dichotomous HOME items, available only for 1998-2002 on the public data file, are assigned respectively to the following areas of interest: ASSESSMENT 1998 (reference numbers C18996.-C19084.), ASSESSMENT 2000 (reference numbers C25061.-C25149.), and ASSESSEMENT 2002 (C25344.-C25432.).

**Cognitive Stimulation and Emotional Support subscales.** In addition to the overall HOME-SF score, the Child file includes two subscores: a cognitive stimulation and emotional support score. The (questionnaire item) components of the total scale, as well as cognitive stimulation and emotional support subscales are specified in the HOME appendix A-2 to this document. Because there are no appropriate national norms available for the overall HOME-SF score or its components, internally normed standard and percentile scores are provided for the overall HOME-SF scores and for the cognitive stimulation and emotional support subscores.

**HOME Norms.** Internal norms for the NLSY79 HOME were developed using standard normal curve assumptions. Children were normed on a single year of age basis with each (weighted) single year age of age group being assigned a standard score mean of 100 and standard deviation of 15. Percentile scores were derived from the standard scores using an inverse normal routine. To the extent that the single year of age data deviate from normality, this procedure produces less than optimal results. An alternate percentile score can be generated using the empirical cumulative distribution function by age that is computed using

the sampling weights. That frequency could be used to crosswalk from raw score to percentile score.

**The HOME Discipline Items.** Several of the HOME-SF items required review and coding of verbatim comments from the mother in order to fully utilize the responses originally coded as “other.” The HOME-SF Part B (for children 3-5) contains items concerning the mother’s response to the child hitting her (Mother Supplement question B08). Part C (for children 6-9) and Part D (for children 10-14) of the HOME-SF contain items concerning the mother’s response to the child swearing at her (questions C22 and D21 respectively). Both items are coded “1” if the parent’s response is moderate, defined as without harsh reprisal.

The discipline item for children ages 3-5 (previously called HOME-Part B) contributes to the HOME-SF scale scores only when certain alternatives (“send to room,” “talk,” “ignore,” and “give a chore”) are selected and the “other” alternative is without harsh reprisal—that is, if a mild reaction is the first response. The discipline item is scored zero if any of the following are selected: “hit,” “spank,” or the “other” alternative is harsh. Harshness is defined as either extensive or excessive deprivation (time-out longer than two hours; deprivation longer than two days) or physical punishment (firmly grasping the child, spanking then talking, or talking then spanking).

The HOME discipline item for older children was scored in a similar manner. Yelling back and withdrawal of love were assigned a value of “1” if there was no indication of a severe or physical responses. The item is scored zero if “spanking” is selected or if the “other” alternative is excessive (longer than three hours of time-out; longer than three days of deprivation) or if physical means (“eat soap”) are the first types of punishment selected. Examples of verbatim scores as harsh are “break him up,” “spank and ground for two weeks,” and “spank then explain why.” If the length of time was not specified (“send to room”), then it was assumed to be a moderate amount of time, so scoring the item was mild. Other examples of verbatims scored non-harsh are “never happens,” “depends on the situation,” “stand in corner until apologizes.” Another example of a mild response (conveying no harsh discipline) was “give him something to eat.” A few other verbatims should be noted. Some mothers selected the “hit” category and commented, “Then say I’m sorry,” while others who checked “hit” said, “But not like I’d hit an adult.” The latter were scored as harsh and assigned a value of “0.”

Three primary coders were used in this process. Inter-coder reliability on the coding of the HOME discipline items was evaluated using Cohen’s Kappa and also by computing percent disagreement. In 2002 there was 100 percent agreement on the recoding decisions for the discipline items.

**The HOME Scores.** As indicated above, the items that mothers complete are dependent on the age of the child: children under age 3 years, 3 through 5, 6 through 9, and 10 and over follow different question sequences. The HOME items and the recoding instructions can be found in Appendix A-2. The reference numbers for the raw and normed HOME scores are listed in Table 2.9 and Appendix K (for years 1986-1994). All children under the age of 15 living with their mothers are eligible for the HOME assessment (until 1994 all children, regardless of age, had a HOME supplement completed by their mother). Thus, children born

by the 1986 survey date (and still below the age of 15 in 2002) may have eight rounds of HOME scores available. Children born between 1986 and 1988 may have seven HOME scores and children born since the 1988 survey can have up to six HOME scores—assuming of course that their mothers completed a HOME assessment for them at the relevant survey points. Note also that whereas the *raw* scores are specific to a child’s age at a particular survey point, a single set of normed scores is created for each survey round, regardless of the child’s age.

**Completion Rates – The HOME.** Table 2.12 indicates the number and types of children at different ages for which a HOME assessment was completed in 2002. Overall, 95.3 percent of children under age 15 have a HOME score in 2002. This level of completion for the HOME assessment has been maintained over recent survey rounds. However, completion rates are much lower for the youngest children, because the interviewer observation items at the end of the *Child Supplement* are less likely to be completed for this age group. Since there are no assessments directly addressed to children under the age of four, interviewers are less likely to see the mother in direct contact with the child, and thus are less able to answer the items that require direct observation of mother-child contact. This lack of data is even a more significant issue with respect to the emotional support subscore, partly because the conditions permitting proration of subscores are more stringent, as noted above.

**Validity and Reliability – The HOME.** The HOME assessment is among the most often used of all the assessments. It is widely employed both as an input, predicting many other child outcomes, and as an outcome in its own right. Several analyses based on the NLSY79 child data indicate that the HOME-SF is closely related to several different indices of family poverty, and, that the measure is sensitive to increments in family income, particularly when looking at children born into poverty. Numerous researchers have continued to utilize the HOME-SF child assessment for various purposes in recent years. The overall HOME-SF scale and the cognitive stimulation and emotional support subscales are used frequently as outcomes of interest predicted by various family circumstances, such as mothers’ and fathers’ employment. These measures of the home environment continue to be often used as predictors of children’s cognitive and/or behavioral outcomes using PPVT, PIAT, and BPI scores. Studies that utilize existing or previously constructed measures from the HOME-SF typically cite one or more of the following sources for reliability and validity information: Baker and Mott, 1989; Menaghan and Parcel, 1989 & 1991; Luster and Dubow, 1990 & 1992; Parcel and Menaghan, 1990. A recent comprehensive review evaluates the strengths and limitations of the NLSY79 HOME-SF scales as well their utility in research across a variety of disciplines (Mott, 2004).

Slight variations on the overall HOME-SF scale are used in order to isolate a facet of the home environment for theoretical reasons. The most frequent example is that father presence has been isolated in some studies so that its unique effects can be examined (Mott, 1993; Baydar, 1995). Although not as frequently utilized as the overall scale and the two main subscales, individual items and researcher-constructed subscales representing a variety of specific concepts are also studied as predictors and as outcomes. For example, some studies use measures of discipline/punitiveness constructed from one or more HOME-SF items to predict later child behavioral outcomes (Dornfeld and Kruttschnitt, 1992; McLeod and

Shanahan, 1993; McLeod et al., 1994; Rodgers et al., 1994; Parcel and Geschwender, 1995; Straus et al., 1997).

Some researchers with concerns about the reliability of some of the subscales have opted to rely on the overall HOME-SF (Ketterlinus et al., 1992). Some analysts, who have conducted confirmatory factor analysis on factor structures for the HOME-SF for younger children, recommend that the HOME-SF should not be thought of as measuring a single concept (Ferron et al., 1994). Researchers with concerns about the validity of the HOME for Hispanic children should be aware that the instrument is administered in Spanish if that is the preferred language of the mother. An extensive discussion of the unique aspects and numerous applications of the NLSY79 HOME scales can be found in Mott, 2004.

As mentioned earlier, bibliographies of research based on the NLSY79 child data are available on-line or from NLS User Services (see Chapter 5). An extensive body of research has developed in which the NLSY79 HOME scales have been used. The *NLSY79 Child Handbook: 1986-1990* describes this research in detail through 1990, emphasizing earlier work that examined the reliability and validity of the HOME (Baker et al., 1993). *The NLSY Children 1992* provides further evidence regarding linkages between the HOME scale and subscales, and a variety of family and maternal antecedents (Mott et al., 1995). Finally, *The NLSY79 Child Assessments: Selected Tables* provides detailed distributions by age and race/ethnicity for the overall HOME scores and the two subscores. Tables series 1 in each of these survey-year assessment reports contains information about the HOME scores.

### ***Temperament (How My Child Usually Acts)***

At the time of the design of the initial NLSY79 Child survey design, no single instrument seemed adequate to use for measuring child temperament, within the context of a large national survey administered by lay personnel. As a result, a Temperament scale was developed, based on Rothbart's Infant Behavior Questionnaire, Campos and Kagan's compliance scale, and other items from Campos.

Because the child's temperament is partially a parental perception, the behavioral style of children in the NLSY79 was measured by a set of maternal-report items (for all children younger than seven years) and interviewer ratings (in 1996-1998, for children three years or older and In 2002 for children age 4 and older). The maternal scale "How My Infant Usually Acts" addresses the activity, predictability, fearfulness, positive affect, and friendliness of infants below age one. "How My Toddler Usually Acts" addresses the fearfulness, positive affect, and friendliness of one-year-olds. "How My Child Usually Acts" measures the compliance and attachment of two- and three-year-olds and additionally, the friendliness of children aged four through six. For children ages three through six, the interviewer rates the child's shyness when first introduced, shyness at the end of the session, and the child's cooperation, interest and motivation, energy, persistence, and attitude toward and rapport with the interviewer during the assessment. All of the scales were available for administration in English and Spanish.

**The Temperament Scores.** A total of ten distinct scores tap various dimensions of temperament, but not all dimensions are appropriate for all ages. For example, when examining infant temperament as a predictor of childhood behavior problems, Colder, Mott

and Berman (2002) performed a confirmatory factor analysis on six items producing two factors or subscales: fear and activity level (p. 6). Gortmaker, Kagan, Caspi and Silva (1997) used the sum of two shyness questions taken at two different time points to produce an indicator of overall shyness in children ages 2 to 7 years old. The specific (questionnaire) items for each Temperament score, and the age appropriateness of the scores are indicated in Appendix B. The complete listing of assessment scores for 1996-2002 can be found in Table 2.9 and Appendix K (for years 1986-1994).

The behavioral tendencies of the children are rated by the mother on a five-point scale, ranging from Almost Never (value of 1) to Almost Always (value of 5). The scores of the various scales are computed by summing the individual items in the scale where appropriate. Some items are recoded in reverse before summing. The question names for such items are in bold in Appendix B. If any item component of a subscale was missing, that subscore was not computed. Since no appropriate national norms are available for this assessment, only raw scores are provided.

**Changes in Scoring the Temperament Scales.** An important and necessary change was made beginning with the 1990 Temperament scoring. Because in some survey rounds children under the age of four are not administered any of the *Child Supplement* items, it is necessary to truncate two scales addressed to younger children. These are the difficulty composite score for children between the ages of 8 months and 23 months and the friendliness scale for children under the age two. For researchers requiring comparability over time, abbreviated and unabbreviated versions of the scores for 1986 and 1988 are included in the public use file.

**Completion, Validity, and Reliability - Temperament.** Researchers considering the use of the Temperament scores may wish to examine Table series 2 in *The NLSY79 Child Assessments: Selected Tables*, as well as the evaluation of the temperament reliability and validity included in *The NLSY Children 1992* (Mott, et al., 1995). The latter document examines, within a multivariate context, the extent to which selected temperament scores are independently linked to a wide range of demographic and socioeconomic antecedents while also predicting other child outcomes in subsequent survey rounds. In general, completion rates for this assessment are quite high, often well above 90 percent (see Tables series 2 in *The NLSY79 Child Assessments: Selected Tables*).

### ***Motor and Social Development***

The Motor and Social Development scale (MSD) was developed by the National Center for Health Statistics to measure dimensions of the motor, social, and cognitive development of young children from birth through three years. The items were derived from standard measures of child development (Bayley Scales of Infant Development, the Gesell Scale, Denver Developmental Screening Test), which have high reliability and validity (Poe 1986). The scale has been used in the National Health Interview Survey (a large national health survey that included 2,714 children up to age four) and in the third National Health and Nutrition Examination Survey (NHANES, 1988-1994). Analyses by Child Trends, a non-profit, non-partisan research organization, of the scale in the 1981 *Child Health Supplement to the National Health Interview Survey* established the age ranges at which each item's developmental milestone is generally reached by U.S. children (Peterson and Moore 1987).

Based on the child's age, NLSY79 mothers answer fifteen age-appropriate items out of 48 motor and social development items. These items have been used with a full spectrum of minority children with no apparent difficulty. A Spanish version of the schedule was available to NLSY79 mothers whose principal language is Spanish.

**Scoring Motor & Social Development.** The NLSY79 Motor and Social Development assessment has eight components (parts A through H) that a mother completes contingent on the child's ages. Part A is appropriate for infants during the first four months of life (i.e., zero through three months) and the most advanced section, Part H, is addressed to children between the ages of 22 and 47 months. All of the items are dichotomous (scored either zero or one) and the total raw score for children of a particular age is obtained by a simple summation (with a range 0 to 15) of the affirmative responses in the age-appropriate section. Associated with each raw score is a series of norms: (1) an overall percentile and standard score and (2) same-gender by age percentile and normed scores. That is, boys were scored using the male national norms and girls were assigned female national norms, and both genders received combined gender norm scores. All these normed scores were constructed by CHRR using data from the nationally representative sample in the 1981 Child Supplement to the National Health Interview Survey (National Center for Health Statistics 1984). The reference numbers for the various raw scores, overall scores, and same-gender normed scores for Motor & Social Development are listed in Table 2.9 and in Appendix K (for years 1986-1994).

**MSD Norms.** The Motor & Social Development norms are grouped into fairly narrow age categories reflecting the extreme sensitivity of a child's level of development to his or her age: following a (four month) zero through three months age break, the four through thirty month age range was normed by successive three month age groups with the thirty-one through forty-two month range being normed according to three successive four month categories, followed by one five month (forty-three through forty-seven month) category. No proration was attempted on this assessment since the proportion of missing items is modest and there was some question about the appropriateness of the procedure, given that later items in the assessment tend to be more difficult than earlier items, and non-response is not random across items. Appendix C contains the norming tables for this assessment.

Caution should be exercised when interpreting results for three-year-olds, the oldest group completing this assessment. The Motor and Social Development assessment tends to "top out" for three-year-olds and does not provide a sensitive ceiling for these older children. *For this reason, researchers using the assessment should include an age control in any multivariate analyses even when they are using normed scores.* In general, the distribution of scores for NLSY79 children on this assessment tends to be more peaked for the youngest and oldest children (e.g., see Table 3.3 in *The NLSY79 Child Assessments: Selected Tables*).

While not described in these tables, it is also useful to note the reported gender differences at the youngest ages. Infant girls score significantly higher than their male counterparts, consistent with other evidence regarding early gender differences in motor and social development. Researchers interested in separately analyzing boys or girls are reminded that separate gender-specific norms are available.

**Completion, Validity, and Reliability - MSD.** As seen in Table 2.12, the overall completion rate for MSD in 2002 is about 96 percent, with a fairly uniform pattern of completion evident across all three categories of race/ethnicity. The overall completion rate for this assessment showed a decline through 1998. A substantial proportion of the non-completions resulted from situations where the mother skipped the section in the paper booklet or inadvertently left a number of the items blank. In 2000 this assessment was converted to CAPI administration to the mother, which may account for the significant increase in overall unit and item response.

Readers interested in information about the validity and reliability of the NLSY79 Child data for this assessment may want to examine the discussions of MSD in the *NLSY79 Child Handbook: 1986-1990* (Baker et al., 1993) and *The NLSY Children 1992* (Mott et al., 1995). Analyses based on the NHANES III data indicate that low birth weight status and pre-term delivery are associated independently with small, but measurable, delays in MSD (Hediger et al., 2002).

### ***The Behavior Problems Index***

The Behavior Problems Index was created by Nicholas Zill and James Peterson to measure the frequency, range, and type of childhood behavior problems for children age four and over (Peterson and Zill 1986). Many items were derived from the Achenbach Behavior Problems Checklist (Achenbach and Edelbrock 1981) and other child behavior scales (Graham and Rutter 1968; Kellam et al., 1975; Rutter, Tizard and Whitmore 1970).

Parent respondents to the 1981 Child Health Supplement of the National Health Interview Survey were asked an extensive series of structured questions concerning the child's problem behaviors and use of mental health services (NCHS 1982: 100-102). The specific questions varied somewhat depending on the age of the child. The behavior problem items utilized in the NLSY79 were developed from these items.

**Scoring the BPI.** The Behavior Problems total score is based on responses from the mothers to 28 questions in the *Mother Supplement* (items 1-26, 31, and 32 in the Behavior Problems scale). These mother-report questions ask about specific behaviors that children age four and over may have exhibited in the previous three months. (Note: Questions 27 through 30 in the BPI section are *not* part of the Behavior Problems scale. They were added by CHRR to tap dimensions that are particularly relevant for older children.) Three response categories were used in the questionnaire: (1) "often true," (2) "sometimes true," and (3) "not true".

**Overall Score and Subscales.** For the overall Behavior Problems scale and the set of six subscales defined below, responses to the individual items are dichotomized and summed to produce an index for each child. In this recoding process, each item answered "often" or "sometimes true" is given a value of one. Each item answered "not true" is given a value of zero. Thus, higher scores represent a greater level of behavior problems. Two of the items (Q.31 and Q.32 in the Behavior Problems sequence) are appropriate only for those children who have attended school at some time. *Only the overall score and the antisocial subscore use these two items.* Thus, for the BPI assessment, parallel raw scores are computed for children in school and children not yet in school.

Factor analysis was used to determine the six subscores alluded to above according to the following domains: (1) antisocial behavior, (2) anxiousness/depression, (3) headstrongness, (4) hyperactivity, (5) immaturity (6) dependency, and (7) peer conflict/social withdrawal. Appendix D-1 of this document displays the components of these subscales. The procedures used to define these subscores are detailed in the *NLSY79 Child Handbook: 1986-1990* (Baker et al., 1993).

**Externalizing/Internalizing scales.** Starting with the 1994 survey, CHRR has prepared an alternate set of BPI scores that measure a child’s tendency to internalize or externalize behaviors. Available as raw, normed and percentile scores, they are titled:

BEHAVIOR PROBLEMS INDEX: EXTERNAL SCORE TRICHOTOMOUS ITEMS  
BEHAVIOR PROBLEMS INDEX: INTERNAL SCORE TRICHOTOMOUS ITEMS

These “trichotomous” scales are constructed from items that are *not* dichotomized but are recoded from 1 (Often True), 2 (Sometimes true), 3 (Not true) to 0, 1, 2 with the following recoding: 3 = 0, 2 = 1, 1 = 2 before summing. The composition of these externalizing and internalizing scales can be found in Appendix D-1.

**BPI Norms.** Except the above non-dichotomous external, internal and total scores (based on trichotomous items), overall as well as “same-gender” normed scores have been created based on data from the 1981 National Health Interview Survey. Girls are systematically more likely to be reported as exhibiting “better” behavior on most of these scales. Normed scores for the BPI include both percentile and standard scores (with a national mean of 100 and a standard deviation of 15) and are based on single year of age data. For children below the age of six, separate norms are created for children in school and out of school.

Nationally normed percentile and standard scores are provided for the three trichotomous scores, but normed “same-gender” scores are not available. With regard to the six subscores, the user is cautioned that the range of normed outcomes is quite constrained, because of the limited number of possible responses for some of the subscores. As with the other *Mother Supplement* assessments, a user who wishes to select a sample of children of a particular age should access the *Mother Supplement* child age variable. Users will find the reference numbers for the Behavior Problems scores in Table 2.9 and Appendix K (for years 1986-1994). The components of the BPI overall scores and subscores are listed in Appendix D-1. Note: Normed scores are not available for the Dependency subscale for children ages 12 and over. The BPI norming tables are printed in Appendix D-2.

**Imputation of BPI scores.** Since 1992, imputed values have been assigned for the overall dichotomous raw score for all children for whom one item was missing. Norms are, of course, also provided for all those children. Similarly, beginning in 1994, scores have been imputed for the overall internal and external subscales where only one item is missing. Starting in 2000, the overall trichotomous score was *not* imputed. The overall dichotomous raw score includes one extra digit; with the final digit representing one implied decimal place. The external and internal raw scores have been rounded to the nearest full digit. Imputation flags (assigned to the ASSESSMENT area of interest) are available that identify those cases that have been prorated. In no instance does imputation involve very many cases.

**Completion, Validity and Reliability - BPI.** The Behavior Problems Index is among the most frequently used of the NLSY79 child assessments, both as an outcome in its own right and as a robust predictor of a wide range of child attitudes and behaviors. Table 2.12 shows that in 2002, the overall completion rate for the BPI reached 99 percent, probably as a result of CAPI administration of the Mother Supplement. Through 2000, the overall completion rate for the Behavior Problems scale is about 93 percent, with somewhat lower levels of completion by Hispanic children in the sample. The racial/ethnic variation evident in the last three rounds is not as pronounced as in earlier survey rounds (Mott, 1998).

A fully representative sample of children would be expected to have a mean standard BPI score of 100, however the mean for the NLSY79 child sample is 103.5 in 1998, 101.5 in 2000, and 101.7 in 2002 (see Table 4.3 in the *Selected Assessment Tables*). Previous evaluations (Mott 1998) speculated that the higher levels reflect the fact that the NLSY79 children are not yet fully representative of a national cross-section of American children and somewhat over-represent children born to younger and less-educated women. This becomes less of an issue with the passing of time as the NLSY79 mothers approach the end of their childbearing years. For example, whereas the NLSY79 children over the age of ten in 1996 have mean behavior problem scores well over 100 (as high as 106 in 1996), the mean score for children ages 4 or 5 is closer to 98. While the age-score pattern appears somewhat erratic over time, there is evidence that the sample of NLSY79 children may have normed scores not substantially different from the overall 1982 national norming sample. The assessment tables reports include distributions for the Behavior Problems Scales starting in 1994 (see Chapter 5 for information on the *Selected Assessment Tables*).

Researchers continue to frequently use the BPI assessment in studies based on the NLSY79 child data. The overall scale, typically used more often than its subscales, is often seen as an outcome predicted by family circumstances and parental characteristics. The overall index has also been used to test the reliability and validity of other scales, such as the temperament scales (Baydar 1995).

Original or modified versions of the internalizing and externalizing subscales have been used as outcomes of interest in a number of studies (Chase-Lansdale and Gordon 1996; McLeod and Shanahan 1993; McLeod and Edwards 1995; Mott, Kowaleski-Jones, and Menaghan 1997).

The six NLSY79 Child behavior problem subscales (antisocial, anxious/depressed, headstrong, hyperactive, dependency, and peer conflict) are often used as child outcomes of interest within a single study. The antisocial and anxious/depressed subscales are also studied separately in some cases. Several researchers have created their own subscales from the items in the BPI child assessment to use as child outcomes. The most frequently studied outcome of this type is oppositional action, a fifteen-item scale that represents “acting out” behaviors (Cooksey, Menaghan and Jekielek 1997).

The *NLSY79 Child Handbook: 1986-1990* (Baker et al., 1993) discusses additional literature on this assessment. *The NLSY Children 1992* includes a discussion of the reliability and validity of the assessment based on the earlier waves of child data (Mott et al., 1995). Users

are encouraged to review an annotated listing of research in which the BPI scales are used by accessing the NLS on-line bibliography or contacting NLS user services (see Chapter 5).

***Parts of the Body (1986 and 1988 only)***

The Parts of the Body assessment was completed by age-eligible NLSY79 children in 1986 and 1988 only. Developed by Jerome Kagan of Harvard University, Parts of the Body attempts to measure a one- or two-year-old child's receptive vocabulary knowledge of orally presented words as a means of estimating verbal intellectual development. The interviewer names each of ten body parts and asks the child to point to that part of his or her body.

**Scoring Body Parts.** The child's score is computed by summing the items that a child correctly identifies (C7972. for 1988 and C5799. for 1986). Thus, a minimum score is 0 and a maximum score is 10. No proration was attempted since the later items in the sequence are more difficult than the earlier items. A Spanish version of this assessment was available for use with young Hispanic children. A complete protocol for the Body Parts assessment can be found in the *1988 Child Supplement* (available from NLS User Services or online at <ftp://ftp.chrr.ohio-state.edu/usersvc/>).

Because of inconsistency in the way some interviewers interpreted the instructions, the Body Parts assessment was scored in 1988 using three alternate criteria. First, a child had to answer each of the ten items either (1) correctly or (2) incorrectly on at least one of the two attempts (see page CS-18 in the *1988 Child Supplement*). If scoring was completed according to this criteria, then the case was coded a "1" on the Body Parts scoring criteria flag (C7973.). A second, less restrictive criterion, allowed some of the individual items to be coded "3" (no answer) on some of the attempts. For this subset of children, a code of "3" was treated as an incorrect response and the overall assessment was accordingly scored. These cases can be identified by a value of "2" on the Body Parts criteria flag. Children for whom virtually all the responses were coded "3" (and translated into incorrect responses) received a value of "3" on the Body Parts criteria flag. Thus, users may restrict analyses to the more constrained sample or opt to include only children who had been scored according to the less conservative definitions. As with all the assessments, users who plan to use a particular assessment are strongly urged to evaluate the scoring schema and data quality according to their own criteria. While we have made every effort to create scores that are faithful to the intentions of the assessment designers, there are instances where researchers could reasonably disagree about what precise scoring procedures should be utilized. The Body Parts assessment was given to very young children for whom there could be considerable ambiguity in differentiating between "incorrect" and "non responses."

**Norms – Body Parts.** As no appropriate national norms are available for scoring this assessment, CHRR has provided (for 1988) internally normed standard and percentile scores (see Appendix K). No normed results are provided for 1986. As the raw score on this assessment is extremely sensitive to the age of the child, users of the raw scores are encouraged to apply appropriate techniques that permit analytical comparisons of children across different ages. When controlling for age, the user should select the appropriate *Child Supplement* age variable that specifies the child's age (in months) as of the *Child Supplement* interview date.

**Completion, Validity, and Reliability – Body Parts.** Notwithstanding the availability of a Spanish version of this assessment in the NLSY79, the user should proceed cautiously when interpreting its reliability and validity, particularly with regard to minority and relatively more disadvantaged children. It appears that a child's score may be quite sensitive to the child's English language capabilities as well as rapport with the interviewer. In 1986, the non-completion rate for this assessment was about 17 percent. For about half of the completed assessments, a child is reported to have not responded on at least one question, requiring the alternate assumptions with regard to scoring we describe above to be made. For a more complete discussion of the reliability and internal validity of this assessment and the Memory for Location assessment, please see pages 30-31 in *The NLSY Children 1992* (Mott et al. 1995).

***Memory for Locations (1986 and 1988 only)***

The Memory for Locations assessment was completed by age-eligible NLSY79 children in 1986 and 1988 only. It was developed as a measure of a child's short-term memory and has been extensively used by Jerome Kagan of Harvard University (Kagan 1981). The child, aged eight months through three years, watches as a figure is placed under one of two to six cups. The cups are screened from a child's view for one to fifteen seconds; the child is then asked to find the location of the figure. Items increase in difficulty as the number of cups and/or the length of time during which the cups are hidden from view increases. A child's score is based on his or her ability to select the cup hiding the figure.

**Scoring Memory for Locations.** The number of individual items that a child can potentially answer in this assessment is contingent on the age of the child. Children between the ages of 8 and 23 months start with item 1, the easiest question; children who are at least two years of age begin with item 4, and children age three start with item 7. A child's score is based on the highest (most difficult) question answered. A child who cannot answer the entry item receives a raw score of zero *regardless of where he or she enters*. Otherwise, if Q.1 is the highest item answered correctly, the child receives a score of 1. The maximum score is 10, if the tenth or final item is correctly answered. A child under two years of age is eligible to receive a score between zero and ten; a child age three, by virtue of the fact that he/she enters at item seven, can only receive a raw score of 0, 7, 8, 9, 10. Because external norms were not available, internally normed standard and percentile scores were developed. The scores that are constructed for this assessment are identified in Appendix K. The user is still advised to use the normed scores cautiously because of the unusual distribution of raw scores described above.

Because of the complexity of the administration procedures for the Memory for Locations assessment, a number of responses were not coded precisely according to the decision rules. On the advice of the assessment developer, children who followed a sequence that might have led to "extra learning" (as part of the assessment administration process) were still scored. For example, if a child was asked Q.1B after having correctly answered Q.1A, the child was scored and not given an "invalid skip" code, even though, theoretically, the child was supposed to proceed directly from Q.1A to Q.2A. In addition, a careful examination of the individual responses suggests that there were a number of children who began the assessment at an improper entry point but who ended up at a level where they would, in all likelihood,

have wound up anyway. In these instances, a score was provided for the children and these cases were “flagged” with a code of “2” on the Memory for Location flag variable (C7977. for 1988 and C5782. for 1986). A code of “1” on this flag includes all scored cases *except* those defined as 2’s. Researchers who plan to use this assessment extensively should carefully examine the actual response patterns to individual items. Individual researchers may choose to impose scoring criteria that are more or less stringent than those used in computing the raw scores provided in this data file.

This assessment displays a clear tendency to “top out” for the oldest children in the sample. That is, a very large proportion (63 percent in 1986) of all three- year-olds and 32 percent of two year olds received the maximum raw score of ten on the assessment. A relatively normal distribution may be in evidence only for children below the age of two.

The Body Parts and Memory for Locations assessments were no longer used in the NLSY79 Child surveys following the 1988 Child data collection effort, partly because of funding constraints and partly because of the greater difficulty in administering them to children in a home setting. Interviewers found it difficult to make an unambiguous determination as to whether a child was unable to respond or whether he/she was just shy. It was sometimes difficult to be definitive regarding the direction in which a child was pointing, either toward a cup or toward a body part.

Finally, evaluation of these two assessments in 1986 showed little in the way of significant linkages between a wide range of socio-economic antecedents and these two outcomes. However, more recent research suggests that these two assessments may be useful independent predictors of cognitive development (Mott, et al., 1995) since Body Parts and Memory for Location scores in 1986 are highly significant predictors of Peabody assessments in 1992. It appears that, in standard multivariate analyses, these early child cognitive measures may indeed be useful predictors of aptitude and achievement measures six years later.

#### ***McCarthy Scales of Children’s Abilities - Verbal Memory (1986-1994)***

The Verbal Memory subscale of the McCarthy Scales of Children’s Abilities was last administered in the NLSY79 Child survey in 1994. This assessment taps a child’s *short-term* memory in response to auditory stimuli. The Verbal Memory subtest selected for use in the NLSY79 Child is only one of six scales that form the complete McCarthy assessment battery. Verbal Memory was administered by first asking the child, age three through six years, to repeat words or sentences said by the interviewer (Parts A and B). Then the child listens to and retells the essential aspects of a short story read aloud by the interviewer (Part C).

Verbal Memory has typically been completed by children between the ages of three and six, although in 1990, administration was limited to ages four to six. In all child survey years it was only administered to age-eligible children who had not previously (in a prior round) completed the assessment. The precise administration pattern by year is noted in Table 2.11. The Verbal Memory Scores that are available on the NLSY79 Child data file are listed in Appendix K.

**Changes in Verbal Memory.** From 1986 to 1990, both the word and sentence components as well as the story part of the assessment were administered. In 1992 and 1994, administration was limited to the word/sentence component of the assessment. This means that in 1992 and 1994, only the first two parts (A and B) of Verbal Memory were administered. After 1994, due to cost reasons and concerns about data quality, administration of this assessment was discontinued.

**Scoring Verbal Memory.** In the first half of the word-sentence component of the assessment (Part A), the score that the child received was contingent on the child repeating a series of words, ideally in the same sequence that they were uttered by the interviewer. In Part B of this first section, the child was scored according to the number of key words that he or she repeated from a sentence read by the interviewer. The combined total score for Parts A and B determined whether the story (Part C) was administered. In Part C, the child was read a story paragraph and then scored on the basis of his or her ability to recall key ideas from that story. National norms are available for this assessment, so children were assigned normed scores based on his or her performance in comparison with a nationally representative sample.

The number of correct responses to the words and sentences on pages 50 and 51 in the 1994 *Child Supplement* (the last year the assessment was administered) were combined to generate one total raw score. Appropriate national norms are available in the McCarthy manual (McCarthy, 1972: 205). Thus, percentile and standard scores are available for linking with the raw scores. The specific identification of these raw and normed scores is found in Appendix K.

As noted in the 1986 through 1990 rounds of data collection, the Verbal Memory assessment included a “Part C” or a “Story” section. Children who received this assessment in 1986-1990 received two scores in each year. Entry into the “Story” was contingent upon receiving a minimum combined score of 8 on Part A plus Part B. The researcher may note that there were a few instances of children entering and receiving a score on Part C who had received an invalid skip score on Part A and Part B. While it may not have been possible to score A and B for various reasons, the available information was sufficient for the scorer to be confident that the A and B score was at least 8. Children who received a valid score of less than 8 on Part A and Part B were automatically assigned a zero on Part C. This explains the considerable heaping at the zero outcome for Part C.

The scoring on Part C is a simple summation of the number of key words/phrases identified correctly from the paragraph on page CS-36 of the 1990 *Child Supplement*. No proration was attempted for missing responses. The individual items appear on page CS-38 of that supplement. A total raw score and two normed scores were generated for Part C in 1986 through 1990 (see Appendix K).

From an analytical perspective, the prospective user may note that the distributions of the percentile and standard scores for Part C are somewhat uneven, reflecting the fact that the Part C outcome allowed for only 12 possible responses (0 and 1 through 11) with a major heaping as noted, at the zero category. The fact that the percentile/standard scores assigned to the various raw scores vary by the age of the child helps to smooth the normed pattern somewhat. However, the user is encouraged to examine the pattern of normed responses before

proceeding with his or her research. As with all of the assessments in the *Child Supplement*, the *Child Supplement age* variable should be used when stratifying the sample by age of child.

**Validity – Verbal Memory.** While this subscale has a high face validity regarding what it purports to measure, the user should be sensitive to the fact that the scoring of Part C, the story section, undoubtedly includes an element of subjectivity. Interviewers can, in some instances, disagree regarding whether or not a child’s specific response was indeed a “correct” or “incorrect” interpretation of an aspect of the story. Also, to some extent, the verbatim verbal responses recorded by the interviewer could, in some instances, be coded in different manners by different interviewers. In order to test this latter premise, NORC had the 1986 verbatim responses for about 400 children independently coded by two coders. There was complete agreement between coders for 92 percent of the respondents.

At a different level, there is also some possibility that the Part A response patterns reflect a lack of precision in the instruction—an ambiguity that also exists in the McCarthy manual. The instructions (for Part A) only ask the child to repeat the words that the interviewer reads to him or her, but do not specify that the words should be repeated in the same sequence. However, in the scoring, the respondent loses a point if the words are repeated out of sequence. Thus, the extent to which the words were repeated in or out of sequence may have been a function of how the instructions were understood, an artifact that could attenuate the reliability of the Part A score.

**Completion Rates - Verbal Memory.** The 1994 completion rate for Parts A and B was only about 82 percent, below the completion rate for all of the other child-administered assessments. Hispanic children had a completion rate of only 77 percent, substantially below that for other children. Thus, as with some of the other assessments, there is surface evidence that language constraints come into play when evaluating the reliability and potential validity of this assessment. With regard to this assessment, it is important to note that a Spanish translation was *not* utilized. Since this test measures *English* language verbal retention, a language bias is likely for at least some children. Hispanic children and children of less educated mothers are heavily over-represented among those who could not be scored—the “invalid response” subset.

Verbal Memory has been one of the most difficult of the assessments to administer because of the ambiguity involved in determining whether a child does not know an answer or is just shy (see Baker and Mott 1995, for a discussion of this issue and its impact on the assessment). This is primarily an issue with younger children who had not previously been tested or had not been in a formal school environment. With the introduction of the CAPI administration procedures in 1994, one additional problem became apparent. The number of cases scored “zero” increased substantially, but interviewer comments suggest that many of these cases really should have been “non-completions.” This is discussed in detail in Baker and Mott (1995). For the reasons noted above, this assessment should be used cautiously. Additional discussion relating to the reliability and validity of this assessment, as well as how it has been used by other researchers, can be found in the *NLSY79 Child Handbook: 1986-1990* (Baker et al., 1993) and in *The NLSY Children 1992* (Mott et al., 1995).

### *Self-Perception Profile for Children (SPPC)*

The Self-Perception Profile for Children (SPPC) is a self-report magnitude estimation scale that measures a child's sense of general self-worth and self-competence in the domain of academic skills (Harter 1982, 1985). Harter's instrument taps five specific domains of self-concept as well as global self-worth. The twelve items selected from the original for use in the NLSY79 assessment translate into two subscores, a global self-worth score and a scholastic competence score. There is no overall self-perception score. The global self-worth score is a summation of the six "even-numbered" items, beginning with the second item. The scholastic competence score is a summation of the odd numbered items, beginning with item one. These two scales represent two of six subscales developed by Susan Harter. A full description of all the subscales appears in the SPPC Manual (Harter 1985). The NLSY79 testing protocol for this assessment is also explained in the user version of the *Child Supplement* (see Chapter 5 for details about questionnaire documentation).

The assessment, titled "What I Am Like" in the *Child Supplement*, was completed by children ages eight and over in the survey years 1986-1994. Beginning with the 1996 survey, administration was limited to children 12 and over. Scale items are typically phrased as follows:

"Some kids like the kind of person they are BUT other kids often wish they were someone else."

Children select which option is most like them and then indicate whether the statement is *sort of true* or *really true* for them. A value of "4" for each item denotes the highest level of self-worth and a "1" denotes the lowest level.

In the NLSY79, interviewers administer this instrument directly to the children. The interviewer reads each statement to the child, then asks "which kind of kid is more like you," and follows up by asking whether or not the particular response is "really true for you" or "sort of true for you." Older children have the option of reading along on printed cards and simply answering whether they are more like the "X" side or the "Y" side of the card. The graphical format and layout of the CAPI screens for SPPC can be found at the back of the *Child Supplement* (available from NLS User Services or on-line at <ftp://ftp.chrr.ohio-state.edu/usersvc/>). These sample pages are included in the appendix to the *Child CAPI Supplement* (see Chapter 5 for access information).

**Changes in SPPC.** From 1986 to 1994 the Self-Perception Profile for Children (SPPC) was administered to children ages 8 and older. Beginning with the 1996 survey, SPPC is administered only to children ages 12 and over.

**Scoring the SPPC.** Each of the two subscales include six items that are scored between one and four, with higher scores representing greater scholastic competence or greater global self-worth. Only raw scores, which are a simple summation of the six individual items in each scale, are provided, as no national norms are available. Subscore identification is documented in Table 2.9 and Appendix K (for years 1986-1994).

For a small number of cases, there are some missing items. In these instances, a prorated score is computed, assigning average values to the missing items. Flag variables that identify the degree to which cases have been prorated are included in each year's data. For example, a value of zero on these flags indicates that all items were completed and no proration performed; a "1" indicates that one item was missing, and so on.

**Completion Rates - SPPC.** The SPPC assessment has a relatively high completion rate (87.5 percent) in the current round, with only modest ethnic or racial variability (see Table 2.12). However, there is evidence that younger children, those under ten (who had been administered this assessment in the pre-1996 survey years), may have had greater difficulty in understanding some of the items. For this reason, scores for younger children may have been somewhat less reliable and valid. In this regard, it is useful to note that within and cross-year correlations between the two SPPC subscales and the various other cognitive assessments are significantly higher for children age ten and over than for eight and nine year olds. The zero-order correlation between the two subscales is about 0.3 for eight- and nine-year-olds compared with 0.4 for children age ten and over (Baker, et al. 1993: 130-131). For younger children, there is little association between the two scores and demographic or socioeconomic priors (Mott, et al. 1995).

**Validity and Reliability - SPPC.** In general, the reported reliabilities for the NLSY79 administration of these two subscales are somewhat lower than those reported by Harter (1985, 1990). She reports internal reliability of about .8 compared with .67 for the NLSY79 samples. This may partly reflect differences between the samples in their racial, ethnic, or socio-economic mix.

Researchers who have used these SPPC measures have relied on the constructed SPPC scores that are provided in the NLSY79 public child file. Using the 6-item global self-worth subscale, Baydar, Hyle, and Brooks-Gunn (1997) report a significant effect of a sibling birth on global self-worth, particularly among children of economically disadvantaged families. Turner (2000) used the scholastic subscale in finding that children resistant to overall delinquency, including drug use, report greater self-perceived scholastic competence than children who report engaging in delinquent behavior and drug use (p. 137 and p. 160). Both the *NLSY79 Child Handbook: 1986-1990* and *The NLSY Children 1992* include more extensive evaluations of the reliability and validity of these two subscores; the *NLSY79 Child Handbook* reviews other literature on the topic (Baker et al., 1993; Mott et al., 1995).

As a final note, it appears that there has been some escalation in the scores of the Global Self-Worth assessment over time. For example, in 1988, 58.4 percent of the children scored 20 or over, compared with about 63-64 percent in 1990-1992, 69 percent in 1994 and 76 percent (children age 12 and over) in 1996. This category surpassed 71 percent in 1998 and reached 70 percent in 2000 and 2002 (see Table 5.4 in the *Child Assessment Tables*). The reasons for the decline in the proportion with very low scores during the period remain unclear.

### ***Wechsler Intelligence Scale for Children - Memory for Digit Span***

The Memory for Digit Span assessment, a component of the Wechsler Intelligence Scales for Children–Revised (WISC-R), is a measure of short-term memory for children aged seven and

over (Wechsler 1974). The WISC-R is one of the best normed and most highly respected measures of child intelligence (although it should be noted that the Digit Span component is one of the two parts of the Wechsler scale not used in establishing IQ tables).

There are two parts to the Memory for Digit Span assessment. First, the child listens to and repeats a sequence of numbers said by the interviewer. In the second part, the child listens to a sequence of numbers and repeats them in reverse order. In both parts, the length of each sequence of numbers increases as the child correctly responds. Starting in 1996, this assessment is administered to all children age seven through 11 years. In prior rounds, it was administered typically to children ages seven and over who had not previously received the assessment, and to all ten and eleven year olds (see Table 2.11).

The child is instructed to repeat a series of 14 numbers (with increasing numbers of digits) forward and a different series of digits in reverse order. Each correct response is worth one point; the theoretical maximum on each of the subscores is, thus, 14 and for the total score, 28. The forward digit sequence is completed prior to the backward digit sequence. However, entry into the reverse sequence is not contingent on successful entry or completion of the forward sequence. Where appropriate, this assessment is administered in Spanish.

**Digit Span Scores.** This assessment generates three non-normed “raw” scores and one overall age-appropriate normed (standard) score. Whereas the normed scores for the other assessments are based on a mean of 100 and a standard deviation of 15, the Digit Span assessment is normed against a distribution that has a mean of 10 and a standard deviation of 3. Norms are only available for the total score. The variables to be accessed for these raw and normed scores can be found in Table 2.9 and Appendix K (for years 1986-1994). The norms are published in the *WISC* manual (Wechsler 1974: 118-150). The precise instruction and items used in this assessment can be found in the Memory for Digit Span section of the 1996 *Child Supplement*, available from NLS user services or on-line at <ftp://ftp.chrr.ohio-state.edu/usersvc/>.

**Completion Rates – Digit Span.** The completion rate for Digit Span in the current round is over 90 percent (Table 2.12), significantly higher for black children. Based on a cross-year examination of Digit Span scores, it is difficult to generalize about racial or ethnic differences in scores. As in 1998, the scores for whites in 2000 appear to be slightly above those of minority groups, with this difference being most prevalent on the “backwards” assessments (see Tables series 6 in the *Assessment Tables* Report). The 2002 scores show a slight increase across all three racial/ethnic sample groups in the overall and forwards scores but about the same pattern as 2000 for digits backward. However, in at least several prior years, different patterns were in evidence, with racial differences not following any systematic pattern.

As noted above, a Spanish version is available for administration. While this version is available for use, it may be that some Hispanic children with a less than adequate understanding of verbal English (the assessment is verbally administered by an interviewer) nonetheless completed the English version with less than optimal results.

**Validity and Reliability – Digit Span.** In multivariate analyses carried out with the 1992 data that controlled for a wide range of demographic and socio-economic antecedents, the

scores of black and Hispanic children were not below those of non-Hispanic, non black children on either the forward or backward assessment (*The NLSY79 Children 1992*). In the same analyses, it was also found that the Digit Span subscores in 1986, in particular the reverse order “digit backwards” assessment, are useful independent predictors of all of the PIAT scores for older children in 1992. Users who want more detailed information about the reliability and validity of these assessments and a brief discussion of other literature about studies that have used these assessments should consult the *NLSY Child Handbook: 1986-1990* (Baker et al., 1993) and *The NLSY Children 1992* (Mott et al., 1995).

### ***PIAT Mathematics***

The Peabody Individual Achievement Test (PIAT) is a wide-ranging measure of academic achievement for children aged five and over and is widely known and used in research. It is among the most widely used brief assessment of academic achievement having demonstrably high test-retest reliability and concurrent validity. The *NLSY79 Child Supplement* includes three subtests from the full PIAT battery: the Mathematics, Reading Recognition, and Reading Comprehension assessments. Many of the comments related here to the PIAT math subtest are equally appropriate for the other PIAT (as well as PPVT) assessments.

The PIAT Mathematics assessment protocol used in the field is described in the Appendix to the *Child Supplement*. This subscale measures a child’s attainment in mathematics as taught in mainstream education. It consists of 84 multiple-choice items of increasing difficulty. It begins with such early skills as recognizing numerals and progresses to measuring advanced concepts in geometry and trigonometry. Essentially, the child looks at each problem and then chooses an answer by pointing to or naming one of four options.

**PIAT Basal and Ceiling.** The PIAT Mathematics assessment was administered to all children below young adult age whose “PPVT age” was five years and above. Administration of this assessment is relatively straightforward. Children entering the assessment at an age-appropriate item (although this is not essential to the scoring) and establish a “basal” by attaining five consecutive correct responses. If no basal is achieved then a basal of “1” is assigned (see PPVT). A “ceiling” is reached when five of seven items are answered incorrectly. The non-normalized raw score is equivalent to the ceiling item minus the number of incorrect responses between the basal and the ceiling scores.

**PIAT Norms.** For a precise statement of the norm derivations, the user should consult the *PIAT Manual* (Dunn and Markwardt, 1970, pp. 81-91, 95). In interpreting the normed scores, the researcher should note that the *PIAT assessments used in the NLSY79 Child were normed about 30 years ago*. Social changes affecting the mathematics and reading knowledge of small children in recent years undoubtedly have altered the mean and dispersion of the reading distribution over this time period. In this regard, a revised version of the PIAT (“PIAT-R”) was released in 1986, but this release occurred too late to incorporate as a 1986 child assessment. To date, we have opted to maintain internal continuity within the NLSY79 by continuing to use the 1968 version of the PIAT.

In 1998 and 2000, the overall (weighted) standard score mean for NLSY79 children completing the PIAT Mathematics assessment is about 104 compared with 100 for the 1968

norming sample (see Tables series 7 in the *Selected Tables* reports). In 2002, the mean overall (weighted) standard score of 106.8 is somewhat higher with slight increases most evident in the black and nonblack/nonHispanic sample groups. Thus, even though NLSY79 children are somewhat disadvantaged compared with a full cross-section of contemporary American children, they nonetheless score above average compared to what one might expect from a full national cross-section. It is likely that this pattern at least partly reflects changes that have occurred in American society in the last 30 years. For example, it is very possible that factors such as child educational television viewing patterns or involvement in pre-school programs have improved younger children's readiness for mathematics and reading, if not their advanced capability.

Normalized percentile and standard scores are derived on an age-specific basis from the child's raw score. The norming sample has a mean of 100 and a standard deviation of 15. The user is reminded that *a child's age determination for this assessment is based on a PPVT age*. The norming procedures essentially are a two-step process with the percentile scores being derived from the raw scores and the standard scores from the percentile scores. The reference numbers for the raw and normed PIAT Math scores are listed in Table 2.9 and Appendix K (for years 1986-1994).

**Completion Rates – the PIATs.** The majority of the invalidly skipped items in the PIATs between 1986 and 1992 (years when the survey was administered by paper and pencil) fall into two categories. First, there are some children who inadvertently were skipped over even though they were of an appropriate age. Second, a number of children could not be scored because the scoring decision rules were not followed properly so either a basal or ceiling could not be obtained. Starting in 1994, this procedure, which resulted in children being asked a greater number of questions than was required by protocol, is no longer utilized. The introduction of computer-assisted personal interview (CAPI) technology in the 1994 child data collection took the decision making regarding basal and ceiling procedures out of the hands of the interviewer. Thus, a PIAT assessment can no longer be terminated inadvertently because an interviewer errs in deciding whether a basal or ceiling has been reached.

Users of the PIAT assessments are encouraged to examine the individual response patterns as well as the reasons for invalid scores, particularly for the 1986–1992 period. Having the individual responses will permit the user to note that a number of assessments originally considered “unscorable” were scorable once the actual patterns of response on the various assessments were considered individually. This edit was possible because the interviewer recorded the actual response and a score of correct or incorrect for each answer. Thus, if the correct-wrong item was left blank inadvertently (something which was possible only with paper-and-pencil administration), but the actual response was available, it was frequently possible, in scoring the 1986 through 1992 assessments, to make a post hoc determination of “correctness.” In addition, depending on the user's research intention, it may be possible to “score” additional cases if one is willing to sacrifice some precision in the scoring. For example, some additional cases could be scored, if one is willing to accept as adequate a score that does not deviate by more than one or two points from the “true” score. This issue has become less relevant since the introduction of CAPI interviewing procedures in 1994.

Table 2.12 shows that the overall completion rate for PIAT Math in 2002 is about 92 percent. There are modest differences between the white, black and Hispanic completion rates.

**Changes in PIAT Scoring.** Beginning with 1990, changes were introduced into the PIAT norming scheme to improve the utility of these measures and to simplify their use. First, children between the ages of 60 and 62 months (for whom no normed percentile scores had been available previously) are now normed using percentile scores designed for children enrolled in the first third of the kindergarten year—the closest approximation available to ages 60 to 62 months.

*Starting in 1994, children with raw scores translating to percentiles that were below the established minimum were assigned percentile scores of “1”; children with raw scores translating to percentile scores above the maximum are assigned percentile scores of 99. In prior years, the “out-of-range” children had been assigned arbitrarily scores of 0, which led to some inadvertent misuse of the data. (Prior to the 1994 period, children who were more than 217 months of age were assigned normed scores of -4, since they were beyond the maximum ages for which nationals normed scores are available.)*

**Validity and Reliability – PIAT Math.** In general, the PIAT Math is a highly reliable and valid assessment. As described in the *NLSY Child Handbook: 1986-1990* and *The NLSY Children 1992*, it is correlated closely with a variety of other cognitive measures. It is both predicted by and predicts scores on a variety of the other assessments. A particularly strong analytical advantage derived from all of the PIAT assessments is the fact that they have now been asked repeatedly of children aged five and over. Some children in the sample aged 13 or 14 years completed these assessments five times and, indeed, most of the children in the Young Adult sample have several PIAT administrations in their NLSY79 history. This pattern of repeat assessment permits the careful examination of their developmental profiles in relation to school and early-career development. A more detailed discussion of repeat assessment can be found later in this Chapter.

### ***PIAT Reading Recognition***

The Peabody Individual Achievement Test (PIAT) Reading Recognition subtest, one of five in the PIAT series, measures word recognition and pronunciation ability—essential components of reading achievement. Children read a word silently, then say it aloud. PIAT Reading Recognition contains 84 items, each with four options, which increase in difficulty from preschool to high school levels. Skills assessed include matching letters, naming names, and reading single words aloud. To quote directly from the PIAT manual, the rationale for the reading recognition subtest is as follows:

“In a technical sense, after the first 18 readiness-type items, the general objective of the reading recognition subtest is to measure skills in translating sequences of printed alphabetic symbols which form words, into speech sounds that can be understood by others as words. This subtest might also be viewed as an oral reading test. While it is recognized that reading aloud is only one aspect of general reading ability, it is a skill useful throughout life in a wide range of everyday situations in or out of school” (Dunn and Markwardt 1970:

19-20). The authors also recognize that “performance on the reading recognition subtest becomes increasingly confounded with the acculturation factors as one moves beyond the early grades.”

This assessment is administered to children below young adult age whose PPVT age is five and over. The scoring decisions and procedures are identical to those described for the PIAT Mathematics assessment. A description of the process and a list of the words uttered by the interviewer are included in the public user version of the *Child Supplement*. The only difference in the implementation procedures between the PIAT Mathematics and PIAT Reading Recognition assessments is that the entry point into the Reading Recognition assessment is based on the child’s score in the Mathematics assessment, although entering at the correct point is not essential to the scoring.

As with PIAT Mathematics, it is important to note that the norming sample for Reading Recognition was selected and the norming carried out in the late 1960s. This has implications for interpreting the standardized scores of the children in the NLSY79 sample, as already described in the PIAT Mathematics discussion. In this regard, the child sample that has completed the Reading Recognition assessment has a mean standard score of about 108 compared with 100 for the national norming sample (see Table series 8 in the *NLSY79 Child Assessments Tables* report).

Most children with invalid Reading Recognition scores (assigned a value of -3) have either not entered the assessment or prematurely terminated the assessment. In some instances, a careful review of the individual responses in conjunction with an examination of the interviewer’s actual scoring calculations permitted clarification, and ultimately scoring, of additional cases. This type of data review was more prevalent during the years that the assessments were administered on paper without the benefit of CAPI scoring.

It is however, important to note that while interviewers are able to record the actual response to each PIAT Math item, the nature of the PIAT Reading Recognition makes this infeasible for the individual items. This is one reason that, in years that this assessment was administered on paper, the overall response rate is slightly lower on the PIAT Reading Recognition assessment. In contrast with the PIAT Mathematics assessment, it was not possible to rectify inadvertent skips for some children on the PIAT Reading Recognition assessment where the “correct-noncorrect” check item inadvertently was left blank. Researchers who plan to use the PIAT Reading Recognition assessment extensively are encouraged to examine the individual response patterns. Where a particular researcher does not require great precision on this particular outcome (e.g., a categorization of scores into a number of discrete categories being sufficient), it possible to reduce the non-completion rate. In a number of cases, while an exact score may not be determined, an appropriate score determination (e.g., within two or three points, or a score of at least a certain level) may be possible.

**Scoring Changes – PIAT Reading.** Changes were introduced beginning with the 1990 PIAT norming scheme to improve the utility of these measures and to simplify their use. First, children between the ages of 60 and 62 months (for whom no normed percentile scores had been available in 1986 or 1988) are now normed using percentile scores designed for children

enrolled in the first third of the kindergarten year—the closest approximation available to ages 60 to 62 months.

Starting in 1994, children with raw scores translating to percentiles below the established minimum are now assigned percentile scores of one; children with raw scores translating to percentile scores above the maximum are assigned percentile scores of 99. In prior years, the “out-of-range” children had been arbitrarily assigned scores of 0, which led to some inadvertent misuse of the data. (Through 1994, children more than 217 months of age were assigned normed scores of -4 since they were beyond the maximum ages for which national normed scores are available.)

**PIAT Reading Recognition Scores.** Three scores are reported for the PIAT Reading Recognition assessment in the child data file: an overall nonnormed raw score and two normed scores—a percentile score and a standard score. The norming sample has a mean of 100 and a standard deviation of 15; these were normed against standards based on a national sample of children in the United States in 1968. The specific child reference numbers for the PIAT Reading Recognition scores for all survey years appear in Table 2.9 and Appendix K (for years 1986-1994).

**Completion, Validity, and Reliability – PIAT Reading Recognition.** The relatively low overall PIAT Reading Recognition completion rate (89%) for 2000 largely reflected the decline in interview completion rates for the mothers. In 2002, the completion rate climbed back to about 92 percent, with some differences evident between non-Hispanic white and minority children (Table 2.12). As is true for the mathematics assessment, the recognition assessment is considered quite reliable and valid. The *NLSY Child Handbook: 1986-1990* includes a comprehensive discussion of these issues, drawing on material from the PIAT Manual as well as a variety of research that has been completed using the NLSY79 Child PIAT reading data (Baker et al., 1993). This discussion also includes internal CHRR evaluation of the cross-year correlations with other NLSY79 PIAT scores and the full spectrum of other cognitive assessments. Analyses presented in *The NLSY Children 1992* offer evidence of strong longitudinal independent associations between PIAT reading and a full set of demographic and socio-economic priors (Mott et al., 1995). In general, this assessment, as well as all of the other Peabody assessments, is widely used and has a well-established record in research.

### ***PIAT Reading Comprehension***

The Peabody Individual Achievement Test (PIAT) Reading Comprehension subtest measures a child’s ability to derive meaning from sentences that are read silently. For each of 66 items of increasing difficulty, the child silently reads a sentence once and then selects one of four pictures that best portrays the meaning of the sentence.

“While understanding the meaning of individual words is important, comprehending passages is more representative of practical reading ability since the context factor is built in, which plays an important role, not only in deciphering the intended meaning of specific words, but of the total passage. Therefore, the format selected for the reading subtest is one of a series of sentences of increasing difficulty. The 66 items in Reading Comprehension

are number 19 through 84, with item 19 corresponding in difficulty with item 19 in Reading Recognition.” (Dunn and Markwardt, 1970, pp. 21-22)

The PIAT Reading Comprehension assessment is administered to all children below young adult age whose PPVT age is five years and over *who scored at least 19 on the Reading Recognition assessment*. (From 1986 through 1992, PIAT Reading Comprehension was actually administered to all children who scored 15 or higher on Reading Recognition. This lowered threshold was used to maximize our ability to score the Reading Comprehension assessment for those cases where interviewers made minor addition errors in totaling the Reading Recognition test, computing actual scores of 19 or more as only being 15 through 18.)

Children who score less than 19 on Reading Recognition are assigned their Reading Recognition score as their Reading Comprehension score. If they score at least 19 on the Reading Recognition assessment, their Reading Recognition score determines the entry point to Reading Comprehension. Entering at the correct location is, however, not essential to the scoring. Basals and ceilings on PIAT Reading Comprehension and an overall nonnormed raw score are determined in a manner identical to the other PIAT procedures. The only difference is that *children for whom a basal could not be computed (but who otherwise completed the comprehension assessment) are automatically assigned a basal of 19*. Administration instructions can be found in the assessment section of the Child Supplement. As with the other PIAT tests, norming was accomplished in the late 1960s with all of its attendant potential analytical problems. These are noted in more detail in the discussion above about the PIAT Mathematics subtest. For a precise statement of the scoring decisions and the norm derivations, the user should consult Dunn and Dunn (1981) and Dunn and Markwardt (1970).

**The PIAT Reading Comprehension Scores.** The NLSY79 Child dataset provides the following PIAT Reading Comprehension scores: overall nonnormed raw scores that can range from 0 to 84, normed percentile scores, and normed standard scores. Reference numbers for the PIAT reading comprehension scores are listed in Table 2.9 and in Appendix K (for 1986-1994). It should be noted that many younger children (aged seven years and below) who receive low raw scores *cannot be given normed scores* because their scores are out of the range of the national PIAT sample used in the norming procedure. These children have been assigned “-4” codes on the percentile and standard score variables. Researchers wishing to keep these children in their analyses will need to consider special decision rules. The way to identify these children is to cross-classify children by their raw score and standard score. They will be identified by having a raw score of zero or greater but a standard and percentile score of -4.

If one is using the PIAT Reading Comprehension assessment for analyzing five- and six-year-olds, the proportion of children without a standard score is a major constraint that cannot be ignored. A large proportion of five- and six-year-olds that have a *valid* raw score on Reading Comprehension could not be given a normed score. All of these children had raw scores below 19 and thus, had their Reading Recognition score imputed as the Comprehension score; one solution for the youngest children (those with PPVT ages under 7) is to limit analyses to Reading Recognition. Another possible strategy is to use the raw score and to include an age control in one’s equations.

By applying procedures parallel to those used with PIAT Mathematics, it was sometimes possible to clarify the score of a previously “unscorable” child by carefully examining the individual response patterns, particularly where the actual response for the “correct-incorrect” item had not been completed. This was more relevant in the 1986–1992 “pre-CAPI” administration survey rounds. In this way, we were able to retrieve a number of cases not previously scorable. Depending on a researcher’s individual inclination or need for precision, it may be possible to score, in an approximate manner, a number of additional children. In order to accomplish this, the researcher will need to examine the individual PIAT comprehension items. Researchers who plan to use this outcome extensively are encouraged to examine the individual item responses.

**Scoring Changes – PIAT Reading Comprehension.** Changes were introduced beginning with the 1990 PIAT norming scheme to improve the utility of these measures and to simplify their use. First, children between the ages of 60 and 62 months (for whom no normed percentile scores had been available previously) are now normed using percentile scores designed for children enrolled in the first third of the kindergarten year—the closest approximation available to ages 60 to 62 months.

*As of the 1994 round, children with raw scores translating to percentiles below the established minimum are now assigned percentile scores of one; children with raw scores translating to percentile scores above the maximum are assigned percentile scores of 99. In prior years, the “out-of-range” children actually had arbitrarily been assigned scores of 0, which led to some inadvertent misuse of the data. (Prior to 1994, children more than 217 months of age are assigned normed scores of -4 since they are beyond the maximum ages for which normed scores are available.)*

**Completion Rates – PIAT Reading Comprehension.** Reading Comprehension completion rates have typically been lower than many of the other assessments. For example, in 1992 only about 86 percent of eligible youth received a comprehension score. In the pre-1994 survey period, several reasons have been suggested for the relatively low comprehension completion rate. In some instances, the assessment was simply skipped over with no reason given. In other instances, a valid Reading Recognition score was available, but the interviewer neglected to assess the child on Reading Comprehension. More typically, the Reading Comprehension assessment was attempted, but the interviewer did not attempt a sufficient number of items to attain a basal or ceiling. An apparently common problem was where an interviewer entered Reading Comprehension at a fairly low level, apparently tested a child, but did not record all of the responses. As with all of the assessments, the researcher is encouraged to examine the scoring patterns for the invalid responses. Depending on one’s research objectives, some flexibility in rescoring may be possible.

The PIAT Comprehension completion rates in 1994 and 1996 are substantially higher than in 1992, almost reaching 90 percent, and dipped to about 88 percent in 1998, reflecting the lower overall survey completion rates. This decline appears for virtually all ages, with the poorest completion rates continuing to be in evidence for the youngest, 5-6 year old children. In 2002, as shown in Table 2.12, completion rates for Reading Comprehension reached 91 percent with the highest level of completion (94.6%) evident among black children in the sample.

**Validity and Reliability – PIAT Reading Comprehension.** As with the other PIAT assessments, Reading Comprehension is generally considered to be a highly reliable and valid assessment that has been extensively used for research purposes. This version was normed in the late 1960s and thus is subject to the same analytical constraints as the other PIAT assessments. In this regard, while the level of the standardized scores appears too high, it is likely that the patterning of the responses is reasonable. That is, higher scores will represent better outcomes in comparison with lower scores. Readers wishing additional detail regarding specific research, which has utilized this NLSY79 assessment, should examine the PIAT discussion in the *NLSY Child Handbook* and review the most recent articles based on the NLSY79 Child reading assessment data by accessing the NLS on-line bibliography (see Chapter 5 for details). Additional information documenting the association between PIAT Comprehension and a full range of socio-economic and demographic maternal and family antecedents can be found in *The NLSY Children 1992* (Mott et al., 1995). Distributions of the PIAT Reading Comprehension scores are summarized in the Table series 9 in the *Selected Assessment Tables* reports.

### ***The Peabody Picture Vocabulary Test - Revised (PPVT-R)***

The Peabody Picture Vocabulary Test (PPVT) “measures an individual’s receptive (hearing) vocabulary for Standard American English and provides, at the same time, a quick estimate of verbal ability or scholastic aptitude” (Dunn and Dunn, 1981). This assessment, designed for ages three and over, has been administered, with some exceptions, to NLSY79 children between the ages of 3-18. Variations in the patterns of administration are somewhat complex for this assessment so the user is encouraged to examine Table 2.11 in order to understand which samples of children took this test over the various survey years.

Readers who wish to examine more than a single example of the actual images (or “plates”) presented to the child, should access the PPVT-R Manual and materials (Dunn and Dunn, 1981) or contact NLS User Services. The English language version of the assessment consists of 175 vocabulary items of generally increasing difficulty. The child listens to a word uttered by the interviewer and then selects one of four pictures that best describes the word’s meaning. A child’s entry point into the assessment is based on his or her PPVT age. A Spanish version of the PPVT-R was introduced into the child survey in 1988.

**Administration of the PPVT.** Children enter the assessment at an age-appropriate level, although this is not essential to the scoring. A “basal” is established when a child correctly identifies eight consecutive items. (Exceptions to this are those cases where a basal cannot be established. In these instances, a child is given a basal of one.) A “ceiling” is established when a child incorrectly identifies six of eight consecutive items. A child’s raw score is determined by adding the number of correct responses between the basal and ceiling to the basal score. In 2000 the interviewer read from a laminated list while the child matched the word by selecting one of four on-screen images designed to reproduce the pictures from the original PPVT easel.

In 1986 the PPVT assessment was administered only in English. However, beginning in 1988 through 2000, a small number of children who preferred to do so were given the Spanish version of this assessment, the “Test de Vocabulario en Imágenes Peabody” or “TVIP.” For

this reason, post-1986 assessment results may be less culturally biased than the 1986 version. In 2002 the Spanish version of the PPVT was no longer administered.

In 1986, all children age three and over were given this assessment. In 1988, all ten- and eleven-year-olds (our “index” population) as well as other children age three and over who had not previously completed the assessment in 1986 were given this assessment. In 1990, all children age ten and eleven as well as all other children age four and over who had not previously completed the assessment were eligible for the PPVT-R assessment. In the 1992 survey round, all children age three and over were eligible to be assessed. Thus, there are at least two survey points (1986 and 1992) in which all age-eligible children who were still being interviewed had a PPVT-R score. Of course, many of these children may also have had an intervening (at age 10 or 11) PPVT-R score. Starting in 1998, the administration of the PPVT-R was largely limited to 4- and 5-year-old children who had not been previously administered the test as well as the index group of children 10-11 years old.

**Completion Rates – the PPVT.** The youngest children administered this test generally score the poorest, probably reflecting their unfamiliarity with a testing environment. Their lower scores do *not* reflect lower status as these younger children have parents with more education than do the older, 10-11 year olds. In the current survey round, 88% of the children ages 4-5 received valid PPVT scores while slightly more than 93% of the index group, ages 10-11, completed the assessment. The across-year administration pattern is described in Table 2.11.

**Scoring the PPVT.** As with PIAT Math and Reading Comprehension, it was possible, primarily in the pre-CAPI years, to improve the overall quality and completion level by utilizing information on the actual responses where “correct-wrong” check item had inadvertently been skipped. In addition, depending on the user’s research intention, it may be possible to “score” additional cases if one is willing to sacrifice some precision in the scoring. For example, some additional cases could be scored if one is willing to accept as adequate a score that does not deviate by more than one or two points from the “true” score. For a precise statement of the scoring decisions and some of the norm derivations, the user should consult the PPVT-R Manual (Dunn and Dunn, 1981, pp. 96-110, 126).

**PPVT Norms.** The PPVT-R was standardized on a nationally representative sample of children and youth. The norming sample included 4,200 children in 1979, and norms development took place in 1980 (Dunn and Dunn, 1981). For a comprehensive discussion of this norming procedure, researchers should refer to the *PPVT-R Manual for Forms L and M* (Dunn and Dunn, 1981). The *PPVT-R Manual* provided information about the linkage between the standard and percentile score.

Users may note one very important distinction between the PPVT-R and PIAT scores—a difference of particular interest to those who plan to use both assessments concurrently. Whereas the PIAT assessments had surprisingly high mean scores (see PIAT discussions) for a sample with an above average proportion of disadvantaged children, the PPVT-R means are somewhat below those of the norming sample. The NLSY79 PPVT-R sample in 2002 has a mean standard score of 99.6 and a standard deviation of about 22. The mean for the white sample (103.3) is slightly higher than the overall national average (see Table 10.4 in the “*Selected Tables*”). This differential between the NLSY79 PIAT and PPVT-R mean scores

may reflect the fact that the PPVT-R norming sample is relatively more contemporary (1979), whereas the PIAT norming sample is from the late 1960s.

Beginning in 1990, the procedure used to create the NLSY79 Child PPVT-R normed scores was refined in two important ways. First, children with raw scores that translated into standard scores between 20 and 39 are now normed using the *PPVT-R Supplementary Norms Tables* (American Guidance Service, 1981). Second, raw scores that would translate to normed standard scores above the maximum provided are assigned standard scores of 160, and raw scores translating to standard scores below the minimum are now assigned standard scores of 20. Prior to 1990, children with these scores were assigned a standard score of zero. CHRR has prepared a file of revised 1986-1988 scores using this updated norming procedure. Users who wish to obtain this file should contact NLS User Services.

Three types of PPVT scores are provided for each child: a non-normed raw score, a standard score, and a percentile score. The reference numbers that identify the PPVT scores in the child documentation can be found in Table 2.9 for years 1996-2002 and in Appendix K for earlier survey years. Instructions in the *PPVT-R Manual* provide information about the linkage between the raw score and the standard score. The percentile score is mechanically determined by the known linkage between the standard and percentile. The NLSY79 Child sample has been normed against a national population with a standard score mean of 100 and a standard deviation of 15.

Users are reminded that the eligibility of children for the PIAT and PPVT-R assessments is based on their “PPVT age,” which can differ from their calendar age (in months). When working with the PPVT-R or PIAT assessments, the “PPVT age” variable should be used.

**Validity and Reliability – the PPVT.** The PPVT-R is among the best-established indicators of verbal intelligence and scholastic aptitude across childhood. It is among the most frequently cited tests in Mitchell’s (1983) “Tests in Print.” Numerous studies have replicated the reliability estimates from the PPVT standardization sample. The *NLSY Child Handbook* synthesizes much of this work. This report also provides cross-year (1986-1990) reliability and validity evaluation using the NLSY79 Child data. *The NLSY Children 1992* contains an evaluation of the quality issues for the 1992 PPVT-R sample, which included the full spectrum of children age three and over. These analyses show strong associations between a full range of social and demographic priors and 1992 PPVT-R scores. The report also documents strong independent linkages between PPVT-R scores in 1986 and PPVT, PIAT Reading and Mathematics, and SPPC scores in 1992. Typically, stronger associations are found for white and Hispanic than for black children. One other finding of importance should be mentioned. More than for any of the other assessments, substantial racial and ethnic variations may be noted for the PPVT. In the current survey round, the average non-Hispanic white child scores at the 56<sup>th</sup> percentile compared to the 32<sup>nd</sup> percentile for his or her Hispanic counterpart and the 27<sup>th</sup> percentile for his or her black counterpart (see Table series 10 *The NLSY79 Child Assessments: Selected Tables*). Substantial ethnic and racial variations remain in multivariate analyses even with demographic and socio-economic controls. The reader is referred to *The NLSY Children 1992* for a more comprehensive evaluation of racial, ethnic, and socio-economic differentials in PPVT-R scores using the 1992 NLSY79 data which included PPVT-R assessment scores for all children 3 and over.

***Repeat Assessments***

The availability of comprehensive child data over time, coupled with longitudinal information on the family background, education, employment histories, and well-being of the NLSY79 mothers, provide researchers with a unique opportunity to examine the linkages between maternal- family behaviors and attitudes and subsequent child development. Certain measures in the NLSY79 Child surveys, such as the HOME, are taken at each survey point. Some assessments, such as the PIAT achievement battery, are administered to a wide range of age-eligible children over a period of time. Still others, such as the PPVT, are administered at the first eligible age, and then usually at the index age of 10 or 11.

Overall patterns of repeat interviews, described in Chapter 1, can be seen for children in Table 1.5 and for young adults in Table 1.6. Table 2.13 offers an example of the extent of repeat assessment for NLSY79 by showing the number of children with only one valid score and the number with multiple scores. The counts in Table 2.13 summarize the number of repeat PIAT and PPVT scores based on sample children with valid scores across assessment points. In this table children are counted if they had any valid PIAT math or reading score in any of the assessment years 1986-2002. Viewed in connection with the longitudinal child assessment information discussed in Chapter 4, these counts of repeat assessment scores offer a preliminary idea of the number of data points on these measures over time. Significant numbers of NLSY79 children have three or more PIAT achievement measures, and more than 5,000 children have multiple PPVT assessment scores.

**Table 2.13. Repeat PIAT and PPVT Scores: Children Assessed in Any Year 1986-2002**

Number of Valid Scores <sup>1</sup>	PIAT Math Score	PIAT Reading Score	PPVT Score
One valid score	1211	1207	2846
Two valid scores	1398	1409	2621
Three valid scores	1392	1373	3177
More than three valid scores	4512	4513	145
<b>Total</b>	<b>8513</b>	<b>8502</b>	<b>8789</b>

<sup>1</sup> The number of PIAT Math scores is based on a count of the survey years in which the child received a valid Math score. The number of PIAT Reading scores is based on a count of either valid Reading Recognition and/or Reading Comprehension scores in any survey year. The number of PPVT scores is based on a count of valid PPVT scores available in any survey year. Counts are based on the number of valid raw scores.

The pattern of repeat PIAT scores by age at the most recent assessment point is displayed in Table 2.14. This table shows the number of children with multiple PIAT scores, based on a count of any valid math or reading score between 1986 and 2002. Children with only one valid PIAT score comprise the smallest subgroup in this table. As one might expect, the majority of 5- and 6-year-olds at the last interview date have only been tested once. Children in the middle age group and those in early adolescence have multiple survey points for measuring change. Clearly the number of children for whom repeat achievement scores are available is significant, particularly when viewing the distribution for children ages 10-14.

**Table 2.14. Number of PIAT Scores by Age of Child at Date of Last Valid Score: Children Assessed in Any Year 1986-2002**

Valid PIAT Scores <sup>1</sup>	Age of Child (Years)											Total
	5	6	7	8	9	10	11	12	13	14	15 +	
One score	389	364	150	91	52	44	31	26	20	11	4	1182
Two scores	0	12	283	365	191	187	110	92	81	49	35	1405
Three scores	0	0	0	9	273	364	189	211	144	80	87	1357
More than three scores	0	0	0	0	0	35	386	988	1845	1063	257	4574
<b>Total</b>	<b>389</b>	<b>376</b>	<b>433</b>	<b>465</b>	<b>516</b>	<b>630</b>	<b>716</b>	<b>1317</b>	<b>2090</b>	<b>1203</b>	<b>383</b>	<b>8518</b>

<sup>1</sup> The number of PIAT scores is based on a count of the number of survey rounds in which a child received a valid PIAT Math and/or Reading Recognition and/or Reading Comprehension score. Counts are based on the number of valid raw scores.

The number of repeat PPVT scores by child age at the date of the last valid score is profiled in Table 2.15. Users interested in multiple PPVT scores are directed to the index group of children who were assessed at preschool or early school levels and then again at the age of 10 or 11. Table 2.15 highlights the power of pooling the sample. This table shows larger numbers of children with multiple scores for assessments that were administered to them when they were age 10 or 11 years old. These children may now be of differing ages since the table displays counts at the *last* time a child was administered the PPVT.

**Table 2.15. Number of PPVT Scores by Age of Child at Date of Last Valid Score**

Valid PPVT Scores <sup>1</sup>	Age of Child (Years)													Total
	< 4	4	5	6	7	8	9	10	11	12	13	14	15 +	
One score	349	1005	813	177	91	47	61	128	80	40	31	12	12	2846
Two scores	0	1	38	63	139	64	49	925	923	60	68	59	232	2621
Three scores	0	0	0	0	0	0	9	954	1240	338	250	298	88	3177
More than three scores	0	0	0	0	0	0	0	0	116	26	3	0	0	145
<b>Total</b>	<b>349</b>	<b>1006</b>	<b>851</b>	<b>240</b>	<b>230</b>	<b>111</b>	<b>119</b>	<b>2007</b>	<b>2359</b>	<b>464</b>	<b>352</b>	<b>369</b>	<b>332</b>	<b>8789</b>

<sup>1</sup> The number of PPVT scores is based on a count of the number of years in which a child received a valid PPVT score. Counts are based on the number of valid raw scores.

These examples illustrate how NLSY79 children experience varying degrees of repeat administration of various assessments. An overall picture of the assessment history of NLSY79 children who have become young adults is available in Table 1.6 in Chapter 1.

### **Interviewer Remarks and Testing Conditions**

At the conclusion of each assessment in the *Child Supplement*, there is a series of interviewer remarks designed to describe the factors that might influence a child's performance. For each assessment the interview records the child's energy level, who else was present during testing, what impact others might have had on a child's performance, and whether an assessment was

prematurely terminated. These remarks are in the CHILD SUPPLEMENT area of interest. The titles for these items are prefixed with the name of each assessment.

Summary evaluations of the overall testing conditions, completed by the interviewer immediately after the entire interview, are found at the end of the *Child Supplement*. These items, prefixed for all years except 1986 with the phrase TESTING CONDITIONS, are assigned to the CHILD SUPPLEMENT area of interest. Users are encouraged to examine both the assessment-specific remarks and these interviewer observations when evaluating quality issues associated with assessment reliability. In the majority of cases, interviewers indicated that they encountered no particular problems or distractions and they viewed the interviewing environment as quite appropriate, indeed positive. Where an assessment was prematurely terminated, the reason for the termination is frequently noted in the interviewer remarks at the end of that particular session. Based on one's research intentions, individual researchers can choose to exclude certain children from their study. For example, children coded with low energy level or who were in testing environments characterized by substantial interference could be excluded from analyses.

In some instances interviewers neglected to complete the remarks items. Thus, an individual user should proceed with caution when using an interviewer remark that suggests that no one other than the target child was present during testing. This is an unlikely scenario in situations where younger children are being assessed. With respect to the interviewer remark items that indicate the presence or absence of parents or siblings, a positive response (i.e., one or greater) indicates that this particular relation was present. However, the absence of that relation was often left blank or not coded zero, particularly in survey years prior to CAPI.

To date little in-depth analysis has been completed that uses the interviewer reports of testing conditions. One study based on the 1992 NLSY79 child data found that differences in achievement test scores by race/ethnicity could be partly explained by testing conditions, including interviewer characteristics, interviewer-child interactions, and the testing environment (Kim et al., 2001). *The NLSY Children 1992* contains a discussion of the impact of testing conditions on selected outcomes. Analyses of the information about the presence of others during the testing indicates that younger children may experience some difficulty in certain cognitive tasks when there is interference in the testing environment and when other adults are present. Younger children who take the SPPC assessment tend to report more positive self-evaluation in the presence of other adults while the presence of other children tends to boost the reports of older children on this assessment. These early results helped inform the field-testing protocol so that interviewer procedures could be refined to minimize any external effects on child performance.

### **Child Completion Rates**

There are several ways that interview completion rates can be defined, depending on one's objective and the potential bias one might be attempting to clarify. The primary reason a child cannot be assessed in any given year is that an eligible mother (main Youth respondent) is not interviewed in that year. The magnitude of this level of nonresponse, as well as potential biases, can be measured by examining the main NLSY79 completion rates. These main Youth patterns, documented in the most recent NLSY79 Handbook, can be explored in greater depth by examining the NLSY79 data file.

The complexity of the NLSY79 Child interview suggests that completion rates for the NLSY79 children can be defined and measured in a number of ways. A “child” interview is comprised of information obtained directly from the child as well as data about the child as reported by the mother. The Mother Supplement contains not only questions about the child’s health status, educational progression, and related topics, but also a significant amount of assessment information, including: Motor and Social Development Scale, the Temperament scales, the HOME scale, and perhaps most importantly, the Behavior Problems Index. Of course, a child interview also includes the assessments that are directly administered to the child, and are contingent on the age of the child. This series, administered in the Child Supplement, includes the PIAT assessments, the PPVT, Digit Span and SPPC. Finally, since children between the ages of ten and 14 are asked a ranged of behavioral and attitudinal questions in a separate Child Self-Administered Supplement (CSAS), response rates for these questions are dependent on the child’s willingness or ability to complete the CSAS instrument. From an overall perspective, it is worthwhile noting that all children who completed a CSAS in 2002 also have at least partial completion on one of the other two instruments noted above (Child Supplement or Mother Supplement).

*Since the primary focus at the outset of the NLSY79 Child was on assessment completion, it was decided at the time of the first child interview round in 1986 to define as eligible for inclusion all children who either completed (or had completed for them) any of the child assessments. This count then forms the denominator utilized for defining assessment completion. Importantly, these are the only children who are assigned a child sampling weight. This weight is essential for estimating potential population bias due to selective non-completion, given the fact that all children do not have the same weights (see discussion of weights in this document). Any of the following sources may cause an incomplete assessment: the child interview may have been broken off before entering a specific assessment; an assessment for which the child was eligible was started but not completed; or an assessment may have been improperly administered and thus could not be scored.*

The following tables help clarify the implications of these different ways of estimating completion success. We focus first on completion rates where the denominator is limited to children who have any assessment data (note the italicized section of the above paragraph). This is the definition currently utilized in measuring assessment completion for NLSY79 children. Using this definition, Table 2.16 shows that in 2002, the completion for those assessments that are completed by the mother range from a high of about 99 percent for Behavior Problems, to a low of about 95 percent for most of the others. These completion rates are systematically higher than those for the last comparable wave of child data collection. (We compare with 1998 rather than 2000 because in 2000, reflecting budget constraints, about 38 percent of child minority oversample cases were not interviewed.) This systematic improvement in the percent of children receiving valid scores on the mother-completed assessments reflects the introduction of an improved interviewing technology in 2002. Prior to 2002, most of the mother-report child assessments were completed in a paper booklet that allowed for more opportunities for mothers to fill out inappropriate or partial assessments.

**Table 2.16. Percentage of Valid Assessments for Interviewed Children**

Child Assessments Completed by Children					
	1986	1990	1994	1998	2002
PIAT Math	92.4	92.2	91.6	88.5	91.9
PIAT Reading Recognition	92.0	90.6	91.3	88.5	92.1
PIAT Reading Comprehension	84.9	89.1	89.7	87.7	91.3
PPVT	86.9	88.0	85.2	85.8	88.8/93.3*
Digit Span	90.4	89.2	94.8	89.8	93.6
SPPC	95.9	93.2	91.7	87.5	91.0
Child Assessments Completed by the Mother					
Motor And Social	93.9	90.8	89.3	86.9	95.9
Temperament (Compliance)	95.8	96.2	94.7	92.5	97.7
The HOME	96.3	92.3	93.6	92.4	95.3
Behavior Problems Index	95.3	94.9	94.5	92.6	99.1

NOTE: The denominator in this table is all children reported by interviewed mothers and living at least part-time in their mother's household at the time of the mother's interview and with some case data from the child interview (any instrument). The year 2000 is omitted from the table since, in that round, 38% of the minority oversamples were excluded.

\* The first PPVT percentage refers to children ages 4-5 and the second to children ages 10-11. Only these age groups took this test in 2002.

In 2002, the component of the child survey completed by the mother was more directly integrated into the mother interview and the data were entered electronically in the field thus making the transition from the main mother interview to the assessments much more seamless, especially for phone interviews. When this interview was used, mothers had more opportunities to complete the mother-report child assessments by phone, reducing the likelihood that one of these assessments would be left incomplete.

Table 2.16 also indicates that there has been an increase over prior rounds in the proportion of valid scores for the assessments directly administered to the children by the interviewer. It is likely that this improvement in assessment completion rates also reflects the change in data capture technology. That is, a greater continuity in the mother-child interviewing process may have reduced the likelihood of interview discontinuity and break-offs than had been true in earlier survey rounds. There is systematic evidence of improvement in specific assessment completion for all of the child-completed assessments. Indeed, just the assurance of completion of the interview through all of the maternal components increases the likelihood of entry into the child-completed component.

A broader definition of eligibility would include *all age-eligible children in the household of the interviewed mother in 2002*. The completion rates for this population are unweighted as children in their mother's household who were not interviewed did not receive a sampling weight. The ages for those children in an interviewed mothers household who were not themselves interviewed were estimated as of the mother's date of interview. These estimates are more appropriate for measuring the proportion of children who were interviewed of those available for possible interview. As seen in Table 2.17, the estimated completion rate for those who were age-eligible and living in their mother's home in 2002 is considerably lower

than the rate based on the first definition. For the mother-report assessments, completion rates range from about 90 percent for the HOME to 95 percent for Temperament. For the child-completed assessments, completion rates range from about 81 percent for the PIAT assessments to almost 88 percent for Digit Span.

**Table 2.17. Percentage of Valid Assessments for All Children of Interviewed Mothers 1998 and 2002**

Child Assessments Completed by Children		
	1998	2002
PIAT Math	83.4	81.4
PIAT Reading Recognition	83.3	81.5
PIAT Reading Comprehension	82.5	80.8
PPVT	79.5	83.9
Digit Span	84.0	87.6
SPPC	81.6	84.5
Child Assessments Completed by the Mother		
Motor and Social Development	83.8	92.0
Temperament (Compliance)	89.1	95.1
The HOME	87.6	90.5
Behavior Problems Index	87.3	94.0

NOTE: The denominator in this table is all children reported by interviewed mothers and living at least part-time in their mother's household at the time of the mother's interview.

Table 2.18 highlights the fact that while completion rates according to this broader definition vary little by race/ethnicity for the mother-report assessments, there is some variation for those assessments given directly to the children by the interviewer. Completions levels for interviewer-administered assessments are typically highest for Black children and lowest for Hispanic children. Completion based on this definition also has risen considerably in recent years for all of the mother-completed assessments, and for all the interviewer-administered child assessments except the PIAT reading and Mathematics assessments. Thus, it is fair to generalize that recent changes in administration procedures have substantially augmented this important quality dimension of the child data collection.

**Table 2.18. Percentage of Valid Assessments for All Children of Interviewed Mothers By Race/Ethnicity 2002**

Child Assessments Completed by Children			
	Hispanic	Black	Non-Black Non-Hispanic
PIAT Math	79.6	84.7	80.5
PIAT Reading Recognition	79.7	85.1	80.5
PIAT Reading Comprehension	78.6	84.8	79.7
PPVT	78.9	85.7	84.9
Digit Span	84.5	91.0	87.2
SPPC	84.8	88.0	82.3
Child Assessments Completed by Mothers			
Motor and Social Development	93.1	92.5	91.3
Temperament (Compliance)	94.8	93.3	95.8
The Home	89.3	90.3	91.1
Behavior Problems Index	92.5	93.4	94.8

NOTE: The denominator in this table is all children reported by interviewed mothers and living at least part-time in their mother's household at the time of the mother's interview.



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## **CHAPTER 3: THE NLSY79 YOUNG ADULTS**

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By the 1994 round of the NLSY79 survey, substantial numbers of the children of NLSY79 mothers had reached at least mid-adolescence. Because of the enormous potential for furthering research possibilities with the NLSY79 cohort and their offspring, the decision was made to separate these older children into a third NLSY79 component, called the Young Adult. This chapter will discuss sample issues that affect the Young Adult survey, the content and structure of the survey instrument and its historical evolution, data quality issues, and constructed variables.

Beginning in 1994, the NLSY79 children who were 15 and older by the end of a survey year were no longer given cognitive and other assessments, but instead received a more standard Computer Assisted Personal Interview (CAPI) survey. This Young Adult CAPI questionnaire focuses on the transition to adulthood, with detailed questions on education, employment, training, health, family experiences, attitudes, interactions with other family members, substance use, sexual activity, non-normative activities, computer use, health problems, and prosocial behavior. Many of the questions in the Young Adult survey parallel those that have been asked of their mothers over the years, particularly when their mothers' had been at comparable life cycle points. The Young Adult survey, however, contains more in depth data for areas such as sexual activity, drug use, schooling activities, attitudes, and marriage and cohabitation history. The primary interview mode for the 1994 through 1998 survey rounds was in-person interviewing; however, beginning with the 2000 survey round the primary mode has shifted to telephone interviewing.

Not all older children represented in the child file are eligible to be fielded as Young Adults, because the child file includes all children known to have been born to NLSY79 mothers. The older children of mothers in the no longer interviewed military and poor white oversamples are in the child file but are ineligible to be interviewed as Young Adults. Additionally, children who have either no or only one or two assessment points from very early in the child study, such as 1986 or 1988, and/or who have not been co-resident with their mothers at least part time are usually not fielded in the Young Adult sample even if they are age-eligible. Older children who are determined to be eligible for the Young Adult survey for a given round are said to be "fielded" in that survey year. Generally speaking, we have fielded older children who have either been assessed or interviewed in recent rounds or who are currently or were typically living with their mother either full or part time. Of course, not all of the children we field as Young Adults get interviewed. Mothers may refuse to allow younger Young Adults (under age 18) to be interviewed, the Young Adults themselves may refuse, or they may be unlocatable.

In 1994 and 1996, the Young Adult sample included all children who were age 15 and over by December 31 of that year and who met the other selection criteria. Due to budgetary constraints, the Young Adult sample in 1998 was limited to those through age 20 as of the interview date. With additional funding through a grant from NICHD, in 2000 and 2002 the sample again included young adults aged 21 and older as well as those aged 15 to 20. In 2000 *only*, around 40% of the black and Hispanic oversample cases between the ages of 15 and 20 were not fielded for budgetary reasons. These young adults were once again eligible to be interviewed in 2002.

Table 3.1 shows the pattern of Young Adult interviews for the 1994 through 2002 survey rounds. When the Young Adult Survey was first fielded in 1994, 1111 older children were identified to be eligible for the Young Adult survey. Of the 1111 fielded in 1994, interviews were conducted with 980 Young Adults. The Young Adults interviewed in the 1994 survey round were disproportionately Black and Hispanic and born to younger mothers. By 2002, we fielded 5095 Young Adults and secured interviews with 4238 Young Adults.

**Table 3.1 NLSY79 Young Adults Interviewed 1994-2002 by Age and Race/Ethnicity**

	Age at Interview											Total
	14	15	16	17	18	19	20	21	22	23-25	26-29	
<b>1994</b>												
Hispanic	23	63	47	28	26	12	6	2				207
Black	57	115	92	74	64	42	16	12	2	1		475
White	40	95	55	44	38	17	5	3		1		298
Total	120	273	194	145	128	71	27	17	2	2		980
<b>1996</b>												
Hispanic	51	81	69	54	41	31	15	12	2	1		357
Black	80	136	142	108	91	60	62	32	15	12		739
White	79	141	129	70	66	41	34	11	6	2		576
Total	210	358	340	232	198	132	108	55	23	15		1672
<b>1998</b>												
Hispanic	58	102	107	81	73	50	37	5				515
Black	80	163	150	134	141	93	87	5				853
White	90	176	148	127	111	64	54	5				775
Total	228	441	405	342	325	207	180	15				2143
<b>2000</b>												
Hispanic	44	64	79	70	68	56	62	63	43	67	8	624
Black	63	102	106	106	112	82	127	103	89	179	31	1100
White	114	212	168	173	139	137	121	76	61	88	12	1301
Total	221	378	353	349	319	275	310	242	193	334	51	3025
<b>2002</b>												
Hispanic	64	94	106	91	93	91	106	82	74	123	39	963
Black	76	124	137	123	157	151	146	142	150	254	130	1590
White	136	181	212	197	165	164	158	128	123	169	52	1685
Total	276	399	455	411	415	406	410	352	347	546	221	4238

Note: In 1994, 1996, 1998, 2000, and 2002, a respondent must have attained the age of 15 by the end of the survey year to be included in the Young Adult survey. In 1998 only, an additional age restriction was imposed: respondents had to be under 21 by the date of interview. A decision was made to retain data from the 15 Young Adults who were inadvertently interviewed even though they had already turned 21. In 2000, approximately 40 percent of black and Hispanic oversample cases between age 15 and 20 were not fielded.

By 2002, the racial mixture of Young Adults is more closely approximating the overall mixture in the child file. Table 3.2 illustrates the distribution of young adults at various ages by the age of the mother at the young adult's birth, also broken out by the mother's race. As can be seen, as children continue to age up into the Young Adult sample, the Young Adult

sample becomes increasingly heterogeneous. The younger young adults are more likely to have been born to older women and are less likely to be minority births (see Chapter 1 for a fuller discussion of the NLSY79 Child and Young Adult samples).

**Table 3.2. Young Adult Age at 2002 Interview by Age of Mother at Birth of Young Adult and by Race/Ethnicity**

Age of YA	Age of Mother at Child's Birth							Total	Mean
	11-13	14-16	17-19	20-22	23-25	26-29	30+		
<b>All Young Adults</b>									
14-17	0	0	6	344	595	580	16	1541	24.6
18-20	0	1	275	506	406	46	0	1231	21.5
21-24	0	126	517	426	47	0	0	1116	19.0
25+	5	147	195	3	0	0	0	350	16.7
Total	5	274	993	1279	1048	623	16	4238	21.6
<b>Hispanic Mother</b>									
14-17	0	0	2	81	141	127	4	539	24.6
18-20	0	1	72	114	92	11	0	290	21.4
21-24	0	25	120	93	12	0	0	250	19.1
25+	0	29	39	0	0	0	0	68	16.8
Total	0	55	233	288	245	138	4	963	21.7
<b>Black Mother</b>									
14-17	0	0	3	129	186	139	3	460	24.2
18-20	0	0	110	200	132	12	0	454	21.3
21-24	0	70	235	161	15	0	0	481	18.7
25+	5	90	99	1	0	0	0	195	16.5
Total	5	160	447	491	333	151	3	1590	20.8
<b>Non-Black, Non-Hispanic Mother</b>									
14-17	0	0	1	134	268	314	9	726	24.8
18-20	0	0	93	192	182	20	0	487	21.8
21-24	0	31	162	172	20	0	0	385	19.4
25+	0	28	57	2	0	0	0	87	17.1
Total	0	59	313	500	470	334	9	1685	22.4

Although the child interview years have focused on children who were co-resident with their mothers, as children age up into the Young Adult sample and enter into various stages of their transition to adulthood, they are eligible to be interviewed even if they are not living with their mothers. Thus, their types of residence, not surprisingly, become increasingly diverse. Table 3.3 shows the type of dwelling for Young Adults interviewed in 2002 by their age at interview. As they age, they are more likely to live in their own residence and less likely to live with parents or other relatives.

**Table 3.3. Young Adult Age at 2002 Interview by Type of Dwelling Unit**

Type of Dwelling	Young Adult Age in Years											Total
	14-16	17	18	19	20	21	22	23	24	25	26+	
Own Household	1	10	38	109	110	159	178	128	132	90	155	1110
Parents' Household	551	156	127	102	98	52	47	23	8	4	8	1176
Mother's Household	484	185	183	132	129	89	66	38	25	18	28	1377
Father's Household	50	29	16	15	23	8	12	3	3	2	1	162
Joint Custody	8	3	4	1	0	0	0	0	0	0	0	16
Relative's Household	30	21	25	25	21	32	27	22	15	9	16	243
Temporary Housing	3	3	15	10	10	4	7	5	2	0	1	60
Military Housing	0	0	1	9	12	3	5	0	0	3	1	34
Jail	3	4	6	3	7	5	5	4	9	3	11	60
<b>Total</b>	<b>1130</b>	<b>411</b>	<b>415</b>	<b>406</b>	<b>410</b>	<b>352</b>	<b>347</b>	<b>223</b>	<b>194</b>	<b>129</b>	<b>221</b>	<b>4238</b>

As has been highlighted in Chapter 1 and will be discussed in greater detail in Chapter 4, one of the strengths of this data set is the presence of sibling pairs within the data. Table 3.4 highlights this strength by showing for Young Adults interviewed in 2002 the number of siblings they have who were also interviewed in 2002. Most of these siblings will also have been interviewed in past rounds, giving researchers ample data to carry out rich within-family analyses.

**Table 3.4. Siblings of Young Adults Interviewed in 2002**

Type of Sibling	Total Interviewed in 2002				
	None	Any Sibs?	One Sib	Two Sibs	Three+ Sibs
All Siblings	474	3,764	1,489	1,251	1,024
YA Siblings	1,054	3,184	1,762	921	501
Child Siblings	2,636	1,602	1,047	412	143

### **The Young Adult Survey Instrument Structure and Contents**

When the Young Adult survey was first designed for the 1994 survey round, many of the CAPI sections were made exactly parallel to those administered to the main NLSY79 respondents. However, other sections of the questionnaire were tailored for this age group. One important part of the design process was to review the NLSY79 1979 questionnaire, to consider where Young Adults could be asked questions that were essentially the same as those asked of their mothers in their first survey round. Additionally, other years of the NLSY79 were reviewed for questions to include. The Young Adult questionnaire remained fairly stable as an instrument through the 1998 fielding, with changes in parallel sections mirroring those in the NLSY79 Youth.

The 2000 Young Adult survey instrument underwent a major redesign and differs in a variety of important ways not only from the main Youth questionnaire, but also from the previous Young Adult instruments. The questionnaire was streamlined and adjusted for telephone

administration, so that most interviews were, on average, less than one hour. Additionally, more pre-existing information was incorporated into the information sheets to determine branching for each respondent's path through the questionnaire. Branching also occurred throughout the questionnaire based on the answers provided by the respondent. However, many of the items that are comparable across the main Youth and the Young Adult were retained. Although not an exclusive listing of these items, Table 3.5 provides users with a listing of attitudinal and behavioral sequences where comparable data can be found for mothers and young adults. The 2002 survey instrument was very similar to the 2000 questionnaire.

**Table 3.5. Selected Attitudinal/Behavioral Sequences Available for Mothers and Young Adults**

Question Sequence	Mothers	YA 1994	YA 1996	YA 1998	YA 2000	YA 2002
<b>Attitudinal</b>						
Job Satisfaction	X	X	X	X	X	X
Fertility Desires/Expectations	X	X	X	X	X	X
Educational Desires/Expectations	X	X	X	X	X	X
Career Expectations	X (Women)	X	X	X	X	X
Marriage Expectations	X	X	X	X	X	X
Pregnancy "Wantedness"	x	X	X	X	X	X
Women's' Roles Scores	X	X	X	X		
Relationship "Quality"	X	X	X	X	X	X
Locus of Control	Rotter, Pearlin	Pearlin	Pearlin	Pearlin	Pearlin	Pearlin
Rosenberg Self-Esteem	X	X	X	X	X	X
Depression Scale (CES-D)	X	X	X	X	X	X
<b>Behavioral</b>						
Religion	X	X	X	X	X	X
Police Contact	X	X	X	X	X	X
Delinquency	X	X	X	X	X	X
School Discipline	X	X	X	X	X	X
<i>Alcohol</i>						
Ever?	X	X	X	X	X	X
Age First?	X	X	X	X	X	X
Frequency	X	X	X	X	X	X
Intensity	X	X	X	X	X	X
Location	X	X	x	x		
<i>Marijuana</i>						
Age first	X	X	X	X	X	X
Age last	X	Recency	Recency	Recency	Recency	Recency
Lifetime frequency	X	X	X	X		
30 day frequency	X	X	X	X	X	X
<i>Cocaine ("Crack" separate in 92, 94)</i>						
Age first	X	X	X	X	X	X
Age last	X	Recency	Recency	Recency	Recency	Recency
30 day frequency	X	X	X	X	X	X
Lifetime frequency	X	X	X	X		
<i>"Other" Drugs</i>						
Lifetime frequency	(laundry list)	(more detail)				
Age first/last	x	x	x	x		
30 day frequency	X	X/Recency	X/Recency	X/Recency	X/Recency	X/Recency
Ever?	X	X	X	X	X	X
<i>Cigarettes</i>						
Ever?	X	X	X	X	X	X
Age first?	X	X	X	X	X	X
Frequency	X	X	X	X	X	X
Intensity	X	X	X	X	X	X
Age Last	X	Recency	Recency	Recency	Recency	Recency

Note: Pearlin = Pearlin Mastery Scale and CES-D = Center for Epidemiologic Studies of Depression Scale

The following outline briefly describes the contents of each section of the 2002 Young Adult survey instrument and highlights changes in that section over time. Users who want a visual representation of the flow of respondents through the questionnaire can review Appendix I. The flow chart in this appendix provides a very general overview of the content of each section as well as the general path of respondents through each section. To fully understand the survey flow, however, users are encouraged to read the description of each section below, as well as consulting either the printed or the HTML version of the CAPI questionnaire. Please note that the HTML version is hyperlinked, allowing users to easily follow survey paths that various respondents might take. Additionally, Appendix J provides a topical listing of the kinds of variables available in the Young Adult data. Again, users should consult the questionnaire from each year to find out exact question wording as well as respondent universes. Questionnaires can be downloaded from the NLS web site (see discussion in Chapter 5) in either a PDF format (for 1994-1994) or an HTML format (2000-2002).

Generally speaking, the CAPI data that is released is largely unedited. Exceptions to this pattern are discussed in the relevant sections. Users should note that all the names of the areas of interest for Young Adult data are preceded by “YA.” Although many of the areas of interest are almost identical to the section names, there are exceptions to this pattern. Table 3.6 provides a summary of the areas of interest in the order in which they appear in the extraction software and a description of their contents.

**Table 3.6. Young Adult Areas of Interest**

Area of Interest	Description
YA ATTITUDES	Contains data from Section 16 for 1994-2002
YA BETWEEN JOBS	Contains data from Section 8 (Gaps) for 1994-1998
YA BIRTH RECORD 1994	Contains data from the 1994 fertility section (Section 12)
YA BIRTH RECORD 1996	Contains data from the 1996 fertility section (Section 12)
YA BIRTH RECORD 1998	Contains data from the 1998 fertility section (Section 12)
YA BIRTH RECORD 2000	Contains data from the 2000 fertility section (Section 12)
YA CHILD CARE	Contains data from Section 13 for 1994-2002
YA CHILDRENS RECORD FORM BIOLOGICAL	Contains raw biological child roster data for 1994-2002
YA COMMON KEY VARIABLES	Contains commonly used variables from all YA years as well as constructed summary variables and cleaned biological child variables
YA CPS	Contains data from Section 6 (CPS) for 1994-98
YA DATING AND MARRIAGE	Contains data from Section 3 for 1994-2002
YA FAMILY BACKGROUND	Contains data from Section 2 for 1994-2002
YA FIRST JOB AFTER HIGH SCHOOL	Contains data from Section 10 for 1994-2002
YA GEOCODE 1994	Contains constructed geocode variables for 1994 (Available only on Geocode release)
YA GEOCODE 1996	Contains constructed geocode variables for 1996 (Available only on Geocode release)
YA GEOCODE 1998	Contains constructed geocode variables for 1998 (Available only on Geocode release)
YA GEOCODE 2000	Contains constructed geocode variables for 2000 (Available only on Geocode release)
YA GEOCODE 2002	Contains constructed geocode variables for 2002 (Available only on Geocode release)
YA HEALTH	Contains data from Section 14 for 1994-2002
YA HOUSEHOLD RECORD	Contains final (cleaned) household rosters and selected items from Section 1 for 1994-2002
YA INCOME	Contains data from Section 15 for 1994-2002
YA INTERVIEWER REMARKS	Contains selected data from the Interviewer Remarks Section for 1994-2002
YA JOB INFORMATION	Contains data on job characteristics collected in the Employer Supplements for 1994-2002 and Section 7 for 2000-2002
YA JOBS	Contains basic job data collected in Section 7 for 1994-1998
YA LAST JOB	Contains data from Section 9 for 1994-2002
YA MILITARY	Contains data from Section 5 for 1994-2002
YA SCHOOL	Contains data from Section 4 for 1994-2002
YA SELF REPORT	Contains data from the YASRB for 1994-1998 and the YASR section for 2000-2002
YA TRAINING	Contains data from Section 11 for 1994-2002

**Section 1: Household Interview**

The household interview for the Young Adult questionnaire closely parallels that of the NLS main Youth; however, no pre-existing information is incorporated into this section. Each

young adult goes through this section as though this were a new household, even if the young adult is living in the NLSY79 mother's household. The questionnaire first establishes the type of dwelling that best describes the young adult's current usual living arrangement. Because type of residence is critical to maintain appropriate branching throughout the survey, the redesign for 2000, maintained in 2002, streamlined this process. The survey asks about biological parental presence; if the young adult resides with neither biological parent, the survey then asks for usual living arrangements. Questions are then asked about the identification, gender (if necessary), age, and relationship to the young adult of each person usually living in the household. Prior to 2000, questions concerning the highest grade completed and work of household members were also asked; these were eliminated in the process of streamlining the questionnaire. A limited amount of information is collected on the type and location of the residence.

The public release version of the questionnaire allows users to see the way in which these data were collected from the respondent. However, the data that are made available to the user come from the final household roster. The final roster is thoroughly cleaned prior to release to ensure that users have access to the most accurate household data we can provide on the young adults. A few data elements from this section, along with the final household roster, are available in the YA HOUSEHOLD RECORD area of interest. It is important for users to note that even when the young adult is living with their mother, the mother's version of household composition and the young adult's version may not correspond. This can occur because one or the other omitted members or because interview dates were different. No attempt is made to reconcile across mother's and young adult's household records.

### ***Section 2: Family Background***

The family background section is designed to gather information about family characteristics and transitions and includes a variety of types of questions depending on each respondent's situation. Respondents are branched in this section based on whether they are living with their mother, with both parents, on their own, or in some other living arrangement as well as on their age and their interview status in past Young Adult rounds.

The family background section begins with a migration sequence, which was expanded in 2000 to include up to two moves since the date of last interview as well as a summary measure of number of moves for people indicating more than two moves. Also added in 2000 were questions aimed at older young adults to identify whether or not there was movement into or out of the mother's household, as well as a question concerning homelessness. Beginning in 2002, these questions were asked of all YA respondents regardless of age.

First-time Young Adults are asked to verify their date of birth and self-identify their race and ethnic background as well as their father's race. The pattern of which young adults were asked race and ethnicity has differed across survey rounds as has the structure of the questions asked. In 1994, all YA respondents were asked both a six-category race question [Black, White (non-Hispanic), Hispanic, American Indian, Asian or Pacific Islander, or Other (SPECIFY)] as well as a detailed ethnic identification question parallel to that asked of their mothers in 1979. In 1996, young adults not interviewed in 1994 were asked the same two questions. In 1998, all young adults were branched into the race questions because the structure of the race questions was changed significantly. Respondents were initially asked a

yes/no question about whether they were of Hispanic origin, followed by a six-category question asking whether they considered themselves White, Black or African American, American Indian or Alaska Native, Asian, or Native Hawaiian, Other Pacific Islander or Other (SPECIFY). Additionally, the category of “American Indian or Native American” in the detailed ethnicity question was changed to “American Indian” beginning in 1998 in order to reduce confusion on the part of respondents. In both 2000 and 2002, only new young adults were asked the race and ethnicity questions; however, beginning in 2000, the six-category race question was asked as a code all that apply.

Younger young adults not living with their mother are asked when and why they left home for both the most recent and, if applicable, the first time. These younger young adults are also asked about their father’s work and education, and all young adults not living with parents are asked the amount and type of contact they have with their parent(s).

All young adults are asked about religious affiliation and attendance, as well as the importance of religion to them. Data from this section are contained in the YA FAMILY BACKGROUND area of interest.

### ***Section 3: Dating and Relationship History***

This section of the questionnaire collects detailed marriage and cohabitation histories, with comparable series for spouses and partners, as well as information about dating behavior. A young adult’s path through this section is determined initially by whether the particular respondent has ever been interviewed as a young adult and, if so, whether the respondent was married or cohabiting at the last survey point.

For Young Adults who were married or cohabiting at their last interview point, information on that relationship is updated. If the relationship is still on-going, spouse/partner characteristics and employment are updated and relationship quality is assessed. If the relationship has ended, information about the termination is collected, and the respondent then enters the sequence to determine current marital status and any additional marriages or cohabitations since the date of last interview.

In most survey years, new young adults and young adults who have not previously reported dating activity are asked about whether and when they began dating. For 2000 *only*, we re-asked all young adults these dating questions, in order to have a point of comparison between in-person and telephone administration. Younger young adults also answer two questions about the number of close friends who are girls and who are boys. These questions had also been asked of these young adults prior to age 15.

After the dating questions, respondents then enter a sequence to determine current marital status and marriage/cohabitation histories. All young adults, except those whose relationships from their past interview point are still current, have their current marital status established and are asked about marriages/cohabitations since the date of last interview.

Any young adult who reports a current or past marriage or cohabitation answers a series of questions about the timing of each relationship and certain characteristics of the spouse/partner, including race, religion, age and highest grade completed. Young Adults who

report a current spouse or partner are also asked questions about that person's employment and about the quality of the relationship.

Young Adults who are not in a current marriage or cohabitation are asked detailed questions about current dating behavior and, if they date only one person, about relationship quality. These young adults, as well as those reporting that they have never been married and no dating behavior, are asked two questions about ideal romantic relationships.

Data from this section are available in the YA DATING AND MARRIAGE area of interest.

#### ***Section 4: Regular Schooling***

This section asks about enrollment status, school experiences, and educational aspirations. All respondents are asked if they are currently enrolled. Older young adults who are not currently enrolled are asked if they have been enrolled at all since the date of last interview. For most older Young Adults who say no, this is the exit point from Section 4. However, if no high school diploma or GED has previously been reported, we ask whether one has been obtained. Also, older respondents who were attending college at their last interview point are asked about degree completion even if they report no enrollment since the date of last interview.

Those who are currently enrolled or who have reported school attendance since the date of last interview, as well as younger Young Adults who are not currently enrolled, are asked a wide range of questions concerning their education. First time respondents answer core questions about repeating or skipping grades and dropping out. Additionally, there are special questions on (1) school quality and time spent on homework, as well as practices used by teachers and parental involvement in homework and the school community, for respondents currently in grades 1-12, (2) the use of career planning or college preparation services by respondents who are high school juniors or seniors, (3) the names of colleges and/or universities applied to and whether or not the respondent was accepted to them for respondents in twelfth grade or first year in college, and (4) the name, type of school, major, degree receipt and financial assistance for college students. Respondents are branched throughout this section according to both enrollment status and highest grade completed. Not all questions in the 2002 schooling section are available for all years. The questions concerning time spent on homework, practices used by teachers, and parental involvement in homework and the school community were added to this section in 1996 and continue to be asked. The sequence concerning colleges applied to and accepted at was added for the first time in 2000.

The data released to the public from this section are available in the YA SCHOOL area of interest. FICE codes for colleges/universities attended or applied to are available only on the Geocode release, in the YA GEOCODE area of interest for each year (see discussion of Geocode variables below).

#### ***Section 5: Military***

This section establishes a history of military service, with detailed questions asked about up to two periods of service. Young adults who are over the age of 16 enter this section and are

asked, depending on their previous YA interview status, either whether they have ever (for first time Young Adults) or since date of last interview (for previously interviewed Young Adults) been enlisted or sworn into any military branch. This section is similar to the military section in the NLS main Youth; however, the questions in the Young Adult ask greater detail about military jobs and training. This section determines which branches the Young Adult has been sworn into and the time period of service. These questions accommodate delayed entry programs and have questions tailored to respondents in the reserves or on active duty. There are also questions that ask about the most recent military job and training. The Young Adult is asked about schooling prior to and during their service. These data can be found in the YA MILITARY area of interest.

### ***Section 7: Jobs and Employer Supplements***

The employment sections of the Young Adult underwent a major redesign for the 2000 survey round. Prior to 2000, there were two distinct sections: the On Jobs section (Section 7) and the Employer Supplements. These two sections were virtually identical to the main Youth sections in each survey round, except for minor differences. For example, the Young Adult On Jobs section did not bring forward employers from past rounds, and the reference date for each survey round was set at January 1 of the year prior to the year of fielding. For example, the reference date for the 1994 fielding was set to January 1, 1993. Young Adults were skipped around certain sequences in the Employer Supplements, specifically those concerning severance pay, pensions, and job search methods. Additionally, the first employer supplement (which asked about current or most recent job) in the Young Adult had a short series of additional questions that asked the respondents to assess certain aspects of that job, which was developed from similar questions asked to the mothers in the original 1979 survey.

For the 2000 survey, the jobs and employer supplements sections of the Young Adult were extensively redesigned and integrated into one looped section, so that all questions concerning a particular employer would be asked before any information about a subsequent employer would be asked. Interviews were instructed to begin with the current or most recent job or the respondent and to proceed backwards in time. If multiple jobs were currently or most recently held, the interviewer was instructed to probe for the job with the greatest number of hours worked per week to determine the first job entered. This looped structure has been maintained in the 2002 survey

Information is collected on all jobs held either since the date of the last interview, if it is after January 1, 1994, or since January 1, 1994, if the date of last interview is earlier than that. The section is designed so that the greatest detail is asked of the current or most recent job. For all subsequent jobs, a smaller set of questions is asked. For jobs of short duration or less than ten hours a week, only employer name, start and stop dates, and hours are asked. Overall, the number of questions asked, even about the first job, was greatly curtailed and streamlined in order to make this section easy to administer over the telephone and to ease respondent burden. However, the streamlined questions allow users to develop a clear employment history with critical job characteristics such as industry, occupation and wages.

For the 1994 through 1998 surveys, data from Section 7 are found in the YA JOBS area of interest, while data from the Employer Supplements are found in the YA JOB INFORMATION area of interest. For the 2000 and 2002 surveys, all data from the integrated

looped section are found in the YA JOB INFORMATION area of interest, allowing users to follow question flow from the CAPI questionnaire.

***Section 9: Last Job Lasting Two Weeks or More***

This short section is designed to collect a small amount of employment information from respondents who were not on active duty in the military and who did not report working at any jobs since their employment reference date (see Section 7, Jobs and Employer Supplements). For respondents who are not initially skipped out of this section, the survey ascertains whether they have ever had a job for pay lasting two or more weeks. If so, basic details about this job such as tenure, industry, occupation and wages are asked. These data can be found in the YA LAST JOB area of interest.

***Section 10: First Significant Job after Leaving School***

This section attempts to identify the first job a respondent had after leaving high school if this job is not identifiable from other sections of the survey. Only first-time young adult respondents who have left school prior to the date of last interview (usually defined as the mother's date of last interview) are branched into this section. A respondent had to have worked at a job for at least 2 months and at least 20 hours a week in order to be eligible for detailed questions in this section. A limited number of job characteristics are asked about, including: start date, stop date, kind of business or industry, kind of work the respondent did, hours per week, and usual earnings. The data from this section is in the YA FIRST JOB AFTER HIGH SCHOOL area of interest.

***Section 11: Other Training***

This section collects information about training received outside of regular schooling or the military. Prior to 2000, this section collected detailed questions on up to six training experiences. As part of the 2000 redesign, the number of training programs asked about was reduced. Detailed questions are asked only about the current or most recent training program, if applicable. Respondents are asked to identify the type of training, the duration of the program, as well as the source of money to pay for the training.

Respondents are then asked for a total number of additional training programs they have attended either ever or since the date of last interview. This pattern of questions was retained for 2002. The Young Adult questionnaire also asks about certificates, licenses and journeyman's cards for practicing professions and what professions these were for. Younger young adults who are still in high school do not enter this section. These data are located in the YA TRAINING area of interest.

***Section 12: Fertility***

The fertility section of the Young Adult closely parallels that in main Youth. However, in the Young Adult, no information is collected about non-biological children or about pregnancies not ending in a live birth, with the exception, beginning in 2000, of first pregnancies. Prior to 2000, the questions relating to first pregnancies were contained in the Young Adult Self-Report booklet (see discussion below). In 1994 through 1998, the main Youth and Young Adult fertility sections were virtually identical except for the pregnancy and non-biological

child sequences. As part of the redesign for 2000 Young Adult survey, however, some of the detailed pre- and postnatal questions were curtailed and parenting attitude questions were added.

Female respondents who have not reported a pregnancy in a past survey round are asked if and when they have ever been pregnant. The fertility section includes two paths for collecting fertility information about live births. Previously interviewed Young Adults are asked to verify and update their fertility information. Respondents who are Young Adults for the first time in a given survey round have their complete fertility record collected. Once a biological child roster for each young adult respondent who has at least one child is completed, the young adults answers questions regarding each child's residence and contact with each parent. Young Adults with at least one child are asked a series of parenting attitude questions. Female respondents are asked a limited number of questions about the pregnancy, including behaviors that could be detrimental to the child's health, as well as the birth weight and length of the child when born, medical visits during the first year due to sickness or injury, well baby care, and breastfeeding for either all pregnancies or pregnancies since the last interview. Both male and female respondents are asked about wantedness and health insurance for their children. All respondents are asked about how many children they expect to have.

The data about pregnancies, births and the first year of life of each child that are collected in this section are available in the YA BIRTH RECORD area of interest for each survey year. However, as with the household record, there is a series of questions relating to verifying previously reported children and recording any new children that results in a roster of biological children. Data from the final roster are available in the YA CHILDRENS RECORD FORM BIOLOGICAL area of interest. Users may wish to note that in 1994 through 1998, some data cleaning was done on the data that are in the public release. Beginning in 2000 and continued for 2002, the data in this area of interest are largely unedited, and a cleaned set of dates of birth has been created for all respondents ever interviewed as Young Adults. These data were updated for 2002, with any discrepancies resolved and newly collected data integrated (see discussion under Key Variables below).

### ***Section 13: Child Care***

The child care section of the Young Adult has traditionally focused on current child care use for all children tied to the Young Adult respondent, including biological, step, adopted and/or partner's children in the household. In 1994 through 1998, questions about usual child care arrangements and hours in child care were asked about all children associated with the respondent. Beginning in 2000, however, the focus of this section shifted dramatically and the kinds of questions asked were expanded.

The questions now focus on the youngest child in the household, regardless of whether that child is step, adopted, or biological. The first series of questions in this section concern parenting behavior and are modeled after questions in the HOME section of the NLSY79 Mother Supplement (see Chapter 2 for a discussion of this instrument). These questions were developed for telephone administration and do not allow for creating an actual HOME score as is done in the NLSY79 Mother Supplement. However, the incorporation of these items provides researchers with a unique opportunity to make intergenerational comparisons of parenting behavior between the young adults and their mothers.

This section also asks detailed questions about current child care for the youngest child. It also includes questions about **total** child care expenses for all of the children associated with the respondent, as well as whether child care difficulties affected employment. Data from this section can be found in the YA CHILD CARE area of interest. Users should note that while specifics on parenting behavior and child care arrangements are only asked about the youngest child in 2000 and 2002, the roster of all children in the household who are tied to the Young Adult is available.

#### ***Section 14: Health***

The health section in the Young Adult differs in several ways from the health section in the main Youth. In main Youth, the health section concentrates on work-related injuries, whereas the Young Adult health section is more general and more closely parallels the health history that has been obtained for all children of NLSY79 mothers. In this way, it can more effectively be linked with the health care information for these children that has been collected over the years.

The Young Adult health section gathers information on types of limitations, number of accidents and injuries in the last 12 months, hospitalizations resulting from these accidents/injuries, height, weight, and insurance coverage. From 1994 through 1998, detailed questions were asked about accidents and injuries in the last 12 months requiring medical attention, whether or not they resulted in hospitalization. Beginning in 2000, young adults have been asked detailed questions only about accidents and injuries resulting in hospitalization in the past 12 months.

Young Adult respondents who are not in their mother's household are asked additional questions about illnesses and routine medical care. For young adult respondents who are living in their mother's household, comparable questions are asked of the mother in the fertility section of the main Youth CAPI questionnaire.

Female young adult respondents who have not yet reported the onset of menses are asked whether menses has started and, if so, when. All the data from this section are in the YA HEALTH area of interest.

#### ***Section 15: Income and Assets***

The income section for the Young Adult questionnaire was also redesigned for the 2000 survey round to streamline the flow of respondents through the section. Prior to the 2000 survey, this section closely paralleled the analogous section in main Youth; however, the main Youth had more extensive questions in areas such as interest income, filing income taxes, and income received by household members other than the respondent or spouse/partner. The Young Adult also had fewer asset questions asked of respondents than did the main Youth.

Beginning in 2000, non-emancipated respondents are asked only about their own income, their family's total income, and their sense of financial strain. All Young Adults are asked about income they have received from the military, from wages, salary, commissions, or tips, from their farm, or from non-farm business, partnership, or professional practice. Respondents who report an employment history since the date of last interview are asked if

they ever received unemployment compensation and, if so, for how many months they received it and how much they received per week for their most recent spell. Respondents who have reported no employment at all since the date of last interview are skipped around this series of questions.

Respondents who are married or who have a partner are asked about income received by their spouse or partner from the military, wages, farm, or business. They are also asked whether their spouse/partner received unemployment compensation.

For several types of reciprocity, respondents are asked if they or their spouse or partner have received it and, if so, for how long and for what amounts. The reciprocity categories are: child support, AFDC, food stamps, and supplemental security income, public assistance, or welfare payments. Finally, respondents are asked a limited number of questions about assets, debts, total family income, and financial strain. These data are contained in the YA INCOME area of interest.

### ***Section 16: Attitudes***

This section contains series of questions that have been used in previous rounds of the main Youth and the Young Adult, with skip patterns based on age and interview status. First time Young Adults as well as Young Adults who were last interviewed prior to 2000 were given the Pearlin Mastery scale, introduced into the main NLSY79 in 1992 (Pearlin et al., 1981). These Young Adults also answered a series of items from the Rosenberg self-esteem scale, also administered to their mothers in 1980 and 1987, and completed a 7-item version of the CES-D depression scale which has been used in the main Youth survey since 1992 (Rosenberg, 1965; Radloff, 1977).

In previous rounds, some young adults answered a number of questions on women's roles and family attitudes, given to the main Youth in 1979, 1982, and 1987. These questions were not administered in 2000; however, they were included in the 2002 questionnaire for young adults who were aged 17 to 18 or 23 and over. Young adults last interviewed in 2000 who did not meet this age criteria were branched directly into the Self-Report section (see next section).

Additionally, in survey years 1994 through 1998, a series of questions about the world of work, based on questions in the 1979 round of the NLSY79, were asked only of new Young Adults. The series about the respondent's knowledge of the world of work was followed by a number of items pertaining to hypothetical job offers, also asked only of new respondents. Each job offer contained a wage offer as well as a brief description of the job duties, and respondents were asked whether or not they would accept the offer. These two series were removed as part of the 2000 redesign in order to streamline the survey and accommodate telephone administration.

Table 3.7 provides a summary of the administration patterns of attitude scales across survey years. All data from this section are in the YA ATTITUDES area of interest.

**Table 3.7. Administration Pattern of Attitude Scales in the Young Adult**

Attitude Scale	Survey Year				
	1994	1996	1998	2000	2002
Knowledge of the World of Work	All YAs	First-time YAs	First-time YAs	Dropped	Dropped
Pearlin Mastery	All YAs	All YAs	All YAs	Those not int. in 1998	Those not int. in 2000
Rosenberg Self-Esteem	All YAs	All YAs	All YAs	Those not int. in 1998	Those not int. in 2000
Risk-Taking	In YASRB	In YASRB	In YASRB	Those not int. in 1998	Those not int. in 2000
CESD 7-item Depression	All YAs	All YAs	All YAs	Those not int. in 1998	Those not int. in 2000
Women's Roles	All YAs	Those not int. in 1994	Those not int. in 1996	Not administered	YAs 17-18, or 23 and older

***Young Adult Self-Report***

From 1994 through 1998, young adult respondents were asked to complete the Young Adult Self-Report Booklet (YASRB), a pencil-and-paper instrument. As part of the 2000 redesign, the questions from the YASRB were streamlined and integrated into the CAPI questionnaire. For telephone administration, the interviewer read these questions over the phone and recorded the answers. For in-person interviews, the interviewers turned the laptop around to the respondents. The respondents went through some example questions, and then responded to their actual questions. This procedure was repeated in 2002.

The length of the YASRB prohibited its wholesale conversion into the CAPI instrument. As part of the redesign process, all of the questions in the YASRB were reviewed to determine, first, whether they should be retained and, second, whether they could be incorporated elsewhere in the existing CAPI instrument or kept in a separate section. For example, the pregnancy history questions fit logically into the fertility section. Most of the questions that were retained were put into the CAPI instrument in a section called the Young Adult Self Report. However, many series were streamlined as much as possible, and many questions were converted to a format that allows telephone administration to maintain confidentiality. Additionally, the conversion to CAPI allowed for skips to be programmed so that respondents could be branched around questions based on their age, past interview status, information gathered earlier in the survey, and information previously provided.

The Young Adult Self-Report section, as well as the YASRB, includes questions about parent and child relationships, risk-taking attitudes, computer use, drug and alcohol use, cigarette use, contact with the criminal justice system, sexual activity, contraception, emotional problems, expectations, and participation in community activities.

First time Young Adults begin this section with questions about interaction patterns between the young adult and his or her parents as well as between the young adult's parents. All Young Adults are asked about closeness to both their mother and their father, unless a parent is deceased. All Young Adults also respond to a series of questions about recent and lifetime

substance use (including cigarettes, alcohol, marijuana, and other substances). These questions, which address actual use as well as behaviors resulting from use, are more detailed than those asked of the children age 10-14. Beginning in 2000, explicit questions about amphetamine usage were included, as was a series of questions designed to assess the impact of marijuana usage in the last 12 months. There is a series of items on computer use, very similar to the questions asked of the younger children age 10-14. The self-report section also contains questions relating to the young adult's sexual experiences including age at first intercourse, sex education, discussions with other people about sex and use of contraception. Questions about the young adult's most recent sexual partner were added beginning in 1998.

The respondents are also asked to rate their neighborhood and to indicate their future expectations about marriage, family and employment at age 35. Questions about anti-social behaviors ask for information about contact with the law, including any arrests and convictions, as well as delinquent behavior not necessarily resulting in contact with the law. Many of these items were also asked of their mothers in 1980. The section also contains a set of questions on pro-social behavior, including participation in volunteer or community organizations, and a short series on emotional problems. All data from this section can be found in the YA SELF REPORT area of interest.

### ***Section 17: Interviewer Remarks***

The interviewer remarks section has remained essentially the same across survey rounds; however, beginning in 2000, branching based on interview type was incorporated into this section. Only interviewer answers about the survey process are released to the public; these data are located in the YA INTERVIEWER REMARKS area of interest.

### ***Deleted Sections***

As part of the 2000 redesign, the decision was made to eliminate two sections that had been included in the 1994 through 1998 surveys. Below is a brief description of those sections.

Section 6, Current Labor Force Status (CPS), in the Young Adult was nearly the same as the CPS section in the NLSY79 main Youth. Young Adults not currently serving in the active military were asked about work activities during the last week. The survey determined if the respondent did any work for pay or profit or unpaid work in a family business or farm. There were questions on whether respondents had a disability that prevented them from doing work, number of jobs or businesses, and hours per week usually worked at job. If on layoff, they were asked about the duration of the layoff and job search activities. Those not working were asked about when they last worked and if they were searching for a job. Respondents were also asked about active and passive job search methods. This section was also eliminated in the main Youth survey for the 2000 fielding. The data from this section can be found in the YA CPS area of interest.

Section 8, Gaps When Not Working or in Military, in the Young Adult was the same as that in main Youth. The number and time periods of gaps when not working were determined internally from dates given by the respondent. Young Adult respondents were asked whether they were looking for work or on layoff during any gaps. If not looking for work, the respondent was asked the main reason why. This section was eliminated to facilitate the

conversion of the instrument to telephone administration and save time given the additions being made such as incorporating the YASRB into the CAPI instrument. The data from this section can be found in the YA BETWEEN JOBS area of interest.

### **Industry and Occupation Coding**

In preparation for the public release of data for each round, all occupation and industry verbatim responses collected in the Young Adult survey are coded using Census coding frames. In 1994, the decision was made to use the 1970 coding frame, which was still in use in the main Youth data, to make the Young Adult data as directly comparable to the mother's data as possible. In addition, the CPS job, defined as the current or most recent primary job of the respondent, was coded using the 1990 coding frame. This pattern of coding was used for the 1996 and 1998 surveys as well.

For the 2000 survey, the decision was made to switch all jobs except father's occupation to the 1990 coding frame. The father's job continued to be coded using the 1970 frame to allow easy comparability with the mother's occupation. The CPS job of the respondent was coded in both the 1970 and the 1990 coding frames. As a result of that decision, the 1994 through 1998 occupation and industry verbatims that had previously been done only in the 1970 coding frame were coded again using the 1990 coding frame. As of the 2000 release, all occupation and industry verbatims, except for father's occupation, have both 1970 and 1990 Census codes available to users.

Beginning in 2002, the decision was made to code all jobs, including the father's occupation, with the 2000 Census occupation and industry coding frame. Switching to the 2000 coding frame allows for greater accuracy in occupation and industry coding given the changes in job structure over time. Although this represents a disconnect from previous years, crosswalks between the 1990 and 2000 coding frames are available.

### **Key Variables**

In addition to the raw data and coded items available in the Young Adult data, there are a number of constructed variables, called key variables, that may be of particular interest to the user. Table 3.8 provides a listing of some of these key variables. These variables can be found in the YA COMMON KEY VARIABLES area of interest.

**Table 3.8. Key Variables on the NLSY79 Young Adult Files (1994-2002): Variable Descriptions and Reference Numbers**

Variable Description	1994	1996	1998	2000	2002
Identification code of Young Adult	*	*	*	*	Y00001.00
Identification code of mother of Young Adult	*	*	*	*	Y06508.00
Date of birth of Young Adult – Day <sup>1</sup>	*	*	*	*	Y06392.00
Date of birth of Young Adult – Month	*	*	*	*	Y06392.01
Date of birth of Young Adult – Year	*	*	*	*	Y06392.02
Sex of Young Adult	*	*	*	*	Y06774.00
Race of Young Adult (mother's racial/ethnic cohort from screener)	*	*	*	*	Y06775.00
Year of most recent Young Adult interview				*	Y12051.00
Number of Young Adult interviews completed				*	Y12052.00
Number of Child survey years w/ data available for R				*	Y12053.00
Young Adult sampling weight <sup>2</sup>	Y03565.00	Y06507.00	Y09469.00	Y11923.00	Y14350.00
Revised Young Adult sampling weight <sup>2</sup>	Y03565.01	Y06507.01	Y09469.01	Y11923.01	
Age of Young Adult (in years) at interview date	Y03424.00	Y06776.00	Y09748.00	Y11924.00	Y14343.00
Age of Young Adult (in years) December 31 of survey year		Y06777.00	Y09749.00	Y11925.00	Y14344.00
Date of CAPI interview – Day	Y00002.00	Y03901.00	Y09337.00	Y11805.00	Y14211.00
Date of CAPI interview – Month	Y00002.01	Y03901.01	Y09337.01	Y11805.01	Y14211.01
Date of CAPI interview – Year	Y00002.02	Y03901.02	Y09337.02	Y11805.02	Y14211.02
Type of Residence R lives in, Constructed	Y03838.00	Y06786.00	Y09754.00	Y11929.00	Y14351.00
Region of Residence		Y06787.00	Y09755.00	Y11930.00	Y14352.00
Is Residence Urban or Rural?	Y03840.12	Y06798.08	Y09757.08	Y12046.00	Y14476.00
Is Residence in SMSA?	Y03840.13	Y06798.09	Y09757.09	Y12047.00	Y14477.00
Number of household members in HH of R		Y06783.00	Y09751.00	Y11926.00	Y14345.00
Official Marital Status		Y06784.00	Y09752.00	Y11927.00	Y14346.00
Cohabitation Status of R		Y06785.00	Y09753.00	Y11928.00	Y14347.00
Has R ever reported cohabitation?				*	Y12054.00
Month began first cohabitation				*	Y12055.00
Year began first cohabitation				*	Y12056.00
Has R ever reported a first marriage?				*	Y12057.00
Month first marriage began				*	Y12058.00
Year first marriage began				*	Y12059.00
Number of children ever born				*	Y12110.00
Age of R at first birth				*	Y12111.00

NOTE: The items in this list focus on the current data round and constitute a small subset of the total number of variables on the NLSY79 Child & YA files.

\* These variables have common reference numbers across survey years.

<sup>1</sup> Available only on the Geocode release.

<sup>2</sup> The 2002 weights were constructed using an updated algorithm. This updated algorithm was also used to create revised weights for earlier survey rounds. Please see the discussion of revised weights in Chapter 1.

Two key identification codes – that of the Young Adult and that of the mother – are provided. Any child who has not yet aged up into the Young Adult sample, or who is ineligible for fielding, or who has been fielded but not interviewed, will have a missing value (-7) on these two ID variables. Only children who have ever been interviewed as Young Adults (N=4698) have valid values. These variables are provided for users who want to quickly restrict their sample to ever-interviewed Young Adults. The ever-interviewed Young Adults also have an updated date of birth (month and year only on the public release; day available only on the Geocode release – see below), gender, and race based on mother’s racial/ethnic cohort from the 1978 screener (for self-identified race and ethnicity, see Section 2 above).

Beginning with the 2000 release, three interview status variables have been provided. The first of these variables is the year of most recent Young Adult survey (Y12051.00). This variable is designed to allow users to quickly identify when data for a non-year-specific variable would have been pulled. For example, if a respondent was last interviewed in 1994, only information from that year would have been available to use in constructing variables such as ever cohabited or ever reported a first marriage.

The second of these variables is the number of Young Adult interviews completed (Y12052.00). This variable will allow users to assess how many respondent they would have multiple time points for given measures. Users are reminded, however, that there are a variety of factors that influence a respondent’s value on this variable, such as when the respondent aged up to the sample, during what years there were age or other restriction applied to the fielded sample, and whether or not the respondent was actually interviewed in a given year. There are two flags per survey year, located in the CHILD BACKGROUND area of interest, allowing the user to identify whether a respondent was eligible to be interviewed as a Young Adult and whether or not a Young Adult interview occurred (see Table 2.5 in Chapter 2).

The last of these interview status variables is the number of Child survey years where the respondent has at least some data available (Y12053.00). Users should be aware that the Child survey consists of two or three instruments, depending on the age of the child, and some respondents may have data for only one of these instruments in a given survey year (See Chapter 2 for greater detail on the Child survey instruments). This variable, as with the number of Young Adult interviews, is provided to help users gain a quick portrait of data availability. (See Chapter 1, Table 1.6, which shows these two variables, combined with age as of December 31, 2000, and race to provide a portrait of the availability of inputs from multiple time points for Young Adults.)

In addition to the variables discussed so far, there are additional key variables that users may find helpful. For each survey year, there are sampling weights for interviewed Young Adults. Beginning in 2002, the algorithm for computing sampling weight for children and young adults was updated. Therefore, for the 1994-2000 survey years, two sampling weight variables are available for each year, the originally released sampling weight and a revised weight using the new algorithm. For 2002, only weights constructed with the new algorithm are available (see discussion of sampling weights in Chapter 1). Please note that in 2000, four respondents who were part of the pool of oversample cases that were not fielded were

inadvertently interviewed. For these four respondents, their interview data are included in the public release, but their sampling weights are set to zero.

Also listed on Table 3.8 is the CAPI interview date for each survey round, as well as a small number of constructed variables available for 1996 through 2000. These variables include age in years at interview date (also available for 1994), age at December 31 of the survey year, type of residence R lives in (also available for 1994), region of residence, number of household members, official marital status and cohabitation status.

Beginning in 2000, a series of constructed variables concerning relationships and fertility is being made available for users. Most of these variables are “yearless” in that they are constructed for all young adults regardless of when they were last interviewed as Young Adults. Y12051.00, discussed above, quickly allows users to identify for each respondent when these variables were last updated. This series of constructed variables includes flags for whether the respondent has ever reported a cohabitation or a first marriage, as well as month and year began first marriage and first cohabitation, if applicable.

The remaining constructed variables pertain to the fertility history of the respondent and are too numerous to list in Table 3.8. Two – the number of children ever born and the age of R at first birth – have been listed. The remaining variables are child-specific. For each child the respondent has reported having, there are cumulative variables for month and year of birth (day available only on the Geocode release, see below), gender, and, if applicable, date of death for that child. These data have been carefully compared across years, and discrepancies have been resolved as far as the data allow. In addition to these variables, there are also year-specific usual residence variables for each child. Users should note that these year-specific variables are created only where appropriate. For example, for fourth children, there are variables for usual residence in 1994, 1996, 2000, and 2002. There is no variable for usual residence of the fourth child in 1998 because in 1998 an age cap of age 21 at the date of interview was in place and no interviewed respondent had more than three children. Similarly, the first residence variable for a seventh child is for 2000, because that is the first round in which a seventh child was reported. The first residence variable for an eighth child is for 2002.

### **Geocode Data**

Beginning with the 2000 data release, the decision was made to create a set of geocode data files for the Young Adults that was comparable to those created each round for the main Youth. A full set of geocode variables was created for all Young Adult years. This section discusses the creation of these variables that are available on the NLSY79 Young Adults geocode data files. These supplemental data files provide selected variables from the *County And City Data Books* from various years along with geographic variables from the NLSY79 Young Adult survey data file.

The county and state of residence for each Young Adult respondent for each survey year were matched with the county and state variables on the *County And City Data Book* data files for both 1988 and 1994, and selected county-level or SMSA-level environmental variables were extracted from those files and included on the geocode data files. For Young Adults living in their mother’s household, the county and state of residence were drawn from the mother’s

NLSY79 data if the mother was interviewed for that year. For Young Adults not living with their mothers or whose mothers were noninterviews in given years, county and state of residence were coded from the YA survey data. In cases where the mother's data were missing or incomplete, YA survey data were used to provide accurate codes wherever possible.

Users should note that a decision was made to extract geocode variables for all five Young Adult survey years from only the 1988 and 1994 *County and City Data Book* data files. This decision means that the 1994 and 1996 Young Adult geocode variables are *not directly comparable* to those of their mothers, whose geocode variables were extracted from the 1983 and 1988 *County and City Data Book* data files.

The *County and City Data Book* data files were prepared by the U.S. Bureau of the Census. Related printed matter for each of these data files can be found in the *County and City Data Book* for the specified year, which is also published by the U.S. Bureau of the Census.

The *Geocode Codebook* for the Young Adult provides the following detailed information on each geocode variable: its reference number, variable description, coding information, frequency distribution, file name, variable name, and source of the variable. Included are references to pertinent attachments and appendices from the *NLSY79 Geocode Codebook Supplement* providing supplementary coding and variable creation procedures. Variables are grouped within the geocode codebook according to the year with YA GEOCODE 1994 variables followed by YA GEOCODE 1996 and so forth. **Note:** Hardcopy versions of the geocode codebook and numeric index are not provided to CD-ROM users since the disc software allows users to generate their own documentation.

For greater detail on the geocoding processes used in the NLSY79 main file across survey rounds, users are encouraged to review the *NLSY79 Geocode Codebook Supplement*. The *NLSY79 Geocode Codebook Supplement* is available electronically on the geocode CD under the NLSY79 documentation (users must unzip and install the NLSY79 data to have this documentation available) or as a hard copy from NLS User Services and has several appendices and attachments, including:

- *Appendix 10: Geocode Documentation* provides background information on how the original 1979-1982 geocode tape and subsequent updates were created and how those data were modified to form the 1979-2002 release.
- *Attachment 100: Geographic Regions* provides a listing of those states, which comprise each of the four regions, used in such variables as region of residence and south-non-south place of birth/place of residence at age 14.
- *Attachment 102: State Federal Information Processing Standards (FIPS) Codes*, which are used to code respondents' state of residence. (The expanded listing in this section is numbered separately from the remainder of this document.)
- *Attachment 104: SMSA Codes* contains the coding information utilized to classify SMSA, MSA, CMSA, PMSA of residence at each interview date.
- *Attachment 105: Addendum to FICE Codes* contains the supplementary identification numbers for those colleges and universities not listed in the Education of Directory Colleges and Universities (1981-1982 and 1982-1983 supplement) published by the

National Center for Educational Statistics. (Section F of this attachment is numbered separately from the remainder of this document.)

- *Appendix 7: Unemployment Rates* provides an explanation of how the continuous and collapsed versions of the variable, unemployment rate for labor market of current residence were created.

### ***1994-2002 Geocode Data File Creation Procedure***

The software package Maptitude (V4.2) was used in the creation of the NLSY79 Young Adults 1994-2002 geocode data files for Young Adults who could not be matched to previous mother data (see NLSY79 Geocode Codebook Supplement for greater detail). This program links respondent address data to standard geographic information such as the FIPS (Federal Information Processing Standards) codes for state and county. Three graduated matching methods were applied, depending on the quality of the address data available.

1. An automated match was done between the respondent's locating address data and the Maptitude database. Address records with matching street segments were assigned the latitude and longitude of the location. In some cases, addresses had to be cleaned before they could be matched by the Maptitude program. Cleaning involves steps such as standardizing the address format, correcting obvious misspellings, identifying apartment numbers and locating them in the correct field, etc. It does not include any changes that might result in a change in the actual address location.
2. For some addresses, the procedure outlined in Step #1 failed to produce a match between the respondent's address data and the Maptitude database. In these cases, geocode staff used the Maptitude program to locate the correct street. If the street number could be located along this street, the latitude and longitude were assigned. However, some streets in the Maptitude database do not include information about street numbers. If this is the case, the address is manually located in the center of the street. The street is then classified as either a short street or a long street. Long streets cross Census tract or block group boundaries while short streets do not. As a result, the level of certainty about geographical information is much higher for short streets than for long streets.
3. Addresses unmatched by either of the first two procedures were assigned latitude and longitude coordinates according to a 5-digit zip centroid. A centroid is essentially the midpoint of a zip code area. The geographic information is less certain for respondents located using the zip centroid method.

Because some Young Adults had latitude and longitude derived from Maptitude, while others had these data matched from NLSY79 records for their mothers from years when different systems were used, a quality of match variable equivalent to GEO10 in the NLSY79 geocode data is not being released. Researchers who need to determine the level of certainty for the respondent's geographic data may contact CHRR User Services for further details.

### ***Supplementary Created Geocode Variables***

**Birthdate Variables.** Data indicating the day of birth of the respondent, his or her parents, children, and other household members are included on the geocode CD-ROM. Month and year of birth variables appear in the public use data set. The reference numbers and question names for the day of birth variables correspond to those used in the main data set for month and year of birth. For example, the 2002 variables DATE OF BIRTH - MONTH and DATE OF BIRTH - YEAR (Y06392.01 and Y06392.02) released in the Child/Young Adult public data file contain information about the respondent's birth month and year. The corresponding variable released only in the geocode data file is DATE OF BIRTH - DAY (Y06392.00) and provides information about the respondent's day of birth. These variables can be found in the YA COMMON KEY VARIABLES area of interest.

**College Variables.** In all four Young Adult rounds, information about the name and location of the college or university that the respondent was currently or most recently attending were asked. Included in the geocode variables for each year are Federal Interagency Committee on Education (FICE) codes for these colleges or universities as well as FIPS codes for the state where they are located. Additionally, beginning in 2000, respondents who were either seniors in high school or in their first year of college were asked about what colleges and/or universities they had applied to. For these colleges and universities, FICE codes are available.

Beginning in 2002, the codes provided for colleges applied to and college attended are UNITID codes from the Integrated Postsecondary Education Data System (IPEDS) database. The UNITID code is a change from previous rounds, where the reported code is the FICE code. A crosswalk between FICE codes and UNITID codes can be found in the IPEDS database. For cases where a UNITID code was unavailable and a FICE code was, the FICE code is provided. For cases where neither a FICE code nor a UNITID code could be found for a given college or university, a code of 999999 was assigned.

**Child Support Variables.** In all five Young Adult rounds, information about the state in which child support agreements were reached was collected. Included in the geocode variables for each year is the FIPS code for these states

### ***Missing Data***

Following the same convention as the NLSY79 Child and Young Adult public release data, the missing data value for all items on the geocode data files is -7. The -7 values indicate either a non-interview for a given year or respondents who have a missing value in the data for any variables from the *County And City Data Book* for the following reasons:

1. Respondents who were in the military or who had an APO address;
2. Respondents who were residing outside of the United States;
3. Respondents whose state or county codes could not be determined.
4. Respondents who reside in a county or SMSA/MSA for which there is missing data for that geographic location from the *County And City Data Book* for that specific item.
5. Respondents who do not reside in an SMSA for any survey year 1994-2002 will be missing SMSA level environmental variables for that year.

6. Respondents whose state, county, and zip codes for any survey year 1994-2002 do not lead to an unambiguous SMSA designation. This generally applies only to a small number of respondents living in New England.

In the 1994-2002 geocode data file, for 1988 and 1994 metropolitan statistical area variables with NECMA codes, respondents living in the New England states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont were not treated any differently than those residing elsewhere. The addition of the “Record Type” variable in the 1988 and the 1994 *County And City Data Book* data files allows the user to designate these cases as missing and remove them from the analysis, without having to conduct a county-by-county or state-by-state determination of NECMA/non-NECMA status.

### *Use of the Geocode Files*

Finally, we have a few suggestions concerning the use of these NLSY79 Young Adult geographic data files. Firstly, the data file and the accompanying documentation should be used in conjunction with the printed versions of the 1988 and 1994 *County and City Data Book* and the IPEDS codes so that researchers have complete information regarding variable descriptions and coding idiosyncrasies. Secondly, users should familiarize themselves not only with this document, but also with the *NLSY79 Geocode Codebook Supplement*. Finally, the data should not be used in any fashion that would endanger the confidentiality of any sample member. To use these data, users must sign a written licensing agreement consenting to protect respondent confidentiality and to other conditions; agree not to make, or allow to be made, unauthorized copies of the geocode file; and further agree to indemnify the Center for Human Resource Research for all claims arising from misuse of the file.

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**CHAPTER 4: UTILIZING NLSY79 CHILD  
AND YOUNG ADULT DATA FOR RESEARCH**

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## **Introduction**

The preceding chapters in this guide have discussed a variety of issues that will help users understand and use the NLSY79 Child and Young Adult data. In this section, we outline some research topics for which these data seem particularly appropriate. This chapter will not consider specific research topics in any depth, but rather suggest, drawing on materials from the earlier chapters, the range of topics that can be explored. We suggest ways that the main NLSY79 mother data, the younger children data, and the young adult data can be linked, permitting researchers to carry out not only within but cross-generational research. Specific procedures for accessing and linking the data files are discussed in Chapter 5.

Data have been collected from the NLSY79 main respondents since the first interview round in 1979. An in-depth discussion of the data available from and about these main respondents may be found in the most recent edition of the *NLS Handbook* and the *NLSY79 User's Guide*. As described in the preceding chapters, since 1986, a wide range of behavioral, characteristic, and attitudinal information has been collected from and about the children who have been born to these women, children who as of 2002 range in age from infancy to almost middle age. Large samples of these children are available for analysis for most ages up to and including the mid to late 20s. Large minority samples are available for analysis. As described in Chapter 1, the potential exists for a variety of sibling-oriented analyses. Techniques are available for enhancing the sample sizes for relatively narrow age ranges that at the same time greatly increase the heterogeneity of the sample. A revised weight program is now available that permits users to more effectively combine weighted samples across survey years. From the perspective of maternal childbearing, the child sample now encompasses over 90 percent of the children that will ever be born to this cohort of women (who as of the current survey point have attained the ages of 37 to 45). However, from the perspective of their children, it is useful to recall that the older the children, on average, the younger their mothers were at the time of their birth. This sample selection issue, highlighted in Chapter 1, has become less significant with every passing survey round, as the older children are increasingly born to women who gave birth at mainstream childbearing ages. Indeed, as noted, over 50 percent of all children are now ten to 19 and have been born to women 20 and over.

## **Life Cycle Profiles for the NLSY79 Children**

The data elements that have been collected for the younger children as well as the young adults have been highlighted in Chapter 2 and Chapter 3. In this chapter the attempt is made to integrate some these topical areas across the life cycle suggesting how they may be integrated into more comprehensive research agendas. Table 4.1 follows two child birth cohorts through their NLSY79 years, suggesting how the data can effectively be used to describe the children's whole lives from several disciplinary perspectives. The items and years referenced in this table are approximate, but in conjunction with the content of prior chapters they should offer interested readers some perspective regarding the potential longitudinal utility of these data. Other ages could have been selected. Larger sample sizes for specific ages can be generated that would permit users to attach similar, and often identical, explanatory inputs to children who had been at specific ages but in different years.

**Table 4.1. Data Elements Available over the Life Course for Two Age Cohorts**

Available Data	1983–1985 Births	1977–1979 Births
Age in 2002 (by Dec.31)	17-19	23-25
Sample Size in 2002	1,287	679
Mom Age at Birth	18-28	14-22
Key Data Elements		
Pre-/Postnatal Information	Yes	Yes
Child Residence Information	Lifelong	Age 6 (approx) onward
Detailed Child Health	Age 2–3 onward	Age 7–9 onward
School Early Years	1989/1991	1983/1985
Child Assessment Years	1986–1998	1986–1992
HOME Assessment	1986–1998	1986–1992
Behavior Problems	1986–1998	1986–1992
PPVT	1986/1988 and 1994/1996	1986, 1988/1990, 1992
PIATs	1988–1998	1986–1992
Adolescent Self-Report	1994–1998	1988–1994
Young Adult Survey	1998–2002	1994–2002

NOTE: This table refers to young adults age 17-25 interviewed in 2002.

This brief lifespan summary should be considered in conjunction with the materials detailed in Chapters 2 and 3 that discuss the data elements only touched on here. The focus in Table 4.1 is on two young adult birth cohorts. The first, born in 1977–1979 was 23 to 25 years in 2002. The second cohort, born in 1983–1985, was between the ages of 17 to 19 as of the end of the 2002 calendar year. These two cohorts are analytically useful because their life spans incorporate data elements from both the younger children and young adult data sets as well as many of the adult years of their mothers. These two young adult cohorts include one group (those born in 1977–1979) that fully incorporates all of the NLSY79 survey years, has reached incipient adulthood and is essentially completing the transition from adolescence to adulthood. The 17 to 19 year olds, the younger of the two groups, have had their full lifespan profiled by the NLSY79 years by virtue of having been born in the early to mid-1980s.

Because both of these cohorts have lived most of their lives within the time frame of NLSY79, these data can be used to define their lives in major respects. First, we know a great deal about the child's family environment over the whole period, information that is synthesized in Table 4.2. Indeed, many of the data elements that we have emphasized in the preceding chapters as being available, particularly for the older children, were also asked of their mothers in their middle to later adolescent years. Beginning with the mother's adolescent years, attitudinal and behavioral information about the maternal generation's own developmental path is available. They had been asked about their own educational, employment and family aspirations when they were the ages that many of their children are now. We have information about their schooling progression and from early on about their employment experiences, and marriage and childbearing experiences. This and other related information was systematically updated at every survey round. There is also comprehensive annual income and individual earnings information, household structure updates, and county

of residence information (available on a separate geocode file). Attitudinal information, such as the Rosenberg self-esteem scale and a sequence of items on attitudes towards women's roles, is available in selected years, along with a uniform battery of tests of maternal cognition and educational achievement (the Armed Services Vocational Aptitude Battery, or ASVAB). There also is a short series of questions on the mother's religious affiliation and upbringing. Finally, moving backwards essentially an additional generation, the first (1979) round included a series of questions probing into the socio-economic background of the mother, as measured by the occupation, earnings, and related questions about her parents (i.e., the children's grandparental generation) while she was growing up. This background input incidentally was greatly enhanced by a detailed childhood residence history that was collected retrospectively for these mothers in 1988. We will incorporate some of the above into the discussions of specific research possibilities that follow. Also, the interested reader is referred to the *NLS Handbook*, *NLSY79 User's Guide*, and selected year-specific interview schedules, as appropriate.

**Table 4.2. NLSY79 Mothers & Children: Comparable Attitudinal and Behavioral Questions**

NLSY79 Mothers	Children 10 & Older	Young Adults
Educational Aspirations/ Expectations, own & child's	Educational Expectations	Educational Expectations
Women's Roles	Gender Role Attitudes	Women's Roles
Employment, own	Employment/Work for Pay	Employment
Marriage & Birth Expectations	Marriage & Birth Expectations	Marriage & Birth Expectations
—	Sex Education	Sex Education
Early Sexual Activity	Early Sexual Activity	Early/Current Sexual Activity
Early Childbearing	Early Childbearing	Early Childbearing
Pearlin Mastery	—	Pearlin Mastery
Rosenberg Self-Esteem	Child Loneliness; SPPC	Rosenberg Self-Esteem
Locus of Control	Peer Pressure	—
Depression Scale (CES-D)	Child Moods	Depression Scale (CES-D)
AIDS Knowledge	Pregnancy Knowledge	Pregnancy Knowledge
Religion, own & child's	Religion & Attendance	Religion & Attendance
Delinquency; Police Contact	Non-Normative Behavior	Delinquency; Police/Justice System Contact; Non-Normative Behavior
HOME Items on Family Activities	Parent-Child Joint Activities	—
School Discipline, own & child's	School Discipline	School Discipline
Child HH Chore Expectations & Time Spent	Family Decision-Making	—
Child Closeness to Each Parent	Parent-Child "Closeness"/Interaction	Parent-Child "Closeness"/Interaction
Relationship (Marital) Quality	Mother-Father Consensus; Dating	Relationship Quality (Spouse, Partner, or Steady Boy-/Girlfriend) Mother-Father Consensus; Dating
School Rating/Satisfaction, own & child's	Child Satisfaction with School	Child Satisfaction with School
Trouble in School (BPI & MS child items)	Bring Parent to School	Bring Parent to School
Parental Monitoring	Parental Monitoring	Limit Setting
Parental Involvement in Child's School	Parental Involvement in Child's School	Parental Involvement in Child's School
Neighborhood Safety	Neighborhood Safety	Neighborhood Safety
TV Viewing by Child	TV Viewing	TV Viewing
Knowledge of Child's Friends	How Much Tell Parents about Friends	—
Childhood Residence, own	Time Away from Parents; Contact with Nonresident Father	Reasons Left Mother's HH; Contact with Nonresident Father
Cigarette, Alcohol, & Drug Use, own	Cigarette, Alcohol, & Drug Use	Cigarette, Alcohol, & Drug Use

NOTE: Items in the "NLSY79 Mothers" column that are qualified with "own" refer to reports about her own behavior; questions where she reports on her own AND her child(ren)'s behavior are noted.

The older of the two groups specified in Table 4.1 was born between 1977 and 1979, either shortly before or immediately after the NLSY79 cohort was initiated. A total of 679 respondents in this cohort of young adults age 23 to 25 were interviewed in 2002. These

children were mostly born to quite young mothers. While comprehensive pre- and postnatal information for all children born to female respondents did not begin until 1984, retrospective information for all children was collected in subsequent, 1985 and 1986 survey rounds. Thus, for almost all these young adults, there is considerable information about maternal behaviors during pregnancy, birth-related information, and health-nutrition related activities during the first year of life. Details on these pre- and postnatal variables are discussed in Chapter 2. Also, beginning in 1986, when the children in this cohort were between the ages of seven and nine, fairly detailed information about health-related behaviors were assessed from biennial maternal reports for each child. This health reporting continued through 1992 from the mothers, and directly from the young adults since that date. Since 1984, when these children were 5 to 7 years old, the survey provides detailed child and paternal residence information, including visitation information for absent fathers. Beginning in 1986, school progression information is available.

Once they attain age 10 (1988 or 1990 for the respondents in the example), the surveys contain more information about their behaviors and experiences. These self-reports for children 10 and over include details about joint activities and interactions with parents, parental rules about activities and behaviors, household decision-making processes, peer pressures, attitudes about school, after-school employment and other extra-curricular activities, incipient substance use, involvement in a variety of non-normative activities, religious activities, dating relationships, sex education and expectations about future marriage and family (in the more recent survey rounds, the depth of the content for some of these topical areas was expanded to collect details about within-family interactions), and—for those age 13 and over—items about sexual activity. Mothers are asked to report on their children's schooling success (e.g., grade repetition, reasons for success or failure) and each child in this age range is asked to rate the quality of the school attended, how the youth feels about his or her life in general, and parental supervision activities from the mother directly.

### **Intercohort Analyses**

Collection of the most unique data elements available for these respondents began in 1986, the first year we began this data collection effort, and continued through 1992, the last biennial survey point prior to their reaching age 15 for this particular cohort. From a cognitive perspective, virtually all of these older children completed the PIAT mathematics and reading assessments four times—in 1986, 1988, 1990, and 1992. They all completed the Peabody Picture Vocabulary Test in 1986 and 1992, and at one additional intervening point depending on their age. At each survey point in which they were age-eligible, their mothers completed the 28-item Behavior Problems scale as well as the NLSY79 abbreviated version of the Caldwell and Bradley HOME scale. This last assessment complements in important respects the information collected directly from the child in the adolescent self-report series noted above. The child self reports, in combination with maternal and child assessments for the 10- to 14-year-old age period, allow comprehensive examination of cognitive, socio-emotional, and behavioral development during these critical late-childhood/early adolescent years.

Beginning in 1994, all of these child respondents had attained young adult age, and almost all began completing the interviewer administered NLSY79 style questionnaire (The Young

Adult surveys are detailed in Chapter 3.) A large majority of these respondents have data from five survey points. (Those who had attained age 21 as of the 1998 survey date were not eligible for interview in that year, but were once again eligible for interview in 2000 and 2002. For these youth, questions were asked in 2000 to capture critical behavioral information covering the 1996-2000 gap.) The Young Adult surveys include detailed data collection on schooling, employment, and family event histories, as well as a rich attitudinal profiling of these youth over the period. The data permit a careful descriptive and analytical exploration of the linkages between the teen and early adult years. More generally, the data set permits an examination of the connections between early childhood, adolescence, and early adulthood, and how this process connects with attitudes and behaviors from the child's family. Table 4.2 highlights the wide range of inputs and outcomes available for such analyses—from the mothers as well as the child's generation, and for younger as well as older children. Of course, as noted above, one constraint for this specific cohort is that the explorations must of necessity focus on a group of youth who had been born to younger mothers, with all that that may imply for social and economic disadvantage.

Turning to the other birth cohort highlighted in Table 4.1 offers a look at those young adults have lived their whole lives within the NLSY79 life span. Born in a year from 1983 through 1985, these youth were all between the ages of 17 and 19 in the year 2002. The advantages of this younger cohort are that they have been born to a more mainstream group of mothers, and that their data were almost all collected on an on going basis as opposed to a retrospective manner. Also, because they have been born to somewhat older women, there are many more of them—virtually all of these youth have now completed at least two young adult interviews.

Because of their more recent birth, we have available a relatively continuous family and household profile, both for them as well as for their mothers. This includes contemporaneous information about their residence structure, paternal presence-absence and possible visitation patterns, and virtual life-long health profiles. Also, beginning at very early ages, between ages one and three, this child cohort has been administered the full range of cognitive, and socio-emotional assessments. Beginning in 1994, when most of these youth had already attained age ten, they began completing the age ten and over self-report booklet. Over the 1998-2002 survey rounds, all of these respondents attained young adult ages, and began completing the more comprehensive regular style NLSY79 interview. Of course, in 2002 and beyond, these young adult respondents are rapidly moving more fully into the early adult ages, completing their schooling, attaining family responsibilities, and become more fully integrated into the work force.

Other birth cohorts could have been selected equally as well for this profiling. The reader can profile other cohorts, or explore how several age cohorts can be combined to broaden as well as increase the sample size for analysis. Additionally, depending on one's research objective, one can explore how siblings of different ages would fall out in terms of having parallel data elements, albeit in different survey rounds. Additionally, a more detailed look at Table 4.2 will suggest the possibility for finding conceptually similar items for exploration across generations. For example, a number of the attitudinal sequences, including some of the expectation items, a sequence on women's roles, a depression scale, and even satisfaction with schooling are asked in a similar way of mothers and children—at younger and older ages. Many of the behavioral sequences—including early sexual activity and childbearing,

religious involvement, substance use or other non-normative activities have been asked one or more time of the mothers and children. Thus the research possibilities for exploring intergenerational transmission of attitudes and behaviors, to one or more siblings in the child generation, are considerable. Finally, in this regard, there are a limited number of instances where mothers and children are asked essentially mirror images of the same questions, so responses of mothers and children can be compared. This includes questions on parental monitoring, school satisfaction, schooling behaviors, and knowledge about the child's friends. Therefore, it is possible to explore whether mothers and children are on the same wavelength regarding whether or not they are viewing child or mother activities, or knowledge level, in a similar way.

### **Possible Research Agendas**

The above sections described in a general way possible useful perspectives when considering the NLSY79 child and young adult data for social science research. This section considers a variety of research possibilities within the context of the NLSY79 and its available data components. Both within and cross-generational research possibilities will be briefly considered. To some extent, specific technical issues associated with these research perspectives have been considered in earlier chapters and will be detailed in Chapter 5. Information from Table 4.3 will be selectively utilized in this discussion. On the surface Tables 4.2 and 4.3 appear similar. However, whereas the objective of Table 4.2 was to suggest comparable data items across the generations, the objective here is to highlight conceptual areas that are useful for explaining within and cross-generational attitudinal profiles and behaviors. Once again, it is emphasized that while the data set at this point has some methodological limitations, particularly regarding heterogeneity at the oldest child ages, it also has considerable strengths. For example, it has large samples at many ages that can be enhanced, a wide range of attitudinal and behavioral items for exploring mother and child connections, substantial minority oversamples, and a large sibling sample. At most younger ages, as has been described, these relatively large samples are quite heterogeneous, including large numbers from all socioeconomic strata. Additionally, the older children at this time represent an ideal sample for exploring a wide range of programmatic and policy issues related to the adjustment process and mainstream economic and social assimilation of disadvantaged youth, while at the same time permitting comparisons with children who have been born to relatively younger but middle class mothers. Also, as noted, the sample sizes and heterogeneity of the older youth is increasing considerably. We now consider a number of research options for which the current data set is most appropriate.

**Table 4.3. Cross-Generational Research Possibilities**

Maternal Background & Inputs	Childhood Mediators	YA Mediators & Outcomes
Demographic	Pre-/Postnatal Information	Demographic
Race/Ethnicity	Maternal Work History	Race/Ethnicity
Religion	Maternal Work History	Religion
Region	Child Care in 1 <sup>st</sup> Three Years	Region
Urban/Rural	Temperament	Urban/Rural
Migration Patterns	Motor and Social Development	Migration Patterns
Behavioral	Body Parts	Behavioral
Age at Menarche	Memory for Location	Age at Menarche
Age at 1 <sup>st</sup> Sex	Digit Span	Age at 1 <sup>st</sup> Sex
Age at 1 <sup>st</sup> Birth	PIAT Math	Age at 1 <sup>st</sup> Birth
Age at 1 <sup>st</sup> Drug Use	PIAT Reading	Age at 1 <sup>st</sup> Drug Use
Age at 1 <sup>st</sup> Marriage	PPVT	Age at 1 <sup>st</sup> Marriage
Deviant Activity	HOME	Age at 1 <sup>st</sup> Cohabitation
Social Psychological	BPI	Deviant Activity
Self-Esteem	SPPC	Sexual Activity
Depression	Preschool/Head Start	Dating Activity
Locus of Control	Regular Schooling	Social Psychological
Mastery	Health	Self-Esteem, Depression
Women's Roles	Relationship with Parents	Mastery, Women's Roles
Early Formative Influences	Risk Taking	Goals/Expectations for Education
Goals/Expectations for Education	Depression	Educational Attainment
Educational Attainment	Gender Attitudes	School to Work Transition
School to Work Transition		Marital History/Relationship Quality
Marital History/Relationship Quality		Job History
Job History		Military Service
Military Service		Recipiency
Recipiency		Transition to Parenthood
Father's Background (for years married to mother)		Parenting attitudes and behaviors
		Father's Background (for non-residential fathers)

### **Exploring Cognitive and Socio-Emotional Trajectories**

Chapter 2 has detailed the comprehensive trajectories available for following children across time, in many instances from infancy or “toddlerhood” to mid-adolescence. To our knowledge, this is one of the few large-scale data sets that permit researchers to examine the same children repeatedly over time, exploring linkages between intellectual and emotional development, or stability in scores on the same or similar assessments over time. Several examples may usefully clarify this theme. For the 1983 to 1985 birth cohort highlighted above, it is possible to examine over-time connections between infant and early childhood cognitive batteries such as the Kagan memory for location assessment, the body parts assessments, or the temperament scale and later intellectual development. Linkages,

including possible causal connections, can be explored between these early cognition measures and not only *levels* of subsequent cognition (as measured, e.g., by PPVT or PIAT scores), but also intellectual *trajectories* over the early childhood to middle adolescent period. In addition to being able to explore differences in levels and trajectories overall, it is possible to consider variations in trajectories between different socio-economic or racial/ethnic groups. Most importantly, variations in trajectories may be linked with differences in life cycle paths. The information available relating to family structure and family economic well-being over time can be used to consider how variations in trajectories, or indeed connections over time between different assessments can be independently linked with variations in background factors or more contemporary family or individual, particularly education and employment, variations.

### **Validity of Repeat Measures**

The data may also be effectively used to explore the face validity of selected assessments over time. As noted, some children have taken the PIAT assessments as many as five times, so it is possible to examine the stability of normed scores over time (bearing in mind that the sample cases were normed against national standards). Similarly the mothers have repeatedly completed a 28-item behavior problems scale for all of their children as they have aged from 4 to 14 years of age. One can explore stability and instability in these scores over time and consider how trajectories over time may be linked to other family factors, including scores on the HOME scale (described in detail in Chapter 2). Repeated measures on this HOME scale provide comprehensive information about the quality of the child's cognitive and socio-emotional home environment for the full first 14 years of a child's life. These home quality dimensions, as well as components of these scales, may be temporally linked with the child's development. Indeed it can be hypothesized that a child's behavior can impact on the home environment (partly perhaps as parents alter the environment to suit their children's needs), and also, perhaps even more so, the environment can alter a child's development process. The repeated measures on these scales, in conjunction with related family information, permit researchers to explore relevant connections in a comprehensive and methodologically more refined way than is typically possible. It is also suggested that the availability of many sibling pairs (see Tables 1.9 and 3.4) permits a more careful exploration of how within-family transitions can alter intellectual and socio-emotional developmental processes. While this discussion has mentioned selected assessments, it should be noted that over the years a wider range of assessments has been administered. These additional assessments may be useful for specialized analyses. Also, as described in sections that follow, selected assessment may be of particular value as intervening measures for explaining many within and between generational processes.

### **Early Family and Relationship Transitions and Behaviors**

The NLSY79 child and young adult surveys represent a very good data source for exploring the antecedents and trajectories for middle and late adolescent to early adult relationships. Beginning at age 13 (and age 15 from 2000 on), the children have reported on their early sexual activity and fertility experiences. Starting at age 15, in-depth information has been collected about relationships in which they have been involved. Beginning with the 1998 survey round, a sequence of items that describe the full range of heterosexual relationships that sexually active youth can be part of are included in the young adult data collection.

Family and maternal inputs, as well as over a decade of child assessment information, permit exploration of the mechanisms relating to transitions in the family arena in a comprehensive manner. This includes not only transitions into early relationships but also exploration of why some early relationships last and others do not; why some cohabitations, perhaps reflecting prior attitudes of these children and their families, ultimately turn into marriages; and what seems to be linked with a tendency for some young adults, men and women, to undertake early childbearing while others delay parenthood. Researchers can explore intergenerational tendencies to form early relationships and begin childbearing at early ages. In particular, it is possible to explore in some detail why some youth from relatively disadvantaged families effectively avoid some of the hurdles posed by early parenthood whereas others are less successful.

### **Young Adult Schooling and Work Outcomes**

Additionally, the data set represents an ideal vehicle for examining how all of the above complexities of early relationship patterns and trajectories are linked with greater or less success regarding late adolescent education progression as well as transitions into the work force. From an employment perspective, there is information about summer and school year employment for these youth from early adolescence onward. There is considerably greater detail regarding the nature and intensity of employment and training experiences during the late adolescent and early adult years. Additionally, the young adult data set includes comprehensive information about later educational experiences from both a behavioral and attitudinal perspective.

### **Geographic Moves, Location, and Employment**

This data set offers some unique opportunities for exploring the inherently complex connections between geographic moves, early family structure transitions, and human capital. Because many of these youth have been effectively tracked since birth, first in their mother's home, and more recently, in increasing numbers, in their own homes, it may be possible to gain clarification regarding the causal connections between some often endogenous processes. A special geocode file is available for all survey rounds for the main respondents in the NLSY79, and is now available for 1994 to 2002 for all the young adults in the survey regardless of their residence. This data file, described in Chapter 3, can be linked with all of the NLSY79 main, younger child, and young adult data.

Migration of young people is an important feature of their early life course, and having geographic detail on a concurrent basis permits a careful study of residential move patterns, their determinants and consequences. The migration literature points to the importance of family connections in helping to explain migration. The residence information in the young adult data permits researchers to now look at the past location of the youth as well as where selected family members live.

From a different perspective, the availability of county-level information for most of the lives of the children permits the exploration of potential connections between intellectual and academic success and the residential dislocation of children. It is possible to examine in a causal context whether or not younger children and young adults are academically disadvantaged if they are subject to repeated geographic movements throughout their

formative years. The locational data also support examinations of a history of fine level geography on subsequent earnings during the early years of adulthood, particularly when this geographic trajectory is augmented by school quality information. How this geographic history is linked with prior intellectual “success,” as measured by the range of childhood cognitive assessment information available, and how this all translates into later human capital investments can now be explored with these data.

### **Non-Normative Behaviors across Generations**

As Table 4.2 suggests, this data set is appropriate for exploring cross-generational tendencies for family members to repeat non-normative behaviors (see the *NLSY79 User’s Guide* for details about the mother’s record). The child data can be used to explore substance use trajectories over time, and possible linkages between this trajectory and a wide range of parallel child and family behaviors and attitudes. Data available for these analyses include detail on school-linked behaviors and attitudes, the transition from school to work, economic well-being through adolescence, contact with the legal system, self-reports on a variety of delinquent activities, substance use over time, and attitudes which have been shown to be linked with subsequent “success” in several life domains. Many of these data elements are available for both the children and their mothers at comparable life cycle points. In addition to these micro-level connections, it is possible to examine selective tendencies, i.e., the *kinds* of family units that appear more protective, and evidence a better ability to break intergenerational connections of activities or behaviors that might typically be considered non-productive. The young adult geocode file, which contains county-level identifiers, enhances the possibility for sorting out the potential relevance of area-level factors that either additively or interactively may affect connections within and between generations. This is one area of research where sibling histories can help clarify within- and between-family life cycle considerations. For example, to what extent are tendencies to follow selected non-normative pathways conditioned by specific family situations that were prevalent at specific earlier child ages?

The data set is particularly suitable for considering potential cross-generational connections. As noted above, there are many possibilities for exploring cross-generational linkages between personal and family attributes evidenced early in a mother’s life cycle and a variety of younger child and young adult behaviors. Independent of other family factors, to what extent are early adult behaviors among the older children, which have potential negative consequences for their progression to “successful” adulthood, parallel to similar early behavior among their mothers? As Tables 4.2 and 4.3 indicate, data elements available for both mothers and children include information on early sexual activity, the Rosenberg self esteem scale, the Pearlin mastery measure, depression measures, items measuring attitudes towards the roles of women in society, early (during adolescence) expectations regarding family, education and work, and school satisfaction. All of these inputs, as well as the wide range of behavioral information, permit researchers to sort out cross-generational socio-economic predictors of non-normative child behaviors from other perhaps more subtle non-normative mother to child connections. In this regard, there are available in this data set a broader range of mother and family traits than are typically available for research of this kind. The Behavior Problems scale, and a number of other child assessments that have been repeatedly completed for each child, can help clarify the mechanisms behind any cross-

generational propensities for non-normative behaviors. They do this by providing important explanatory insights regarding the long-term patterns of parent-child interaction, the quality of the cognitive and emotional home environment, and indeed several dimensions of the youth's development process from childhood through later adolescence. These data are available for all children in the same families, so an exploration of the effects of interactions of these assessments with other ongoing family events as well as their temporal occurrence in the life cycle can be considered. This kind of research may help clarify which higher risk families and which children within those families are able to avoid the repetition of dysfunctional behaviors in the younger generation.

### **How Children Affect Mothers**

For those interested in exploring possible feedback effects, the repeated child measurement for several behaviors and attitudes, in conjunction with the detailed information available about maternal behaviors, permit one to sort out to some extent the effect of changing child behaviors on subsequent actions of their mothers. For example, just as one can examine the impact of maternal employment on a child's behavior, or changes in a child's behavior, one can explore how changes in a child's behavior or health can affect subsequent maternal employment decisions!

### **Variation in High School and College Attendance**

The NLSY79 data file includes in-depth information relating to both maternal/family and youth priors that typically are considered significant analytical predictors of young adult schooling decisions. As the data collection gets extended past the mid-adolescent ages, the censoring issue associated with both very early school leaving and early childbearing is reduced. As of 2002, the data set offers large samples of youth past adolescence, as well as fairly substantial minority samples at relatively older ages for analysis. The child data collection includes a fairly wide range of information asked of the mothers and children about school progression patterns, parent-school interaction processes, and child and parental satisfaction with the child's schooling. The young adult survey collects a range of information about the high school completion process as well as college attendance. If a young adult has attended college since the date of last interview, the name of the current or most recent college attended is asked as well as the start and stop dates for attendance. Young adults in college are asked their major, whether they are part or full-time students, the cost of attending college, and if they have received degrees of any type. The young adult surveys ask questions about financial aid: whether or not a loan was received and, if so, the amount and how much of the years expenses it covered; whether or not the young adult received work study, scholarships, grants, fellowships, assistantships, as well as various other forms of help from government, institutions, friends, or family. Beginning with the year 2000 data collection, there is an additional series of questions that ask about all colleges that have been applied to and whether or not the youth was accepted. Given that these questions have been asked repeatedly since 1994, the data now permit one to construct college trajectories for a relatively large disadvantaged population. These college profiles can be linked with early employment success, differentiating between white, black, and Hispanic youth.

One can also link these educational profiles with early adult family-related activities. With regard to all these processes, it is possible to clarify the extent to which the cognitive and

socio-emotional tests administered in earlier waves either directly to the child or by maternal proxy are indeed useful predictors of early career or family success, independent of the host of family factors known to be associated with child development. With respect to evaluating the relevance of various forms of college trajectories, a key issue would be to explore causal dimensions of the child assessment-college involvement-early post college “success” trajectory. Users should note that detailed geographic information, as well as information identifying specific colleges, is now available on the young adult geocode file.

### **Within-Family Differences in Outcomes**

This topic has already been addressed in several places throughout this volume, particularly in Chapter 1. Because the NLSY79 child sample is comprised of all children born to female respondents, many sibling clusters have been interviewed over time. For many years, it has been possible to explore the origins of differences between siblings in cognitive, emotional and particularly behavioral outcomes. It has been possible to clarify the independent impact of differential family behaviors that could be conditioned by the reality that children from the same parents may nonetheless encounter different family processes reflecting factors such as variations in their parents’ life cycle stages or sibling placement or gender.

One can now follow many of these same siblings into the young adult years. There are substantial numbers who have one to three siblings, and the bulk of these siblings are now of young adult age (see Table 1.9). In addition to sharing many common data elements, the siblings also have many potentially unique background characteristics that can be used to sort out and perhaps explain behavioral differences for a range of outcomes. The HOME scale can provide insights into variations in child raising patterns by child parity, gender, or other characteristics such as health status. Many of the older children and young adults are within two or three years of each other in age so their outcomes, such as employment or family attributes can be measured at approximately similar life cycle points. Of course, with every additional survey round, the heterogeneity of the sample increases, bringing more children who have been born to a wider age range of mothers. The utility of the sample can also be enhanced by collapsing similarly aged youth across survey years, as discussed earlier (see Table 1.7 and Table 1.8). It is feasible, for example, to explore how child-raising practices for individual young women may be sensitive to the age of their mother at birth, and how this may translate into considerable variation in adolescent and young adult behaviors for children in the same family. Items from the geocode file could be used to clarify the impact of geographic moves, neighborhood characteristics and the life cycle stage when these events occurred on subsequent behaviors and attitudes, controlling for many other commonalities within a family. From the perspective of younger children, it may be possible to establish whether early and repeated movement impedes intellectual and behavioral development for some but not all children in a family, as suggested by some child development research.

### **Child Health and Child Outcomes**

Over the years, the NLSY79 child interviews have included a number of measures designed to measure various dimensions of the physical and emotional development of the children. Mothers have reported on limiting health conditions, utilization of health services, and illness and accidents. This information can be linked with all the other developmental and behavioral information available about the child and his/her family.

The health data collection for each child essentially begins prior to the birth of the child, and encompasses the wide range of prenatal inputs about the mother's behavior and attributes (including weight gain during pregnancy and key facts about each pregnancy and birth), as well as summary health measures for the mother, including periodic weight and height measures over her own NLSY79 time line. Table 4.4 summarizes the types of health variables found in the Child data files. Key health items from the Young Adult surveys are listed in Table 4.5.

**Table 4.4. Health Data in the NLSY79 Child Surveys**

Child Health	1986	1988	1990	1992	1994	1996	1998	2000	2002
Child's eye and hair color	M								
Does health limit school or play	M	M	M	M	M	M	M	M	M
Physical, emotional, or mental condition requiring: treatment, medicine, or special equipment	M	M	M	M	M	M	M	M	M
Type/duration of limiting health conditions	M	M	M	M	M	M	M	M	M
Accidents/injuries needing medical attention in last 12 months	M	M	M	M	M	M	M	M	M
Accidents/injuries needing hospitalization since last interview/since birth		M	M	M	M	M	M	M	M
Number of illnesses requiring medical attention or treatment	M	M	M	M	M	M	M	M	M
Date of last routine health checkup	M	M	M	M	M	M	M	M	M
Menses; age at 1 <sup>st</sup> menarche for female child (and mother)	M	M	M	M	M	M	M	M	M
Right/left handedness						M	M	M	M
Date of last dental checkup/work	M	M	M	M	M	M	M	M	M
Source of health insurance, if any	M	M	M	M	M	M	M	M	M
Behavioral, emotional, or mental problems; did insurance cover doctor visit	M	M	M	M	M	M	M	M	M
Or prescription drugs taken to help control activity/behavior	M	M	M	M	M	M	M	M	M
Height and weight of child	M-I								
Healthcare during pregnancy leading to child's birth <sup>1</sup>	M	M	M	M	M	M	M	M	M
Postnatal infant healthcare and feeding <sup>1</sup>	M	M	M	M	M	M	M	M	M
Temperament Scales (<4 years)	M	M	M	M	M	M	M	M	M
Motor and Social Development Scale (<4 years)	M	M	M	M	M	M	M	M	M
Behavior Problems Index (4+ years)	M	M	M	M	M	M	M	M	M
Cigarette use; age first smoked; frequency		C	C	C	C	C	C	C	C
Alcohol use; age first drank; frequency		C	C	C	C	C	C	C	C
Marijuana use; age first used; frequency		C	C	C	C	C	C	C	C
Substance use (like glue, gas, sprays, fluids) that are "sniffed/huffed"; age first used; frequency					C	C	C	C	C
Other drug use (LSD, cocaine, uppers, downers); age first used; frequency		C	C	C	C	C	C	C	C

NOTE: Users are reminded that, while Child and Young Adult health items are presented separately in this table, all child health items were collected for young adults when they were age 14 or younger in the years their mothers were interviewed.

"C" denotes child report.

"M" denotes mother report.

"M-I" denotes either mother report or interviewer measurement; flag indicating source of report appears in the data file for each survey year.

<sup>1</sup> Pre- and postnatal items have been asked in the mother's main Youth interview since 1982 so that most information has been collected for most births. This information includes child's birth weight and length, mother's weight gain, type of delivery, etc.

**Table 4.5. Health Data in the NLSY79 Young Adult Surveys**

Young Adult Health	1994	1996	1998	2000	2002
Does health limit work/school	YA	YA	YA	YA	YA
Type and duration of health limitation	YA	YA	YA	YA	YA
Recent accidents, injuries, illnesses, hospitalization <sup>1</sup>	YA	YA	YA	YA	YA
Height, weight	YA	YA	YA	YA	YA
Right/left handedness		YA	YA		
Menses information (females)	YA	YA	YA	YA	YA
Health insurance coverage for self and for child(ren) <sup>1</sup>	YA	YA	YA	YA	YA
CES-Depression Scale (7 items)	YA	YA	YA	YA	YA
Prenatal care (females)	YA	YA	YA	YA	YA
Health care and nutrition during pregnancy (females)	YA	YA	YA	YA	YA
Cigarette and alcohol use during pregnancy (females)	YA	YA	YA	YA	YA
Drug use during pregnancy (females)	YA	YA	YA		

NOTE: Users are reminded that, while Child and Young Adult health items are presented separately in this table, all child health items were collected for young adults when they were age 14 or younger in the years their mothers were interviewed.

<sup>1</sup> Information on recent illnesses, routine check-ups, and health insurance for young adults living in the mother's household is reported by the mother in the fertility section of the main Youth interview. All other young adult health items are obtained through the Young Adult report.

During the first year of life, there is a relatively intensive body of child health information that asks about early infant-birth connected health problems, as well as medical visitations for both sick and well care, including the nature of the contact, and the need for hospitalization. During the first four years of life, mothers complete a motor and social development scale about each child (described in Chapter 2) that assesses the maturational development of the child compared to other children of the same age. Height and weight are reported or measured at each interview point. On a continuing basis over the child's/young adult's life, there are biennial reports on child accidents, injuries, and hospitalizations. This information is subject to some censoring as noted in Chapter 2. One advantage that this data collection provides over institutionally collected health data is that, because it is self-reported by mother or child, it avoids biases that may be linked with race, class, and ethnic differentials in the likelihood that specific groups may actually contact appropriate health individuals or institutions. For most years health information is obtained through maternal report, but as the children age into the young adult years, the data are based on self-reports.

Over the surveys, there also is considerable ancillary information collected about each child that details limiting health conditions (with respect to school, peers, and work); emotional problems; and the utilization of specialized medical, dental, and psychiatric services. Much of this information has been collected repeatedly for each child, and collected for each child in a family unit. These data are useful not only for profiling children's developmental paths over time, but also for enhancing interpretations of both children's and mother's behavior over time from a causal perspective.

The discussion in this chapter is not intended to be all-inclusive, but rather to suggest avenues for approaching the data. The development of these or other topics must of necessity draw on a variety of other NLSY79 informational sources. These include the other chapters in this volume, the *NLS Handbook*, the *NLSY79 User's Guide*, various child health materials, and in particular, the various child and young adult interview schedules. Information about these and other relevant materials, including instructions on how to obtain the data, may be found on-line at <<http://www.bls.gov/nls/nlsy79ch.htm>>. Chapter 5 describes in greater detail the procedures for using and linking some of these data sources and documentation.



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## **CHAPTER 5: DATA FILES & DOCUMENTATION**

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The NLSY79 Child and Young Adult data release contains comprehensive information from the 1986 through the current survey round. The file also contains child-specific information from the mother's main Youth interviews. Certain variables are derived from the mother's longitudinal record while other data items represent the questions administered during the Child and Young Adult interviews and the responses from each child assessment. Finally, there is an extensive set of created variables on the file, based on the assessment and interview data. Detailed information on the types of data available for the NLSY79 Children and Young Adults can be found by examining print or on-line field instruments and by searching the database indices. Instructions on how to search the database can be found in the NLS Investigator's User's Manual that accompanies the data file. Users who are interested in items based on data from the mother's record are encouraged to access copies of the main Youth questionnaires and to review the NLSY79 main Youth documentation.

The NLSY79 Child data include demographic and family background, pre- and postnatal health history, home environment reports, information on child care and school experiences, items and scores from the biennial child assessments, and reports from the child "10 and older" self-report questionnaire. The Young Adult contains questionnaire items from all Young Adult interview years, covering areas such as family background, schooling, training, work and military experiences, relationship history, fertility, health, and drug and alcohol use, as well as a set of created variables for each round. Geographic information for young adults is available on a separate geocode file.

Constructed variables, drawn from the mothers' records, provide information on each mother's household composition, quarterly employment referenced to the birth of each child, and family background. While most information is cross-sectional, many variables link maternal events or behaviors to the child's life cycle—specific points after, or in some instances, before the child's birth. Any item from the complete record of the mother's main Youth record can be linked to the Child and Young Adult files. This chapter discusses the structure of the public data files, the types of documentation available, how to merge files, and where to access user information.

### **Types of Variables**

Variables in the NLSY79 Child and Young Adult file are derived from a number of sources. Some represent the unedited respondent answers from the child, mother, or young adult, while others are constructed. The type of variable may affect (1) the physical placement of the variable within the codebook (its sequence in the reference number list) and (2) the assignment of a variable to a particular area (or areas) of interest. Types of variables that appear in the public releases of the Child and Young Adult files include:

1. Direct (or raw) responses from a questionnaire or assessment or other survey instrument.
2. Recoded or edited variables constructed from raw data according to consistent procedures, e.g., coding of verbatim responses about jobs done for pay or religion other than the precoded categories. Such variables are marked as recode versions of the original.

3. Constructed variables based on responses to more than one data item or multiple reports to the same item, either from cross-sectional or longitudinal information. Some of these created variables are indices or scale summations, such as the assessment scores, and others are individual items edited for consistency where necessary, e.g., child background characteristics such as age, date of birth, and gender.
4. Constructed variables from a non-NLS data source, e.g., the County & City Data Book information present on the NLSY79 Young Adult geocode file.
5. Variables provided by NORC or another outside organization based on sources not directly available to the user, e.g., the transcript data and test scores from the child school survey.
6. Data collected from or about one universe of respondents reconstructed with a second universe as the unit of observation, e.g., variables on the NLSY79 Child File that are based on inputs from the mother's main Youth record but linked to each child.

### **Linking the Data & Documentation**

#### ***Child Question & Variable Names***

Variables in the NLSY79 child data are generally named according to the source from which they are derived. Items from the Child, Mother, and Child-Self-Administered supplements have question names linked to the location in the instrument. For example, "CS94-14" (HAS CHILD EVER BEEN ENROLLED IN HEAD START?) comes from Q.14 asked in the first section of the Child Supplement in 1994. Acronyms are used to identify the scores derived from the child assessments administered at the time of the survey (e.g., *BPI2002* for Behavior Problems Index-Raw Score, 2002). Mnemonic names identify constructed variables that are based on inputs taken from the main NLSY79 survey (e.g., *AGEMOM2000* for Age of mother at interview date, 2000).

Through 1998, questions from the mother and child instruments are generally identified by "MS" for Mother Supplement or "CS" for Child Supplement and, starting in 2000, "CSAS" for the Child Self-Administered Supplement. The digits that follow this prefix refer to the year of the survey. Starting in 2000, question names for items from the child questionnaires generally indicate the topical section of the instrument from which each question was derived. For example, child question names beginning with "SCHL" come from the schooling section of the Child Supplement questionnaire; items prefixed with "HLTH" designate the child health questions in the supplement. The question name also indicates the order in which the question was administered within each section of a questionnaire.

Constructed variables are usually named according to the topic of their content. The item called "FSTYRAFT" (C00052.00) in the CHILD BACKGROUND area of interest refers to the "first survey year of mother after the child's birth." Such items on NLSY79 mothers and their children are usually based on multiple inputs from the main youth and child survey instruments. Codebook entries for these items may include a reference to one or more main file reference number to give the user an example of the main Youth question on which the

child-specific item is based. For example, in the PRE/POST NATAL CARE area of interest, the item PRE0009 (C03201.00) refers the user to R13284. in order to see the inputs to the variable that were extracted from the main Youth file.

***Child Question Naming Conventions—Details***

**Mother Supplement Question Names.** From 1986-1996 question names for items in the Mother Supplement have the following three components: (1) “MS” to designate the source of the item, (2) a 2-digit number to indicate the year of the survey round, and (3) deck and column number. For example in the item listed below, MS960329, the “MS” indicates the Mother Supplement, the “92” means the item is from the 1992 survey, and “0329” shows that the item was in Deck 3, Column 29 in the booklet.

1992: MS920323 HOME PART B (3-5 YRS): HOW OFTEN MOTHER READS TO CHILD  
 1994: MS940331 HOME PART B (3-5 YRS): HOW OFTEN MOTHER READS TO CHILD  
 1996: MS960329 HOME PART B (3-5 YRS): HOW OFTEN MOTHER READS TO CHILD

In 1998 a similar system was used in naming Mother Supplement questions except that section number and question numbers replace the deck and column numbers, which were no longer relevant. In the example below, MS981B01 means that this item is from the Mother Supplement, 1998, Section 1-B (the HOME), question 1.

MS981B01 HOME PART B (3-5 YRS): HOW OFTEN MOTHER READS TO CHILD

In 2000 a new naming system was introduced that more closely parallels that used for the main Youth and Young Adult surveys. As seen in the example below, questions from the Mother Supplement still use the MS designation and a reference to the section and item number within the section but do not include a reference to the year of the survey.

HOME-B01 HOME (AGE 3 YRS): HOW OFTEN MOTHER READS TO CHILD  
 MS1-A01 HOME (AGES 4-5 YRS): HOW OFTEN MOTHER READS TO CHILD

NOTE: In 2000 the HOME and Temperament items have different question naming conventions depending on the age of the child. Items for children under age 4 that were administered in the Child CAPI Supplement are named according to the name of the assessment (e.g., HOME-B01 above). HOME and Temperament questions for children age 4 and older appear in the Mother Supplement and are therefore prefixed with “MS” followed by the section and item number (MS1-A01 means Mother Supplement, Section 1-A, question 01). Notes have been entered into the codebook for these items to alert users to this change in 2000. In 2002 all these mother-report assessment items returned to the Mother Supplement.

**Child Supplement Question Names.** Through 1992, questions that were administered in the Child Supplement include CS for the supplement, a year number, and deck and column. When CAPI was introduced in 1994 questions were no longer identified by deck and column but simply by item number.

CS921746 CHILD BACKGROUND: HAS CHILD EVER BEEN ENROLLED IN HEAD START?  
 CS94-14 CHILD BACKGROUND: HAS CHILD EVER BEEN ENROLLED IN HEAD START?  
 CS96-14 CHILD BACKGROUND: HAS CHILD EVER BEEN ENROLLED IN HEAD START?  
 CS98-14 CHILD BACKGROUND: HAS CHILD EVER BEEN ENROLLED IN HEAD START?

Starting in 2000 questions in the Child CAPI Supplement are generally identified by the section of the questionnaire. In the example that follows BKGN stands for the Child Background section of the questionnaire:

BKGN-12 CHILD BACKGROUND: HAS CHILD EVER BEEN ENROLLED IN HEAD START?

**Child Self-Administered Supplement Question Names.** Questions in the Child Self-Administered Supplement for children 10 and older are prefixed by “CS” until the 2000 survey when they begin with “CSAS.” Through 1996, deck and column numbers were used to designate the question location in the CSAS booklet. The following example designates the year “96” and then deck “01”, column “13” (pg. 3 of the paper booklet):

CS960113 CHILD SELF-ADMIN: GONE TO MOVIES WITH PARENTS IN LAST MONTH

In 1998, item numbers are used.

CS98001A CHILD SELF-ADMIN: GONE TO MOVIES WITH PARENTS IN LAST MONTH

Starting in 2000, the prefix CSAS designates that the item is from the Child Self-Administered Supplement and the item number corresponds to the actual question in the instrument:

CSAS001A CHILD SELF-ADMIN: GONE TO MOVIES WITH PARENTS IN LAST MONTH

### *Young Adult Question & Variable Names*

Question names in the Young Adult surveys follow one of three general patterns. Individual items from the Young Adult CAPI questionnaire are usually prefixed by “Q” and the section number. The suffix generally indicates the order in which questions appear. Because questions asked in multiple rounds retain the same question name, many suffixes also include letters (e.g., Q4-31B). Thus Q2-19 represents the following question (asked in each survey year) of the Family Background portion (Section 2) of the YA CAPI questionnaire:

Q2-19 IS THIS THE FIRST TIME R STOPPED LIVING WITH MOTHER?

Questions from the Young Adult self-report booklet in 1994 and 1996 are prefixed with “YA” followed by the survey year, and then a designation of the deck and column number:

YA940939 YA SELF-REPORT: EVER BEEN ON PROBATION?

YA960839 YA SELF-REPORT: EVER BEEN ON PROBATION?

In 1998, question names for these self-report items no longer incorporate the deck and column numbers and are simply named according to question number sequence in the booklet:

YA98100 YA SELF-REPORT: EVER BEEN ON PROBATION?

Starting in 2000, self-report questions appear in the self-report section of the YA CAPI questionnaire and are prefixed by “YASR”:

YASR-67 EVER BEEN ON PROBATION?

Constructed variables on the Young Adult file are identified by mnemonic names related to their content. For example, the series of variables that identifies the cohabitation status in each survey round are named “COHAB” followed by a year designation.

COHAB96	COHABITATION STATUS OF R
COHAB98	COHABITATION STATUS OF R
COHAB2000	COHABITATION STATUS OF R
COHAB2002	COHABITATION STATUS OF R

### ***Child & Young Adult Reference Numbers***

All variables on the NLSY79 Child and Young Adult files are assigned unique identifiers called reference numbers, which determine the relative position of each variable within the codebook. Reference numbers that start with “C” are used for data items on the Child file, and “Y” numbers for the Young Adult. The “C” numbers (for the Child) and the “Y” numbers (for the Young Adult) appear in each codebook entry and also form the basis of the variable names on the SAS and SPSS control cards that are generated by the extraction procedures on the data set.

Reference numbers for Young Adult variables are prefixed with the letter “Y.” Decimals in the Young Adult reference numbers generally indicate that more than one variable has been derived from a single question. However, decimals may also appear in reference numbers when variables have been added to the file after the original public release. For example, these variables have been added to the 1994 YA data:

Y03840.12	IS CURRENT RESIDENCE URBAN OR RURAL?
Y03840.13	IS CURRENT RESIDENCE IN SMSA?
Y03565.01	REVISED YOUNG ADULT SAMPLING WEIGHT

Users of the main Youth data will recognize these reference numbers as conceptually equivalent to the “R” numbers used in the NLSY79 main Youth documentation.

### **Contents of the Child & Young Adult Public Data Files**

The current Child and Young Adult data release contains the complete set of Child and Young Adult files, for all years, which can be linked with the entire record for NLSY79 females. The NLSY79 main Youth file is available for download as a separate file via ftp and is also on the NLS combined CD.

The Child file includes the individual items from the Child assessments as well as all the derived raw and normed assessment scores for each survey round. The current version of this file updates information for children already born as of the last survey and adds data for children born between the last and current survey rounds. Child-specific information on the file includes demographic and family background, pre- and postnatal health history, home environment reports, child care experiences, and all items and scores from the biennial child assessments. Constructed mother-specific variables include information on each mother’s household composition, quarterly employment referenced to the birth of each child, and family background.

The Young Adult data contains 1994-2002 questionnaire items, covering areas such as work experience, military service, training, schooling, family background, relationship history, income, health, fertility, child care, and drug and alcohol use, as well as a set of created variables for each round.

The Child and Young Adult files are grouped in topical areas of interest (formerly referred to as “record types”) but may be accessed using a variety of search strategies, including “any word in context,” year, reference number, and question name. The search and extraction software facilitates the process of finding and using the appropriate variables. Users should refer to the current *NLS Database Investigator Guide*, which accompanies the data, both on the CD and via download.

**Constructed Child- and Mother-Specific Variables.** In addition to the questionnaire items and constructed assessment scores the NLSY79 Child data set contains a number of other constructed variables. Some constructed variables, such as pre- and postnatal care and child usual residence, are drawn from child-specific information collected in the mother’s main Youth interview. Other elements, such as maternal household composition and family background, are constructed from mother-based information that does not vary across children. Constructed variables are generally found in the following Areas of Interest: CHILD BACKGROUND, FAMILY BACKGROUND, MATERNAL HEALTH, MATERNAL HOUSEHOLD COMPOSITION, PRE/POST NATAL CARE, and MATERNAL WORK HISTORY. These created items include sibling identifiers, maternal family background, maternal household composition at each interview, maternal work histories, family educational background, and maternal health. Details on these constructed variables can be found in Chapter 2 of this guide and in Chapter 4 of the *NLS Handbook*. Mother-specific information present on the NLSY79 main data file and on special data sources such as the work history and geocode main Youth files can be linked with the Child data by case ID.

**Constructed Young Adult Variables.** In addition to the questionnaire items from the 1994-2002 Young Adult surveys, several constructed variables for Young Adults are available in the current data release (see Chapter 3). Some of these are available for all young adult respondents who were interviewed in *any* survey year, while others are specific to a particular survey round. These variables are all located in the Area of Interest called YA COMMON KEY VARIABLES. The following variables are constructed for *all* young adults: young adult ID (Y00001.00), date of birth, gender, race, and the ID code of the mother, as well as comprehensive biological child information and dates of first marriage and first cohabitation.

### **File and Variable Linking Procedures**

The Child/Young Adult data files contain many constructed variables drawn from multiple sources, including both cross-sectional and longitudinal information in both the child and mother records. Users of the Child/Young Adult data who wish to construct variables not found in the Child/ Young Adult files may access the mothers’ records in the main Youth files in order to obtain the necessary inputs. A useful variable for linking the mother’s longitudinal record to the child is C52.00, which defines the first survey year (of the mother) following the

child's date of birth. (All children born prior to the 1979 survey date are assigned 1979 as their first post-birth survey point.)

In general, a researcher interested in creating a variable that references a particular post-birth survey point for all children would need to follow a two-step procedure. For example, to create a variable that defines the first post-birth survey maternal school enrollment status for all children from information collected at the mother's survey dates, one would take the following steps: (1) use C52.00 to define the appropriate survey year following each child's date of birth, and (2) use this variable to choose a maternal enrollment status variable, depending on the date of the birth of the child. If the child's first post-birth survey year is 1982, the maternal enrollment status variable as of the 1982 interview (C570.00) would be selected. Similarly the appropriate enrollment status information could be combined across the relevant surveys into one created "first post-birth survey enrollment status" variable.

For more refined linking procedures, the user may need to access maternal interview dates as well as the dates of many relevant events, such as school leaving, job changes, and marital changes. Variables on the file that are keyed to the child's date of birth or to the mother's date of interview can be used to (1) precisely link many social, economic, and demographic maternal behaviors with a child's birth or age at a particular point or to (2) define the survey point closest to a particular child's birth or attained age. The first of these two objectives can be facilitated by using variable C2700.00, which defines the birth of every child in terms of the number of weeks that have elapsed between January 1, 1978 and the current maternal interview date. This variable can be used to link with the NLSY79 main Youth Work History data that constructs a week-by-week profile of the respondent's employment experience.

The pre- and postnatal variables (C3200.00-C3392.10) are already defined in an appropriate life cycle context, since they reference either the pregnancy leading up to a particular birth or an event/behavior during the first year following a birth. A missing value in this series of constructed child variables means that at least one input from the main Youth file was missing (refer to the note in the Child codebook for C2700.00).

### ***Linking Data Files***

The child sequential identification code (C1.00) allows the user to link children with their siblings on the NLSY79 Child files and with their mothers on the main NLSY79 files. The child ID is composed of the first 5 digits of the mother's sequential ID plus a 2-digit code (01-11) generally *but not always* indicating the child's order of birth. Children with the same first 5 digits in their IDs are siblings. Since the child ID contains the first 5 digits of the mother ID, either the child ID or the mother ID (C2.00) enables the users wishing to create a mother-based file to extract maternal characteristics and write them out only for mothers.

**Child ID vs. Young Adult ID.** Users will note that identification codes are provided for all children as CPUBID (C00001.00) in the CHILD BACKGROUND area of interest and again for young adults as CASEID (Y00001.00) in YA COMMON KEY VARIABLES. The only distinction between these two variables is that CASEID is only available for children who have been interviewed as young adults. The variable called CPUBID is a comprehensive ID code with values for all children (including young adults), regardless of age or interview

status. The YA CASEID is included for the convenience of users accessing only the Young Adult data.

**Linking Children and Young Adults to Mothers.** Space constraints require that the current release of the Child and Young Adult data be stored in a file *separate* from the main Youth files. The Child/Young Adult file does *not* contain software that will enable users to automatically create a merged extract of children or young adults and data selected from the mother's record. Such a merge can be accomplished by means of Child case ID (C1.00) and Mother case ID (C2.00) saved on a Child/Young Adult extract and mother case ID (R1.00) saved on an extract from the main Youth file. The respondent identification code should always be among the variables saved in creating any specification file or extract. When selecting variables from the NLSY79 main Youth file, users should include R1. (Identification Code) in the list of saved variables. Before exiting the Child/Young Adult data set, users should verify that Child ID and mother ID are among the saved variables. The user can employ any of a number of methods for merging files. Appendix F of this document offers sample programs designed to assist users in merging files.

### *Missing Data*

On the current release, missing values other than those reserved for Don't Know (-2), Refusal (-1), and Invalid Skip (-3) have been collapsed into a "-7." This value includes noninterviews and valid skips. For survey rounds 1998-2002, users can rely on the Interview/Assessment flags in the CHILD BACKGROUND area of interest to determine child or young adult interview status. For survey rounds prior to 1998, users can restrict the child sampling weight to values greater than "0" to target respondents interviewed.

**Interview Status Flags.** A set of variables has been constructed that indicates the interview status for children, young adults and their mothers. These interview status flags are cross-sectional and thus only reflect valid values for cases from a particular survey round. The relevant Child interview status variables, available starting in 1998, are identified by reference numbers C00115.01-C00115.23:

CINTRV98	INTERVIEW STATUS OF CHILD
CASSMT98	ASSESSMENT STATUS OF CHILD
INCSUP98	DOES CHILD HAVE A CHILD SUPPLEMENT?
INMSUP98	DOES CHILD HAVE A MOTHER SUPPLEMENT RECORD?
INCSAS98	DOES CHILD 10-14 YEARS OLD HAVE A CSAS RECORD?
CINTRV2000	INTERVIEW STATUS OF CHILD
INCSUP2000	DOES CHILD HAVE A CHILD SUPPLEMENT?
INMSUP2000	DOES CHILD HAVE A MOTHER SUPPLEMENT RECORD?
INCSAS2000	DOES CHILD 10-14 YEARS OLD HAVE A CSAS RECORD?
CINTRV2002	INTERVIEW STATUS OF CHILD R20-2002
INCSUP2002	DOES CHILD HAVE A CHILD SUPPLEMENT RECORD R20-2002?
CSCOMP2002	COMPLETION STATUS OF CHILD SUPPLEMENT R20-2002
INMSUP2002	DOES CHILD HAVE A MOTHER SUPPLEMENT RECORD IN 2002?
MSCOMP2002	COMPLETION STATUS OF MOTHER SUPPLEMENT R20-2002
INCSAS2002	DOES CHILD HAVE A CHILD SELF-ADMINISTERED SUPPLEMENT RECORD R20-2002?

CSASCOMP2002 COMPLETION STATUS OF CHILD SELF-ADMINISTERED SUPPLEMENT  
R20-2002

The Young Adult interview status flags, available for 1994-2002, are also in the CHILD BACKGROUND area of interest and can be identified by reference numbers C00112.00 - C00112.09:

YASAMP [1994-2002] IS CHILD ELIGIBLE FOR YOUNG ADULT INTERVIEW?  
YAINTV [1994-2002] WAS CHILD INTERVIEWED AS YOUNG ADULT?

The “MINTRV” variables in this series indicate if the mother was interviewed as part of the main Youth survey:

MINTRV98 (C00115.03) INTERVIEW STATUS OF MOTHER  
MINTRV2000 (C00115.09) INTERVIEW STATUS OF MOTHER  
MINTRV2002 (C00115.15) INTERVIEW STATUS OF MOTHER R20-2002

More details on mothers’ interview status are provided by a series of variables titled “REASON FOR NONINTERVIEW” in the NLSY79 main Youth area of interest called COMMON VARIABLES. For a detailed discussion of completion rates for the child sample, see Chapter 2.

**Sampling Weights to Identify Interviews.** Users can also employ the Child and Young Adult sampling weight variables to delineate their analysis sample and to identify respondents interviewed in each survey round. The list of sampling weights for children and young adults appears in Table 1.10.

The Child sampling weights are assigned to the ASSESSMENT areas of interest. Children who have been assessed or interviewed in a given year have values greater than 0 on their sampling weight for that year.

The Young Adult sampling weights for each year are assigned to the YA COMMON KEYVARS area of interest. These YA sampling weight variables are specific to young adults interviewed in that year so that any young adult not interviewed or any child who is not a young adult in that year is assigned a value of “0.” Therefore, restricting the sample to cases greater than “0” on either of these types of variables will result in cases interviewed in that year.

### **Child & Young Adult Data On-line for Download**

The Child-Young Adult data files, as well as the NLSY79 main file, are available for download. The Child/YA dataset contains all the child-based created variables, all the assessment variables (both “raw” items and created scores), constructed variables drawn from the NLSY79 main Youth 1979-2002 database<sup>2</sup>, all the Young Adult CAPI and self-report

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<sup>2</sup>Users should note that the young adults are represented in all non round-specific Areas of Interest, such as PRE/POST NATAL CARE, MATERNAL WORK HISTORY, and CHILD BACKGROUND. Young adults are also included in the variables in MATERNAL HOUSEHOLD COMPOSITION, which are based on data for all interviewed mothers and thus attached to each of her children regardless of age.

data, and the YA created variables. One set of current Child and Young Adult questionnaires and the current Child Assessment Tables report accompany the data.

Instructions for obtaining the data can be found on the *NLS Information* Web page <<http://www.nlsinfo.org>>. At this site, click on Order Data, and select NLSY79-Children-Young Adults. You will see item number:

DCYA-R11-2	NLSY79 Child/Young Adult 1979-2002 Data Release R11.2 (CD-ROM includes NLSY79 main file data R12.1)
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Clicking the box on the far right (Size/Download) will make the Child-YA file available for download. Users who access the child and young adult data in this manner will receive the 1986-2002 Child data and codebook, the 1994-2002 Young Adult data, and documentation for the Child & Young Adult that includes one set of current questionnaires, this users guide, and the *2002 Child Assessment Tables* report. Be sure to download the DB Investigator software in order to search and extract variables.

The complete NLSY79 main file is NOT automatically included as part of the Child-YA download. The NLSY79 main file can be accessed separately from the same website. Users should note that an electronic copy of the *NLSY79 Users Guide* comes with the download of the main NLSY79 data set. Users who are unfamiliar with the NLS extraction software and wish to download the file should review Chapter 8 of the current *NLS Handbook*, which is found on-line at <<http://www.bls.gov/nls/handbook/nlshndbk.htm>>.

### **Child & Young Adult Data on CD-ROM**

The Child and Young Adult data, together with search and extraction software, are available on compact disc (CD-ROM) for use in a Windows environment. The data sets on the CD are in compressed format and must be decompressed to the hard drive to be accessible to the NLS DB Investigator software. The CD contains the 1986-2002 Child data, the 1994-2002 Young Adult data, the complete 1979-2002 NLSY79 main Youth file, and documentation for the 2002 Child & Young Adult. The combined NLS CD also contains all currently available data for the other NLS cohorts.

Users who wish to retrieve information from the mothers' records, beyond the variables included in the child files will need to access the main Youth file, which is on the CD as a separate zipped file. A copy of the *NLSY79 Users Guide* is automatically available on the CD when accessing the NLSY79 main file.

### **Child & Young Adult User Documentation**

**Codebook.** The NLSY79 Child and Young Adult (and main Youth) data files are each documented by a codebook that lists each variable and briefly describes its content. Each codebook entry contains the variable's unique reference number, coding categories for the variable, frequency distributions, minimum and maximum values, and any special notes. Entries for questionnaire items also contain links to the previous and next question in the instrument. The hyperlinked reference numbers that appear in codebook entries for created variables simply take the user to the next item in the list, generally within the area of interest.

**Areas of Interest.** The main Youth and Child/Young Adult data sets are also assigned to topical “Areas of Interest” (formerly called Record Types) in order to group the variables by topic. Since the Child and Young Adult cases reside in the data set as one merged file, users are urged to use caution when searching or selecting “Child” versus “YA” variables. To help users distinguish the child from young adult items, the Areas of Interest for Young Adults are prefixed with “YA.” For example, users browsing the topical “Areas of Interest” will find both YA CHILD CARE and CHILD CARE. The former contains all the questions from the Young Adult CAPI questionnaire related to use of child care for their children. The CHILD CARE index holds information drawn from the mother’s main Youth record related to the child care experiences of the NLSY79 children, including the early experiences of the children who are now Young Adults.

**Child and Young Adult Survey Instruments.** Since most of the primary variables found within the Child data set are derived directly from one or more survey instruments, users should have access to at least one set of questionnaires. Copies of the Child and Young Adult questionnaires and interview aids are available from NLS User Services at cost or on-line in PDF or HTML format. Users can access the Child and Young Adult questionnaires at the BLS-NLS website: <<http://www.bls.gov/nls/nlsy79ch.htm>>. This site has links to the following 2002 questionnaires in PDF and HTML format:

- Child CAPI Supplement (CS) - public user version of Child CAPI questionnaire, containing interviewer-administered assessments
- Child Self-Administered Supplement (CSAS) - public user version of self-report questionnaire for children age 10-14; administered on PDA or laptop
- Mother Supplement (MS) - public user version of CAPI maternal report questionnaire for each child; contains mother-report assessments
- Young Adult CAPI - public user version of the Young Adult CAPI questionnaire

Copies of Child and Young Adult questionnaires for all survey rounds can also be downloaded via FTP at the <<ftp://ftp.chrr.ohio-state.edu/usersvc/>> CHRR site or by visiting the <[http://www.nlsinfo.org/ordering/display\\_db.php3](http://www.nlsinfo.org/ordering/display_db.php3)> Product Availability page.

**The NLS Handbook.** The *NLS Handbook*, updated periodically, provides an introduction to and overall picture of all the cohorts that comprise the National Longitudinal Surveys: NLSY97, NLSY79 and children, Mature Women, Young Women, Older Men, and Young Men. It is particularly useful for those who are unfamiliar with the surveys and their data. Each cohort-specific chapter of this handbook is accompanied by detailed tables that provide users with information about many of the variables contained in each of the surveys over time.

**NLS Bibliographies.** NLS User Services maintains an annotated archive of NLS research on-line at <<http://www.nlsbibliography.org>>. Records of more than 4,000 journal articles, working papers, monographs, reports, presentations, theses, and dissertations are available for users to search, retrieve, and print customized listings of NLS research. CHRR periodically compiles a comprehensive listing of research based on the child, maternal, and fertility data from the NLSY79. This bibliography, *Research Using NLSY79 Data on Fertility, Child*

*Care, & Child Development*, can be downloaded at <<http://www.bls.gov/nls/nlsdoc.htm>> or requested from NLS User Services (see contact information at the end of this chapter).

**NLS News.** The Bureau of Labor Statistics publishes a quarterly NLS newsletter that includes information about new data releases, error notices, completed NLS research, and other information of general interest to the NLS research community. Issues can be downloaded in PDF at <<http://www.bls.gov/nls/nlsnews.htm>>.

**Other Documentation.** In addition to the codebooks, variable descriptions, search indices, and items described above, CHRR provides the following materials to users as additional documentation for the NLSY79 Child and Young Adult data:

- NLS CD-ROM Guide (for CD users)
- NLSY79 Child Handbooks 1986-1992
- Child Assessment Tables reports
- Child-YA Data Users Guide for prior rounds

Comprehensive documentation and bibliographies are available at no charge from CHRR. Selected reports, user updates, and current questionnaires can be accessed on-line on the BLS Child-YA website. Paper versions of original field instruments can also be purchased from CHRR or downloaded at no charge from <<ftp://ftp.chrr.ohio-state.edu/usersvc/>>.

### **User Notes & Errata**

Periodically CHRR provides users with additional updates to the existing data or documentation. Notes are sometimes prepared that clarify certain elements of the current files. This information is compiled into a list of “User Notes,” a copy of which is provided with each data release. Updates are also posted to the Child & Young Adult pages on the BLS-NLS website (<<http://www.bls.gov/nls/nlsy79ch.htm>>). Updates to previous data rounds are noted in the documentation for those rounds. For example, updates to the last data release that are not referenced below can be found on-line on the Errata and User Notes page for the NLSY79 Child & YA. Known updates to the current Child and Young Adult files are listed below.

**Cases deleted from file.** Starting with the 2000 public release, the following child cases were deleted from the NLSY79 Child-Young Adult file: Child Public ID = 318802, 318803, 567001, 864903, 902102,1031303. A review of the longitudinal main Youth record has shown that these cases are duplicates, nonbiological children, or non-live births previously reported by NLSY79 respondents.

**Over samples restored in 2002.** The randomly selected oversample cases that were excluded in the 2000 survey were restored to the fielded sample in 2002. Due to funding constraints in the 2000 survey, children of the black and Hispanic over samples were reduced by about 38 percent. These excluded cases were eligible for re-interview in 2002. Users who need details on these cases can obtain a file that identifies the excluded oversample from NLS User Services.

**Child cases with no mother interview.** In 2002, 14 children were interviewed whose mothers were not interviewed. Their Public IDs are 400201, 400202, 651302, 815301, 815302, 933601, 955802, 997801, 998004, 998005, 998006, 1018802, 1180801, 1202702. (In 2000 two children (Public IDs 11202 and 592604) were interviewed whose mothers were not.) Users will notice that variables tied to the mother's interview date, such as AGECH2002 (C00047.46) or AGEMOM2002 (C00382.38), will show missing values for these cases even though the children themselves were interviewed. Since the AGECH and AGEMOM variables are based on inputs from the mother's record, users may want to default to the child's age at the date of assessment (CSAGE2002, C00070.49). Users should note that Young Adult children are often interviewed in a given survey round, regardless of the interview status of their mothers. Contact with children under age 15 is largely predicated on completion of the mother's own interview and her authorization to assess her younger children.

Users should make sure that their supply of documentation includes any errata sheets or users notes that contain corrections and updates to the data files. The full set of user documentation is listed in a document (ChildYAUUserDocs.pdf) with the data download or on the CD. User update information is available from NLS User Services (see the contact information at the end of this chapter).

### **Contact and Ordering Information**

#### ***The NLSY79 Child-YA Web Page***

Data users can view information about the NLSY79 Child and Young Adult Surveys on the NLSY79 pages of the BLS web site: <<http://www.bls.gov/nls/nlsy79ch.htm>>. The web site features downloadable public use data and documentation for the current NLSY79 main and Child files, as well as information about any modifications or updates to the data and/or documentation. Published reports from previous years' surveys are also available.

Users who seek more detailed information about the NLSY79 Child assessments as well as supplementary information about sample constraints in previous survey rounds should consult the *NLSY Child Handbook: 1986-1990* (Baker et al., 1993) and *The NLSY Children 1992* (Mott et al., 1995). Tabular reports for the assessments scores, starting with the 1994 survey round, are available in print format from NLS User Services or online at the CHRR site: <<ftp://ftp.chrr.ohio-state.edu/usersvc/>>.

Information on the NLSY79 Child & Young Adult surveys is available on-line at:

**<http://www.bls.gov/nls/nlsy79ch.htm>**

The NLS website, managed by The Bureau of Labor Statistics, can be accessed at:

**<http://www.bls.gov/nls/home.htm>**

Searches of the NLS annotated bibliography can be made via:

**<http://www.nlsbibliography.org/>**

*NLS User Services at CHRR.* Please direct all questions and comments related to ordering or using the NLSY79 Child and Young Adult data and documentation to:

NLS User Services  
Center for Human Resources Research (CHRR)  
921 Chatham Lane, Suite 100  
Columbus, OH 43221-2418 USA

Phone: (614) 442-7366  
Fax: (614) 442-7329  
E-mail: [usersvc@postoffice.chrr.ohio-state.edu](mailto:usersvc@postoffice.chrr.ohio-state.edu)

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Documents and reports listed below that are prepared by the Center for Human Resources Research are available from CHRR, NLS User Services, or on-line in the Child-Young-Adult folder at the following ftp site: <<ftp://ftp.chrr.ohio-state.edu/usersvc/>>.

A comprehensive, annotated bibliography of NLS research can be accessed at: <<http://www.nlsbibliography.org/>>.

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## **APPENDICES**

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**APPENDIX A. NLSY79 CHILD HOME-SF**

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**Appendix A-1. NLSY79 Child HOME-SF (Short Form): Scale items by age and type of report**

HOME-SF Item Description S = Mother Self-Report    O = Interviewer Observation	Age Assessed			
	0-2 yrs	3-5 yrs	6-9 yrs	10-14 yrs
1. Child gets out of house 4 times a week or more	S			
2. Child has 3 children's books (10 for ages 3-9 yrs; 20 for ages 10-14 yrs)**	S	S	S	S
3. Mother reads to child 3 times a week or more***	S	S	S	
4. Child taken to grocery store (once/week or 2-3 times a month)	S	S		
5. Child has one or more cuddly, soft or role-playing toys	S			
6. Child has one or more push or pull toys	S			
7. Mother believes parents should usually or always spend time teaching kids	S			
8. Child eats meal with both mother and father(-figure) once a day or more	S	S	S	S
9. Mom often talks with child while working	S			
10. Mom reports no more than 1 spank during past week	S	S	S	
11. Mom spontaneously vocalize to/conversed with child at least twice	O	O	O	O
12. Mom responded verbally to child	O			
13. Mom showed physical affection to child	O	O	O***	O***
14. Mom did not spank child	O	O		
15. Mom did not interfere/restrict child more than 3 times	O			
16. Mom provided appropriate toys/activities to child	O			
17. Mom kept child in view	O			
18. Play environment is safe (home or building for ages 36 mos +)	O	O	O	O
19. Family subscribes to at least one magazine		S		
20. Child has use of record/CD player and at least 5 records/CDs/tapes		S		
21. Child helped to learn numbers at home		S		
22. Child helped to learn alphabet at home		S		
23. Child helped to learn colors at home		S		
24. Child helped to learn shapes and sizes at home		S		
25. Child has some choice in foods for breakfast and lunch		S		
26. TV is on in home less than 5 hours per day		S		
27. Non-harsh discipline if child hits (or swears/speaks in anger ages 72mos+)		S	S	S
28. Child taken to museum in past year		S	S	S
29. Child expected to make his/her bed			S	S

**Appendix A-1. NLSY79 Child HOME-SF (Short Form): Scale items by age and type of report (continued)**

HOME-SF item description	Age Assessed					
	S = Mother Self-Report	O = Interviewer Observation	0-2 yrs	3-5 yrs	6-9 yrs	10-14 yrs
30. Child expected to clean his/her room					S	S
31. Child expected to clean up after spills					S	
32. Child expected to bathe him/herself					S	
33. Child expected to pick up after himself/herself					S	S
34. Child expected to keep shared living areas clean and straight						S
35. Child expected to do routine chores such as lawn, help w/ dinner, dishes						S
36. Child expected to help manage his/her own time						S
37. Musical instrument in home child can use (see #20)					S	S
38. Family gets a daily newspaper					S	S
39. Child reads several times a week for enjoyment					S	S
40. Family encourages child to start and do hobbies					S	S
41. Child receives lessons or belongs to sports/music/art/dance/drama org					S	S
42. Child taken to musical or drama performance in past year					S	S
43. Family visits with family or friends 2-3 times a month					S	S
44. Child spends time with father(-figure) 4 times a week					S	S
45. Child spends time with father(-figure) in outdoor activities once a week					S	S
46. When watching TV, parent discusses program with child					S	S
47. Mom encouraged child to contribute to conversation				O	O	O
48. Mom answered child's questions or requests verbally				O	O	O
49. Mom introduced interviewer to child by name				O	O	O
50. Mom's voice conveyed positive feeling about child				O	O	O
51. Home is not dark				O	O	O
52. Home is reasonably clean				O	O	O
53. Home is minimally cluttered				O	O	O

\* One combined version of Interviewer Observations used for ages 6-14 years.  
 \*\* Data available so that item can be scored based on 10+ books for all ages.  
 \*\*\* Physical affection items reported by mothers for these age groups but not included in score.

### Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children under age 3 years

Q Name	Ref #	Scale	Question Text	Recode	
				1	0
HOME-A01	C27089	C	How often does child have a chance to get out of the house?	6,7	1-5
HOME-A02	C27090	C	About how many children's books does child have?	3,4	1,2
HOME-A03	C27091	C	How often do you get a chance to read to child?	5,6	1-4
HOME-A04	C27092	C	How often do you take child to the grocery store?	1	2-4
HOME-A05	C27093	C	About how many, if any, cuddly, soft, or role-playing toys does child have?	>=1	0
HOME-A06	C27094	C	About how many, if any, push or pull toys does child have?	>=1	0
HOME-A07	C27095	C	Some parents spend time teaching their children new skill while other parents believe children learn best on	1,2	3,4
HOME-A08	C27096		How much time does child spend time watching TV on a typical weekday?		
HOME-A09	C27097		How much time does child spend time watching TV on a typical weekend day?		
HOME-A10B	C27099		About how many hours is the TV on in your home each day?		
HOME-A11	C270101		Does child ever see his/her father, or someone you consider a father-figure?		
HOME-A12	C27102		Is this person his/her biological father, stepfather, or father-figure?		
HOME-A13	C27103		What is his relationship to you?		
HOME-A14	C27105	*	Does child see his/her father/step/father-figure on a daily basis?	1	0,2
HOME-A15	C27106	E	How often does child eat a meal with both you and his/her father/step/father-figure?	1,2	3-7
HOME-A16	C27107	E	How often do you talk to child while you are working?	1,2	3-5
HOME-A17A	C27108		How close does child feel toward you?		
HOME-A17B	C27110		How close does child feel toward his/her (biological) father?		
HOME-A17D	C27112		How close does s/he feel toward his/her father/step/father-figure?		
HOME-A18	C27113	E	About how many times, if any, have you had to spank child in the past week?	0,1	>=2
CSOB-1A	C25780	*	Interviewer: Did you observe child and his/her mother together at any time?	1	0
CSOB-2A	C25781	E	Interviewer: Mother spontaneously spoke to child twice or more (excluding scolding)?	1	0
CSOB-3A	C25782	E	Interviewer: Mother responded verbally to child's speech?	1	0
CSOB-4A	C25783	E	Interviewer: Mother caressed, kissed, or hugged child at least once?	1	0
CSOB-5A	C25784	E	Interviewer: Mother slapped or spanked child at least once?	0	1
CSOB-6A	C25785	E	Interviewer: Mother interfered w/ child's actions or restricted child from exploring >= 3 times?	0	1
CSOB-7A	C25786	C	Interviewer: Mother provided toys or interesting activities for child?	1	0
CSOB-8A	C25787	E	Interviewer: Mother kept child in view/ could see child/ looked at him/her often?	1	0
CSOB-9A	C25788	C	Interviewer: Child's play environment is safe?	1	0

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale—used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

**Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 3-5 years**

Q Name	Ref. #	Scale	Question Text	Recode	
				1	0
HOME-B01	C27114	C	How often do you read stories to child?	5,6	1-4
HOME-B02	C27115	C	About how many children's books does child have?	4	1-3
HOME-B03	C27116	C	About how many magazines does your family get regularly?	2-5	1
HOME-B04	C27117	C	Does child have the use of a CD player, tape deck, or tape recorder, or record player at home and at least 5 children's records or tapes?	1	0
HOME-B05A	C27118	C	Do you or have you helped [child] with numbers?	1	
HOME-B05B	C27119	C	Do you (or someone else) help [child] with the alphabet?	1	
HOME-B05C	C27120	C	Do you (or someone else) help [child] with colors?	1	
HOME-B05D	C27121	C	Do you (or someone else) help [child] with shapes and sizes?	1	
HOME-B06	C27122	E	How much choice is child allowed in deciding foods s/he eats at breakfast & lunch?		
HOME-B07B	C27124	E	About how many hours is the TV on in your home each day?	1,2	3,4
HOME-B08B-01	C27126.00	E**	If child got so angry that s/he hit you, what would you do? Hit him/her back		1
HOME-B08B-02	C27126.01	E**	If child got so angry that s/he hit you, what would you do? Send child to room	1	
HOME-B08B-03	C27126.02	E**	If child got so angry that s/he hit you, what would you do? Spank child		1
HOME-B08B-04	C27126.03	E**	If child got so angry that s/he hit you, what would you do? Talk to child	1	
HOME-B08B-05	C27126.04	E**	If child got so angry that s/he hit you, what would you do? Ignore it	1	
HOME-B08B-06	C27126.05	E**	If child got so angry that s/he hit you, what would you do? Give child a chore	1	
HOME-B08B-07	C27126.06	E**	If child got so angry that s/he hit you, what would you do? Take away allowance	1	
HOME-B08B-08	C27126.07	E**	If child got so angry that s/he hit you, what would you do? Hold hands until calm	1	
HOME-B08B-09	C27126.09	E**	If child got so angry that s/he hit you, what would you do? Other	non-harsh	harsh
HOME-B08B-10	C27126.08	E**	If child got so angry that s/he hit you, what would you do? Short time-out	1	0
HOME-B09	C27127	C	How often does a family member get a chance to take child on any kind of outing?	3-5	1,2
HOME-B10	C27128	C	How often has a family member taken or arranged to take child to any type of museum?	2-5	1
HOME-B11	C27129		How much time does the child spend watching TV on a typical weekday?		
HOME-B12	C27130		How much time does the child spend watching TV on a typical weekend day?		
HOME-B13	C27132		Does child ever see his/her father, or someone you consider a father-figure?		
HOME-B14	C27133		Is this man the child's biological father, stepfather, or a father-figure?		

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale—used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

**Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 3-5 years (continued)**

Q Name	Ref. #	Scale	Question Text	Recode	
				1	0
HOME-B15	C27134		What is his relationship to you?		
HOME-B16	C27136		Does child see his/her (father/stepfather/father-figure) on a daily basis?		
HOME-B17	C27137	E	How often does child eat a meal with you and his/her father/stepfather/father-figure?	1,2	3-7
HOME-B18A	C27138		How close does child feel toward you?		
HOME-B18B	C27140		How close does child feel toward his/her (biological) father?		
HOME-B18D	C27142		How close does child feel toward his/her (father/stepfather/father-figure)?		
HOME-B19	C27143	E	About how many times, if any, have you had to spank child in the past week?	0,1	>=2
CSOB-1B	C25789		Interviewer: Did you observe child and his/her mother together at any time?		
CSOB-2B	C25790	E	Interviewer: Mother conversed w/ child >=2 times (no scolding or suspicious comments)?	1	0
CSOB-3B	C25791	E	Interviewer: Mother answered child's questions or requests verbally?	1	0
CSOB-4B	C25792	E	Interviewer: Mother caressed, kissed, or hugged child at least once?	1	0
CSOB-5B	C25793	E	Interviewer: Mother introduced interviewer to child by name?	1	0
CSOB-6B	C25794	E	Interviewer: Mother physically restricted or (shook/grabbed) child?	0	1
CSOB-7B	C25795	E	Interviewer: Mother slapped or spanked child at least once?	0	1
CSOB-8B	C25796	E	Interviewer: Mother's voice conveyed positive feeling about child?	1	0
CSOB-9B	C25797	C	Interviewer: Child's play environment is safe?	1	0
CSOB-10B	C25798	C	Interviewer: Interior of the home is dark or perceptually monotonous?	0	1
CSOB-11B	C25799	C	Interviewer: All visible rooms of house/apartment are reasonably clean?	1	0
CSOB-12B	C25800	C	Interviewer: All visible rooms of house/apartment are minimally cluttered?	1	0

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale—used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

## Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 6-9 years

Q Name	Ref. #	Scale	Question Text	Recode	
				1	0
HOME-C01	C27144	C	About how many books does child have?	4	1-3
HOME-C02	C27145	C	How often do you read aloud to child?	5,6	1-4
HOME-C03A	C27146	E	How often is child expected to make his/her own bed?	2-5	else
HOME-C03B	C27147	E	How often is child expected to clean his/her own room?	2-5	else
HOME-C03C	C27148	E	How often is child expected to clean up after spills?	2-5	else
HOME-C03D	C27149	E	How often is child expected to bathe himself/herself?	2-5	else
HOME-C03E	C27150	E	How often is child expected to pick up after himself/herself?	2-5	else
HOME-C04	C27151	C	Is there a musical instrument that child can use here at home?	1	0
HOME-C05	C27152	C	Does your family get a daily newspaper?	1	0
HOME-C06	C27153	C	How often does child read for enjoyment?	1,2	3-5
HOME-C07	C27154	C	Does your family encourage child to start and keep doing hobbies?	1	0
HOME-C08	C27155	C	Does child get special lessons or belong to any organization that encourages activities such as sports, music, art, dance, drama, etc.?	1	0
HOME-C09	C27156	C	How often has a family member taken or arranged to take child to any type of museum?	1	2-5
HOME-C10	C27157	C	How often has a family member taken or arranged to take child to any type of musical or theatrical performance within the past year?	1	2-5
HOME-C11	C27158	E	How often does your whole family get together with relatives or friends?	4,5	1-3
HOME-C12	C27159		How much time would you say child spends watching TV on a typical weekday?		
HOME-C13	C27160		How much time would you say child spends watching TV on a typical weekend day?		
HOME-C14	C27162		Does child ever see his or her father, stepfather, or father-figure?		
HOME-C15	C27163		Is this man his/her biological father, stepfather, or father-figure?		
HOME-C16	C27164		What is his relationship to you?		
HOME-C17	C27166	E	How often does child spend time with his/her father, stepfather, or father-figure?	1,2	3-7
HOME-C18	C27167	E	How often does child spend time with his/her father, stepfather, or father-figure in outdoor activities?	1,2	3-7
HOME-C19	C27168	E	How often does child eat a meal with both mother and father?	1,2	3-7
HOME-C20	C27170	C	When your family watches TV, do you or (father) discuss programs with him/her?		
HOME-C21A	C27171		How close does child feel toward you?		
HOME-C21B	C27173		How close does child feel toward his/her biological father?		

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale—used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

**Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 6-9 years (continued)**

Q Name	Ref. #	Scale	Question Text	Recode	
				1	0
HOME-C21D	C27175		How close does child feel toward his/her stepfather?		
HOME-C22B-01	C27177.00	E**	Mother response to tantrum-Grounding	1	
HOME-C22B-02	C27177.01	E**	Mother response to tantrum-Spanking		0
HOME-C22B-03	C27177.02	E**	Mother response to tantrum-Talk with child	1	
HOME-C22B-04	C27177.03	E**	Mother response to tantrum-Give child a household chore	1	
HOME-C22B-05	C27177.04	E**	Mother response to tantrum-Ignore it	1	
HOME-C22B-06	C27177.05	E**	Mother response to tantrum-Send child to room	1	
HOME-C22B-07	C27177.06	E**	Mother response to tantrum-Take away allowance	1	
HOME-C22B-08	C27177.07	E**	Mother response to tantrum-Take away TV, phone or other privileges	1	
HOME-C22B-10	C27177.08	E**	Mother response to tantrum-Short time-out	1	
HOME-C22B-09	C27177.09	E**	Mother response to tantrum-Other (specify)	Non-harsh	harsh
HOME-C23A	C27178		Low grades-How likely would you be to contact his or her teacher or principal?		
HOME-C23B	C27179		Low grades-How likely would you be to lecture the child?		
HOME-C23C	C27180		Low grades-How likely would you be to keep a closer eye on child's activities?		
HOME-C23D	C27181		Low grades-How likely would you be to punish child?		
HOME-C23E	C27182		Low grades-How likely would you be to talk with child?		
HOME-C23F	C27183		Low grades-How likely would you be to see child improves on his/her own?		
HOME-C23G	C27184		Low grades-How likely would you be to tell child to study more?		
HOME-C23H	C27185		Low grades-How likely would you be to help child with his/her homework more?		
HOME-C23I	C27186		Low grades-How likely would you be to limit non-school activities?		
HOME-C23J	C27187		Low grades-How likely would you be to do something else?		
HOME-C24A	C27189	E	How many times in the past week have you had to spank child?	0,1	>=2
HOME-C24B	C27190		How many times in the past week have you grounded child?		
HOME-C24C	C27191		How many times in the past week have you taken away TV or other privileges?		
HOME-C24D	C27192		How many times in the past week have you praised child for doing something worthwhile?		
HOME-C24E	C27193		How many times in the past week have you taken away his/her allowance?		
HOME-C24F	C27194		How many times in the past week have you shown child physical affection?		
HOME-C24G	C27195		How many times in the past week have you sent child to his/her room?		

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale—used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

**Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 6-9 years (continued)**

Q Name	Ref. #	Scale	Question Text	Recode	
				1	0
HOME-C24H	C27196		How many times in the past week have you told another adult something positive about child?		
CSOB-1C	C25801		Interviewer: Did you observe child and his/her mother together at any time?		
CSOB-2C	C25802	E	Interviewer: Mother encouraged child to contribute to the conversation?	1	0
CSOB-3C	C25803	E	Interviewer: Mother answered child's questions or requests verbally?	1	0
CSOB-4C	C25804	E	Interviewer: Mother conversed with child excluding scolding or suspicious comments?	1	0
CSOB-5C	C25805	E	Interviewer: Mother introduced interviewer to child by name?	1	0
CSOB-6C	C25806	E	Interviewer: Mother's voice conveyed positive feeling about child?	1	0
CSOB-7C	C25807	C	Interviewer: Interior of the home is dark or perceptually monotonous?	0	1
CSOB-8C	C25808	C	Interviewer: All visible rooms of the house/apartment are reasonably clean?	1	0
CSOB-9C	C25809	C	Interviewer: All visible rooms of the house/apartment are minimally cluttered?	1	0
CSOB-10C	C25810	C	Interviewer: Building has no dangerous structural or health hazards within a school-ager's range.	1	0

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale; used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

### Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 10-14 years

Q Name	Ref #	Scale	Question Text	Recode	
				1	0
HOME-D01	C272197	C	How many books does child have?	4	1-3
HOME-D02A	C272198	E	How often is child expected to make his/her own bed?	2-5	else
HOME-D02B	C272199	E	How often is child expected to clean his/her own room?	2-5	else
HOME-D02C	C272200	E	How often is child expected to pick up after himself/herself?	2-5	else
HOME-D02D	C272201	E	How often is child expected to keep shared living areas clean and straight?	2-5	else
HOME-D02E	C272202	E	How often is child expected to do routine chores?	2-5	else
HOME-D02F	C272203	E	How often is child expected to help manage his/her own time?	2-5	else
HOME-D03	C272204	C	Is there a musical instrument that child can use here at home?	1	0
HOME-D04	C272205	C	Does your family get a daily newspaper?	1	0
HOME-D05	C272206	C	How often does child read for enjoyment?	1,2	3-5
HOME-D06	C272207	C	Does your family encourage child to start and keep doing hobbies?	1	0
HOME-D07	C272208	C	Does child get special lessons or belong to any organization that encourages activities such as sports, music, art, dance, drama, etc.?	1	0
HOME-D08	C272209	C	How often has any family member taken or arranged to take child to any type of museum?	1	2-5
HOME-D09	C272210	C	How often has a family member taken or arranged to take child to any type of musical or theatrical performance within the past year?	1	2-5
HOME-D10	C272211	E	How often does your whole family get together with relatives or friends?	4,5	1-3
HOME-D11	C272212		How much time would you say child spends watching TV on a typical weekday?		
HOME-D12	C272213		How much time would you say child spends watching TV on a typical weekend day?		
HOME-D13	C272215		Does child ever see his or her father, stepfather, or father-figure?		
HOME-D14	C272216		Is this man his/her biological father, stepfather, or father-figure?		
HOME-D15	C272218		What is his relationship to you?		
HOME-D16	C272219	E	How often does child spend time with his/her father, stepfather, or father-figure?	1,2	3-7
HOME-D17	C272220	E	How often does child spend time with his/her father, stepfather, or father-figure in outdoor activities?	1-3	4-7, 98
HOME-D18	C272221	E	How often does child eat a meal with both mother and father?	1,2	3-7
HOME-D19	C272223	C	When your family watches TV together, do you or child's father (or stepfather or father-figure) discuss TV programs with him/her?	1	0
HOME-D20A	C272224		How close does child feel toward you?		

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale; used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

**Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 10-14 years (continued)**

Q Name	Ref #	Scale	Question Text	Recode	
				1	0
HOME-D20B	C272226		How close does child feel toward his/her biological father?		
HOME-D20D	C272228		How close does child feel toward his/her stepfather?		
HOME-D21B-01	C272230.00	E**	Mother response to tantrum-Grounding	1	
HOME-D21B-02	C272230.01	E**	Mother response to tantrum-Spanking		0
HOME-D21B-03	C272230.02	E**	Mother response to tantrum-Talk with child	1	
HOME-D21B-04	C272230.03	E**	Mother response to tantrum-Give child a household chore	1	
HOME-D21B-05	C272230.04	E**	Mother response to tantrum-Ignore it	1	
HOME-D21B-06	C272230.05	E**	Mother response to tantrum-Send child to room	1	
HOME-D21B-07	C272230.06	E**	Mother response to tantrum-Take away allowance	1	
HOME-D21B-08	C272230.07	E**	Mother response to tantrum-Take away TV, phone or other privileges	1	
HOME-D21B-10	C272230.08	E**	Mother response to tantrum-Short time-out	1	
HOME-D21B-09	C272230.09	E**	Mother response to tantrum-Other (specify)	non-harsh	harsh
HOME-D22A	C272231		If child brought home a report card with grades lower than expected, Low grades-How likely would you be to contact his or her teacher or principal?		
HOME-D22B	C272232		Low grades-How likely would you be to lecture the child?		
HOME-D22C	C272233		Low grades-How likely would you be to keep a closer eye on child's activities?		
HOME-D22D	C272234		Low grades-How likely would you be to punish child?		
HOME-D22E	C272235		Low grades-How likely would you be to talk with child?		
HOME-D22F	C272236		Low grades-How likely would you be to see child improves on his/her own?		
HOME-D22G	C272237		Low grades-How likely would you be to tell child to study more?		
HOME-D22H	C272238		Low grades-How likely would you be to help child with his/her homework more?		
HOME-D22I	C272239		Low grades-How likely would you be to limit non-school activities?		
HOME-D22J	C272240		Low grades-How likely would you be to do something else?		
HOME-D23A	C272242	E	How many times in the past week have you had to spank child?	0,1	>=2
HOME-D23B	C272243		How many times in the past week have you grounded child?		
HOME-D23C	C272244		How many times in the past week have you taken away TV or other privileges?		
HOME-D23D	C272245		How many times in the past week have you praised child for doing something worthwhile?		

E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale; used in scoring other item(s), \*\* If any harsh response in this series, then item score=0.

**Appendix A-2. The NLSY79 HOME scales and item recodes, 2002: Children age 10-14 years (continued)**

Q Name	Ref #	Scale	Question Text	Recode	
				1	0
HOME-D23E	C272246		How many times in the past week have you taken away his/her allowance?		
HOME-D23F	C272247		How many times in the past week have you shown child physical affection?		
HOME-D23G	C272248		How many times in the past week have you sent child to his/her room?		
HOME-D23H	C272249		How many times in the past week have you told another adult something positive about child?		
CSOB-1C	C25801		Interviewer: Did you observe child and his/her mother together at any time?	1	0
CSOB-2C	C25802	E	Interviewer: Mother encouraged child to contribute to the conversation?	1	0
CSOB-3C	C25803	E	Interviewer: Mother answered child's questions or requests verbally?	1	0
CSOB-4C	C25804	E	Interviewer: Mother conversed with child excluding scolding or suspicious comments?	1	0
CSOB-5C	C25805	E	Interviewer: Mother introduced interviewer to child by name?	1	0
CSOB-6C	C25806	E	Interviewer: Mother's voice conveyed positive feeling about child?	1	0
CSOB-7C	C25807	C	Interviewer: Interior of the home is dark or perceptually monotonous?	0	1
CSOB-8C	C25808	C	Interviewer: All visible rooms of the house/apartment are reasonably clean?	1	0
CSOB-9C	C25809	C	Interviewer: All visible rooms of the house/apartment are minimally cluttered?	1	0
CSOB-10C	C25810	C	Interviewer: Building has no potentially dangerous structural or health hazards within a school-aged child's range.	1	0

Note: All HOME interviewer observation items (CSOB) are NOT read to the mother but completed by the interviewer at the conclusion of the Child Supplement. E = Emotional Support, C = Cognitive Stimulation, \*Item not part of scale; used in scoring other item(s), \*\* If any harsh response in this series, then item score=0

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**APPENDIX B. HOW MY INFANT/CHILD ACTS:  
COMPOSITION OF THE TEMPERAMENT SCALES**

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**Appendix B. How My Child Acts: Composition of the Temperament Scales**

Scale	Age in Mos	Q# 1986-98	Q# 2000	Q# 2002	Description	2002 Ref #
Activity						
A	0-11	A01	ACT-A01	NA	Squirms etc. during feeding	NA
A	0-11	A02	ACT-A02	NA	Waves arms during feeding	NA
A	0-11	A03	ACT-A03	NA	Moves in crib	NA
Predictability						
A	0-11	A04	ACT-A04	NA	Sleepy at same time	NA
A	0-11	A05	ACT-A05	NA	Hungry at same time	NA
A	0-11	A06	ACT-A06	NA	Wakes in same mood	NA
Fearfulness						
A	0-11	A07	ACT-A07	NA	Cries with strangers	NA
A	0-11	A08	ACT-A08	NA	Afraid w/ strange animals	NA
A	0-11	A09	ACT-A09	NA	Upset when you leave	NA
A	0-11	A10	ACT-A10	NA	Cries at Dr./nurse	NA
B	12-23	B01	ACT-B01	ACT-B01	Cries with strangers	C27254
B	12-23	B02	ACT-B02	ACT-B02	Upset w/ strange animals	C27255
B	12-23	B03	ACT-B03	ACT-B03	Upset when you leave	C27256
B	12-23	B04	ACT-B04	ACT-B04	Cries at Dr./nurse	C27257
Positive Affect						
A	0-11	A11	ACT-A11	NA	Smiles when you play	NA
A	0-11	A12	ACT-A12	NA	Smiles while playing alone	NA
A	0-11	A13	ACT-A13	NA	Smiles/laughs in bath	NA
B	12-23	B05	ACT-B05	ACT-B05	Smiles when you play	C27258
B	12-23	B06	ACT-B06	ACT-B06	Smiles while playing alone	C27259
B	12-23	B07	ACT-B07	ACT-B07	Smiles/laughs in bath	C27260
Compliance						
C	24-83	C01	ACT-C01	ACT-C01	Child resists eating meals	C27265
C	24-83	C02	ACT-C02	ACT-C02	Child obeys when told to eat	C27266
C	24-83	C03	ACT-C03	ACT-C03	Child resists going to bed	C27267
C	24-83	C04	ACT-C04	ACT-C04	Child obeys going to bed	C27268
C	24-83	C05	ACT-C05	ACT-C05	Child protests TV rules	C27269
C	24-83	C06	ACT-C06	ACT-C06	Child obeys TV rules	C27270
Insecure Attachment						
C	24-83	C13	ACT-C13	ACT-C13	Trouble soothing	C27277
C	24-83	C14	ACT-C14	ACT-C14	Stays close when playing	C27278
C	24-83	C15	ACT-C15	ACT-C15	Copy your actions	C27279
C	24-83	C16	ACT-C16	ACT-C16	Upset when you leave	C27280
C	24-83	C17	ACT-C17	ACT-C17	Child is demanding	C27281
C	24-83	C18	ACT-C18	ACT-C18	Child empathetic	C27282
C	24-83	C19	ACT-C19	ACT-C19	Wants to help with things	C27283

**Appendix B. Temperament Scales**

Scale	Age in Mos	Q# 1986-98	Q# 2000	Q# 2002	Description	2002 Ref #
Sociability						
C	48-83	CSEV1A	CSEV-1A	CSEV-1A	Child attitude toward tests	C26437
C	48-83	CSEV1B	CSEV-1B	CSEV-1B	Rapport w/ interviewer	C26438
C	48-83	CSEV1C	CSEV-1C	CSEV-1C	Perseverance/persistence	C26439
Difficulty Composite – Abbreviated						
A	0-11	A04	ACT-A04	NA	Sleepy at same time	NA
A	0-11	A05	ACT-A05	NA	Hungry a same time	NA
A	0-11	A06	ACT-A06	NA	Wakes in same mood	NA
A	0-11	A07	ACT-A07	NA	Cries with strangers	NA
A	0-11	A08	ACT-A08	NA	Upset w/ strange animals	NA
A	0-11	A09	ACT-A09	NA	Upset when you leave	NA
A	0-11	A10	ACT-A10	NA	Cries for Dr./nurse	NA
A	0-11	A11	ACT-A11	NA	Smiles when you play	NA
A	0-11	A12	ACT-A12	NA	Smiles while playing alone	NA
A	0-11	A13	ACT-A13	NA	Smiles/laughs in bath	NA
A	0-11	A14	ACT-A14	NA	Loud sound	NA
A	0-11	A15	ACT-A15	NA	Trouble soothing	NA
A	0-11	A16	ACT-A16	NA	Fussy	NA
A	0-11	A17	ACT-A17	NA	Cry and fuss	NA
B	12-23	B01	ACT-B01	ACT-B01	Cries with strangers	C27254
B	12-23	B02	ACT-B02	ACT-B02	Upset w/ strange animals	C27255
B	12-23	B03	ACT-B03	ACT-B03	Upset when left alone	C27256
B	12-23	B04	ACT-B04	ACT-B04	Cries for Dr./nurse	C27257
B	12-23	B05	ACT-B05	ACT-B05	Smiles when you play	C27258
B	12-23	B06	ACT-B06	ACT-B06	Smiles while playing alone	C27259
B	12-23	B07	ACT-B07	ACT-B07	Smiles/laughs in bath	C27260
B	12-23	B08	ACT-B08	ACT-B08	Upset by loud sound	C27261
B	12-23	B09	ACT-B09	ACT-B09	Trouble soothing	C27262
B	12-23	B10	ACT-B10	ACT-B10	Fussy during day	C27263
B	12-23	B11	ACT-B11	ACT-B11	Cry and fuss compared	C27264
Negative Hedonic Tone Composite						
A	0-11	A07	ACT-A07	NA	Cries with strangers	NA
A	0-11	A08	ACT-A08	NA	Upset w/ strange animals	NA
A	0-11	A09	ACT-A09	NA	Upset when you leave	NA
A	0-11	A10	ACT-A10	NA	Cries for Dr./nurse	NA
A	0-11	A11	ACT-A11	NA	Smiles when you play	NA
A	0-11	A12	ACT-A12	NA	Smiles while playing alone	NA
A	0-11	A13	ACT-A13	NA	Smiles/laughs in bath	NA
A	0-11	A14	ACT-A14	NA	Loud sound	NA
A	0-11	A15	ACT-A15	NA	Trouble soothing	NA
A	0-11	A16	ACT-A16	NA	Fussy	NA

**Appendix B. Temperament Scales**

Scale	Age in Mos	Q# 1986-98	Q# 2000	Q# 2002	Description	2002 Ref #
A	0-11	A17	ACT-A17	NA	Cry and fuss	NA
B	12-23	B01	ACT-B01	ACT-B01	Cries with strangers	C27254
B	12-23	B02	ACT-B02	ACT-B02	Upset w/ strange animals	C27255
B	12-23	B03	ACT-B03	ACT-B03	Upset when you leave	C27256
B	12-23	B04	ACT-B04	ACT-B04	Cries for Dr./nurse	C27257
B	12-23	<b>B05</b>	<b>ACT-B05</b>	<b>ACT-B05</b>	Smiles when you play	C27258
B	12-23	<b>B06</b>	<b>ACT-B06</b>	<b>ACT-B06</b>	Smiles while playing alone	C27259
B	12-23	<b>B07</b>	<b>ACT-B07</b>	<b>ACT-B07</b>	Smiles/laughs in bath	C27260
B	12-23	B08	ACT-B08	ACT-B08	Upset by loud sound	C27261
B	12-23	B09	ACT-B09	ACT-B09	Trouble soothing	C27262
B	12-23	B10	ACT-B10	ACT-B10	Fussy during day	C27263
B	12-23	B11	ACT-B11	ACT-B11	Cry and fuss compared	C27264
Friendliness Composite Abbreviation						
A	0-11	<b>A14</b>	<b>ACT-A14</b>	NA	Upset by loud sound	NA
A	0-11	<b>A15</b>	<b>ACT-A15</b>	NA	Trouble soothing	NA
A	0-11	<b>A16</b>	<b>ACT-A16</b>	NA	Fussy during day	NA
A	0-11	<b>A17</b>	<b>ACT-A17</b>	NA	Cry and fuss compared	NA
B	12-23	<b>B08</b>	<b>ACT-B08</b>	<b>ACT-B08</b>	Upset by loud sound	C27261
B	12-23	<b>B09</b>	<b>ACT-B09</b>	<b>ACT-B09</b>	Trouble soothing	C27262
B	12-23	<b>B10</b>	<b>ACT-B10</b>	<b>ACT-B10</b>	Fussy during day	C27263
B	12-23	<b>B11</b>	<b>ACT-B11</b>	<b>ACT-B11</b>	Cry and fuss compared	C27264

Notes:

From 1986-1998, all questions were administered in the Mother Supplement self-report booklet. In 2000, questions were administered in the CAPI Child Supplement for children under age 4.

**Bold question numbers indicate that the item is reversed in scoring.**



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**APPENDIX C. MOTOR & SOCIAL  
DEVELOPMENT ASSESSMENT**

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**Appendix C. Motor & Social Development Assessment: Raw, Percentile, and Standard Scores by Age and Sex of Child**

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
0-3	0	14	67	9	65	12	66
0-3	1	35	73	33	72	35	73
0-3	2	49	75	57	76	53	76
0-3	3	60	77	82	79	70	78
0-3	4	90	80	118	82	103	81
0-3	5	155	85	179	86	166	85
0-3	6	223	89	267	91	243	90
0-3	7	277	91	346	94	310	93
0-3	8	348	94	431	97	386	96
0-3	9	440	98	558	102	496	100
0-3	10	527	101	667	106	593	104
0-3	11	595	104	755	110	670	107
0-3	12	699	108	852	116	771	111
0-3	13	827	114	925	122	873	117
0-3	14	916	121	961	126	937	123
0-3	15	975	130	985	133	980	131
4-6	0	0	0	0	0	0	0
4-6	1	5	61	0	0	3	58
4-6	2	9	65	0	0	5	61
4-6	3	14	67	5	61	10	65
4-6	4	38	73	46	75	42	74
4-6	5	142	84	127	83	134	83
4-6	6	335	94	228	89	283	91
4-6	7	528	101	389	96	461	99
4-6	8	679	107	576	103	629	105
4-6	9	797	112	708	108	753	110
4-6	10	873	117	824	114	849	115
4-6	11	924	122	909	120	918	121
4-6	12	967	128	944	124	955	126
4-6	13	985	133	970	128	979	130

**Appendix C: Motor & Social Development Assessment: Scores by Age and Sex of Child (continued)**

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
4-6	14	991	135	985	133	988	134
4-6	15	996	139	995	139	995	139
7-9	0	5	61	0	0	3	58
7-9	1	9	65	9	65	10	65
7-9	2	9	65	18	69	14	67
7-9	3	9	65	27	71	19	69
7-9	4	28	71	41	74	35	73
7-9	5	51	75	59	76	55	76
7-9	6	84	79	104	81	94	80
7-9	7	134	83	171	86	153	85
7-9	8	245	90	252	90	249	90
7-9	9	356	94	365	95	361	95
7-9	10	440	98	477	99	459	98
7-9	11	584	103	609	104	596	104
7-9	12	718	109	744	110	730	109
7-9	13	820	114	838	115	829	114
7-9	14	917	121	924	121	921	121
7-9	15	982	131	982	131	982	131
10-12	0	0	0	0	0	0	0
10-12	1	3	60	4	60	3	60
10-12	2	17	68	8	64	13	66
10-12	3	33	72	8	64	22	70
10-12	4	53	76	12	66	35	73
10-12	5	76	79	28	71	55	76
10-12	6	113	82	62	77	90	80
10-12	7	166	85	102	81	137	84
10-12	8	235	89	163	85	203	88
10-12	9	354	94	264	91	315	93
10-12	10	493	100	390	96	447	98
10-12	11	609	104	553	102	584	103

**Appendix C: Motor & Social Development Assessment: Scores by Age and Sex of Child (continued)**

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
10-12	12	722	109	715	109	719	109
10-12	13	818	114	829	114	823	114
10-12	14	911	120	923	121	916	121
10-12	15	984	132	984	132	984	132
13-15	0	4	60	0	0	2	57
13-15	1	8	64	0	0	4	60
13-15	2	8	64	0	0	4	60
13-15	3	21	69	9	65	15	67
13-15	4	42	74	23	70	33	72
13-15	5	63	77	42	74	52	76
13-15	6	91	80	87	80	89	80
13-15	7	136	84	147	84	142	84
13-15	8	207	88	206	88	207	88
13-15	9	302	92	294	92	298	92
13-15	10	434	97	404	96	420	97
13-15	11	587	103	551	102	570	103
13-15	12	727	109	711	108	720	109
13-15	13	868	117	844	115	857	116
13-15	14	959	126	950	125	954	125
13-15	15	988	134	996	139	992	136
16-18	0	0	0	0	0	0	0
16-18	1	0	0	0	0	0	0
16-18	2	9	65	0	0	5	61
16-18	3	36	73	0	0	18	68
16-18	4	59	76	0	0	28	71
16-18	5	77	79	0	0	37	73
16-18	6	116	82	29	71	71	78
16-18	7	201	87	94	80	145	84
16-18	8	344	94	195	87	266	91
16-18	9	541	102	415	97	474	99

**Appendix C: Motor & Social Development Assessment: Scores by Age and Sex of Child (continued)**

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
16-18	10	742	110	659	106	699	108
16-18	11	879	118	809	113	843	115
16-18	12	947	124	894	119	920	121
16-18	13	978	130	940	123	957	126
16-18	14	991	135	976	130	983	132
16-18	15	996	139	996	140	996	139
19-21	0	0	0	0	0	0	0
19-21	1	4	60	0	0	2	57
19-21	2	8	64	0	0	4	60
19-21	3	8	64	0	0	4	60
19-21	4	41	74	0	0	21	69
19-21	5	107	81	17	68	63	77
19-21	6	223	89	120	82	174	86
19-21	7	418	97	298	92	359	95
19-21	8	608	104	496	100	553	102
19-21	9	739	110	655	106	699	108
19-21	10	826	114	772	111	799	113
19-21	11	897	119	879	118	888	118
19-21	12	951	125	935	123	943	124
19-21	13	971	128	957	126	965	127
19-21	14	984	132	974	129	979	130
19-21	15	996	140	992	136	994	137
22-24	0	16	68	14	67	15	67
22-24	1	80	79	47	75	65	77
22-24	2	187	87	135	83	164	85
22-24	3	318	93	286	92	302	92
22-24	4	425	97	397	96	413	97
22-24	5	516	101	491	100	504	100
22-24	6	639	105	579	103	612	104
22-24	7	765	111	663	106	719	109

**Appendix C: Motor & Social Development Assessment: Scores by Age and Sex of Child (continued)**

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
22-24	8	857	116	776	111	820	114
22-24	9	921	121	860	116	893	119
22-24	10	964	127	907	120	938	123
22-24	11	984	132	935	123	962	127
22-24	12	996	140	968	128	983	132
22-24	13	999	146	991	135	996	140
22-24	14	999	146	991	135	996	140
22-24	15	999	146	996	139	998	143
25-27	0	14	67	5	61	9	65
25-27	1	45	74	19	69	32	72
25-27	2	93	80	57	76	76	78
25-27	3	177	86	118	82	149	84
25-27	4	257	90	189	87	224	89
25-27	5	319	93	236	89	279	91
25-27	6	429	97	292	92	363	95
25-27	7	588	103	392	96	493	100
25-27	8	713	108	542	102	631	105
25-27	9	779	112	685	107	733	109
25-27	10	845	115	759	111	804	113
25-27	11	912	120	835	115	874	117
25-27	12	956	126	910	120	934	123
25-27	13	982	131	953	125	968	128
25-27	14	991	135	981	131	986	133
25-27	15	996	139	999	146	998	142
28-30	0	12	66	0	0	6	62
28-30	1	30	72	0	0	15	67
28-30	2	54	76	12	66	33	72
28-30	3	90	80	35	73	62	77
28-30	4	126	83	63	77	94	80
28-30	5	169	86	92	80	130	83

### Appendix C: Motor & Social Development Assessment: Scores by Age and Sex of Child (continued)

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
28-30	6	223	89	120	82	171	86
28-30	7	301	92	161	85	229	89
28-30	8	385	96	224	89	303	92
28-30	9	507	100	322	93	412	97
28-30	10	699	108	465	99	579	103
28-30	11	831	114	644	106	735	109
28-30	12	885	118	788	112	835	115
28-30	13	952	125	891	118	920	121
28-30	14	994	138	966	127	980	131
28-30	15	999	146	995	138	997	141
31-34	0	0	0	0	0	0	0
31-34	1	4	60	18	69	11	66
31-34	2	16	68	40	74	28	71
31-34	3	27	71	44	74	36	73
31-34	4	39	73	44	74	41	74
31-34	5	62	77	48	75	55	76
31-34	6	95	80	59	76	76	79
31-34	7	131	83	81	79	105	81
31-34	8	191	87	124	83	157	85
31-34	9	275	91	193	87	233	89
31-34	10	355	94	289	92	321	93
31-34	11	504	100	408	97	455	98
31-34	12	684	107	562	102	621	105
31-34	13	817	114	734	109	774	111
31-34	14	920	121	888	118	903	119
31-34	15	981	131	978	130	980	131
35-38	0	0	0	4	60	2	57
35-38	1	0	0	8	64	4	60
35-38	2	0	0	12	66	6	62
35-38	3	0	0	17	68	7	63

**Appendix C: Motor & Social Development Assessment: Scores by Age and Sex of Child (continued)**

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
35-38	4	3	60	17	68	13	67
35-38	5	10	65	17	68	9	65
35-38	6	21	69	17	68	19	69
35-38	7	44	74	17	68	32	72
35-38	8	71	78	30	72	52	76
35-38	9	105	81	71	78	89	80
35-38	10	182	86	117	82	154	85
35-38	11	307	92	175	86	248	90
35-38	12	459	98	267	91	373	95
35-38	13	649	106	430	97	550	102
35-38	14	845	115	667	106	765	111
35-38	15	966	127	896	119	935	123
39-42	0	0	0	0	0	0	0
39-42	1	5	61	0	0	2	57
39-42	2	14	67	0	0	6	62
39-42	3	23	70	0	0	10	65
39-42	4	32	72	0	0	15	67
39-42	5	41	74	0	0	19	69
39-42	6	45	75	0	0	21	69
39-42	7	45	75	8	64	25	71
39-42	8	45	75	20	69	31	72
39-42	9	59	76	31	72	44	74
39-42	10	99	81	66	77	81	79
39-42	11	180	86	120	82	148	84
39-42	12	297	92	213	88	253	90
39-42	13	482	99	396	96	436	98
39-42	14	712	108	640	105	673	107
39-42	15	910	120	884	118	896	119
43-47	0	0	0	0	0	0	0
43-47	1	0	0	0	0	0	0

**Appendix C: Motor & Social Development Assessment: Scores by Age and Sex of Child (continued)**

Child Age in Months	Raw Score	Boys		Girls		All Children	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
43-47	2	3	59	0	0	2	55
43-47	3	6	62	0	0	3	59
43-47	4	6	62	0	0	3	59
43-47	5	9	65	0	0	5	61
43-47	6	13	67	3	60	8	64
43-47	7	16	68	7	63	12	66
43-47	8	32	72	14	67	23	70
43-47	9	54	76	27	71	40	74
43-47	10	73	78	53	76	63	77
43-47	11	117	82	85	79	101	81
43-47	12	195	87	126	83	160	85
43-47	13	318	93	224	89	272	91
43-47	14	594	104	448	98	522	101
43-47	15	896	119	800	113	849	115

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**APPENDIX D. CHILD BEHAVIOR  
PROBLEMS INDEX**

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### Appendix D-1. NLSY79 Child Behavior Problems Index: Composition of the BPI subscales, 2002

Subscale	External	Internal	Item Description	MS Q#	C #
ANTISOCIAL	X		Cheats or tells lies	BPI-04	C27376
ANTISOCIAL	X		Bullies or is cruel/mean to others	BPI-09	C27381
ANTISOCIAL			Does not feel sorry for misbehaving	BPI-11	C27383
ANTISOCIAL	X		Breaks things deliberately <12 yrs	BPI-22	C27394
ANTISOCIAL	X		Disobedient at school >5 yrs	BPI-31	C27404
ANTISOCIAL	X		Trouble getting along w/ teachers >5 yrs	BPI-32	C27405
ANXIOUS/ DEPRESSED	X		Sudden changes in mood/feeling	BPI-01	C27373
ANXIOUS/ DEPRESSED		X	Feels/complains no one loves him/her	BPI-02	C27374
ANXIOUS/ DEPRESSED	X	X	Too fearful or anxious	BPI-05	C27377
ANXIOUS/ DEPRESSED		X	Feels worthless or inferior	BPI-14	C27386
ANXIOUS/ DEPRESSED	X	X	Unhappy, sad or depressed	BPI-20	C27392
DEPENDENT		X	Clings to adults <12 yrs	BPI-23	C27395
DEPENDENT		X	Cries too much <12 yrs	BPI-24	C27396
DEPENDENT		X	Demands a lot of attention <12 yrs	BPI-25	C27397
DEPENDENT		X	Too dependent on others <12 yrs	BPI-26	C27398
HEADSTRONG	X		High strung, tense, nervous	BPI-03	C27375
HEADSTRONG	X		Argues too much	BPI-06	C27378
HEADSTRONG	X		Disobedient at home	BPI-10	C27382
HEADSTRONG	X		Stubborn, sullen, or irritable	BPI-18	C27390
HEADSTRONG	X		Strong temper, loses it easily	BPI-19	C27391
HYPERACTIVE	X		Difficulty concentrating/paying attention	BPI-07	C27379
HYPERACTIVE	X	X	Easily confused/in a fog	BPI-08	C27380
HYPERACTIVE	X		Impulsive – acts without thinking	BPI-13	C27385
HYPERACTIVE	X		Trouble with obsessions, etc.	BPI-16	C27388

**Appendix D-1. NLSY79 Child Behavior Problems Index: Composition of the BPI subscales, 2002 (continued)**

Subscale	External	Internal	Item Description	MS Q#	C #
HYPERACTIVE	X		Restless, overly active, etc.	BPI-17	C27389
PEER PROBLEMS	X		Trouble getting along with others	BPI-12	C27384
PEER PROBLEMS	X		Not liked by other children	BPI-15	C27387
PEER PROBLEMS		X	Withdrawn, not involved with others	BPI-21	C27393
			Feels others are out to get him/her	BPI-27	C27399
			Hangs around w/ kids who get in trouble	BPI-28	C27400
			Is secretive, keeps things to self	BPI-29	C27401
			Worries too much	BPI-30	C27402
Total # items:	20	10		32	

**Appendix D-2a. Behavior Problems Index – Anxious/Depressed Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
4	0	210	88	194	87	202	87
4	1	562	102	545	102	554	102
4	2	791	112	799	113	795	112
4	3	923	121	932	122	927	122
4	4	980	131	982	131	982	131
4	5	996	139	982	131	998	142
5	0	181	86	167	86	174	86
5	1	499	100	490	100	494	100
5	2	735	109	750	110	743	110
5	3	882	118	893	119	888	118
5	4	955	125	953	125	954	125
5	5	990	135	987	133	989	134
6	0	178	86	164	85	171	86
6	1	475	99	477	99	476	99
6	2	711	108	712	108	711	108
6	3	871	117	859	116	865	117
6	4	948	124	943	124	946	124
6	5	990	135	982	131	985	133
7	0	165	85	206	88	185	87
7	1	479	99	533	101	506	100
7	2	722	109	739	110	730	109
7	3	857	116	868	117	863	116
7	4	929	122	944	124	936	123
7	5	980	131	988	134	984	132
8	0	170	86	167	85	169	86
8	1	475	88	480	99	478	99
8	2	695	108	713	108	704	108
8	3	840	115	854	116	847	115

**Appendix D-2a. Behavior Problems Index – Anxious/Depressed Subscale (continued)**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
8	4	931	122	938	123	935	123
8	5	981	131	983	132	982	131
9	0	191	87	199	87	195	87
9	1	489	100	502	100	495	100
9	2	693	108	704	108	699	108
9	3	842	115	852	116	847	115
9	4	924	121	935	123	930	122
9	5	979	131	984	132	981	131
10	0	173	86	172	86	173	86
10	1	470	99	475	99	473	99
10	2	690	107	683	107	686	107
10	3	842	115	825	114	833	114
10	4	931	122	928	122	929	122
10	5	983	132	983	132	983	132
11	0	175	86	178	86	177	86
11	1	477	99	473	99	475	99
11	2	691	107	670	107	681	107
11	3	827	114	830	114	828	114
11	4	922	121	940	123	930	122
11	5	985	132	985	133	985	132
12	0	196	87	194	87	195	87
12	1	516	101	517	101	516	101
12	2	710	108	729	109	720	109
12	3	826	114	860	116	843	115
12	4	917	121	942	124	930	122
12	5	981	131	990	135	985	133
13	0	197	87	172	86	185	87
13	1	516	101	478	99	498	100

**Appendix D-2a. Behavior Problems Index – Anxious/Depressed Subscale (continued)**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile Score	Standard Score	Percentile Score	Standard Score	Percentile Score	Standard Score
13	2	715	108	699	108	707	108
13	3	840	115	842	115	841	115
13	4	922	121	926	122	924	121
13	5	978	130	978	130	978	130
14	0	223	89	183	86	204	88
14	1	567	103	499	100	534	101
14	2	763	111	700	108	733	109
14	3	878	117	823	114	852	116
14	4	944	124	913	120	929	122
14	5	984	132	974	129	979	131
15	0	231	89	190	87	212	88
15	1	596	104	502	100	551	102
15	2	785	112	708	108	748	110
15	3	876	117	835	115	856	116
15	4	947	124	912	120	930	122
15	5	991	135	973	129	982	131

**Appendix D-2b. Behavior Problems Index – Antisocial Subscale: Raw, Percentile, and Standard Scores by Age, Sex, and School Experience of Child**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
4	0	233	89	167	85	307	92	279	91	269	91	223	89
4	1	585	103	500	100	732	109	680	107	655	106	591	103
4	2	796	112	759	111	899	119	877	117	846	115	818	114
4	3	935	123	917	121	972	129	968	128	953	125	946	124
4	4	990	135	992	136	998	143	992	136	994	138	992	136
4	5	990	135			998	143			994	138		
4	6	990	135			998	143			994	138		
5	0	240	89	207	88	281	91	229	89	261	90	217	88
5	1	588	103	563	102	680	107	583	103	636	105	572	103
5	2	777	111	813	113	851	116	819	114	816	113	817	114
5	3	898	119	951	125	934	123	965	127	917	121	957	126
5	4	962	127	995	138	977	130	965	127	969	128	997	140
5	5	988	134			993	136			991	135		
5	6	996	140			998	143			997	141		
6	0	212	88			290	92			250	90		
6	1	548	102			676	107			611	104		
6	2	761	111			848	115			803	113		
6	3	885	118			945	124			913	120		
6	4	942	124			977	130			960	126		
6	5	972	129			994	138			983	132		
6	6	990	135			994	138			995	138		
7	0	221	88			293	92			256	90		
7	1	565	102			704	108			634	105		
7	2	756	110			870	117			811	113		
7	3	855	116			948	124			900	119		
7	4	923	121			988	134			955	125		
7	5	973	129			996	139			984	132		

## Appendix D-2b. Behavior Problems Index – Antisocial Subscale (continued)

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
7	6	994	138			999	145			996	140		
8	0	251	90			288	92			270	91		
8	1	601	104			684	107			643	105		
8	2	767	111			846	115			807	113		
8	3	890	118			940	123			916	121		
8	4	966	127			984	132			976	130		
8	5	988	134			995	138			992	136		
8	6	996	139			995	138			998	143		
9	0	254	90			318	93			286	92		
9	1	613	104			746	110			680	107		
9	2	788	112			897	119			843	115		
9	3	899	119			954	125			927	122		
9	4	957	126			982	131			969	128		
9	5	984	132			996	139			990	135		
9	6	997	141			996	139			999	145		
10	0	257	90			339	94			299	92		
10	1	630	105			774	111			703	108		
10	2	804	113			901	119			853	116		
10	3	895	119			957	126			927	122		
10	4	948	124			988	134			968	128		
10	5	982	131			996	140			989	134		
10	6	999	145			999	146			999	146		
11	0	260	90			339	94			296	92		
11	1	625	105			763	111			689	107		
11	2	787	112			898	119			837	115		
11	3	881	118			964	127			918	121		
11	4	940	123			984	132			959	126		
11	5	978	130			994	138			985	133		

**Appendix D-2b. Behavior Problems Index – Antisocial Subscale (continued)**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
11	6	998	142			994	138			999	145		
12	0	282	91			338	94			311	93		
12	1	653	106			769	111			713	108		
12	2	799	113			912	120			858	116		
12	3	888	118			970	128			930	122		
12	4	943	124			987	133			966	127		
12	5	984	132			997	141			990	135		
13	0	268	91			335	94			299	92		
13	1	644	106			755	110			696	108		
13	2	804	113			884	118			841	115		
13	3	889	118			947	124			916	121		
13	4	951	125			983	132			966	127		
13	5	988	134			999	145			993	137		
14	0	287	92			324	93			305	92		
14	1	670	107			732	109			699	108		
14	2	825	114			867	117			844	115		
14	3	910	120			941	123			925	122		
14	4	960	126			973	129			966	127		
14	5	992	136			992	136			992	136		
15	0	313	93			336	94			324	93		
15	1	710	108			750	110			729	109		
15	2	833	114			870	117			850	116		
15	3	901	119			934	123			917	121		
15	4	955	125			972	129			963	127		
15	5	990	135			993	137			992	136		

**Appendix D-2c. Behavior Problems Index – Dependent Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
4	0	188	87	196	87	192	87
4	1	508	100	510	100	508	100
4	2	737	109	745	110	740	110
4	3	901	119	904	120	903	119
4	4	985	132	974	129	980	131
5	0	192	87	180	86	186	87
5	1	514	101	506	100	510	100
5	2	749	110	763	111	756	110
5	3	900	119	919	121	909	120
5	4	973	129	982	131	978	130
6	0	225	89	210	88	218	88
6	1	579	103	550	102	564	102
6	2	783	112	770	111	776	111
6	3	783	112	770	111	776	111
6	3	907	120	912	120	910	120
6	4	978	130	982	131	980	131
7	0	234	89	236	89	235	89
7	1	589	103	600	104	594	104
7	2	795	112	800	113	798	112
7	3	917	121	921	121	920	121
7	4	978	130	985	132	980	131
8	0	267	91	242	90	255	90
8	1	665	106	614	104	639	105
8	2	854	116	814	113	833	115
8	3	933	122	925	122	928	122
8	4	977	130	983	132	980	131
9	0	261	90	261	90	261	90
9	1	656	106	639	105	647	106

**Appendix D-2c. Behavior Problems Index – Dependent Subscale (continued)**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
9	2	848	115	830	114	839	115
9	3	938	123	943	124	940	123
9	4	985	133	990	135	987	133
10	0	299	92	297	92	298	92
10	1	711	108	683	107	697	108
10	2	868	117	840	115	854	116
10	3	945	124	935	123	940	123
10	4	989	134	982	131	985	133
11	0	289	92	290	92	289	92
11	1	692	108	698	108	694	108
11	2	865	117	870	117	867	117
11	3	953	125	951	125	952	125
11	4	990	135	990	135	990	135

**Appendix D-2d. Behavior Problems Index – Headstrong Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
4	0	118	82	132	83	125	83
4	1	320	93	359	95	339	94
4	2	471	99	533	101	501	100
4	3	618	104	689	107	653	106
4	4	797	112	852	116	823	114
4	5	947	124	969	128	958	126
5	0	104	81	130	83	118	82
5	1	287	92	346	94	318	93
5	2	454	98	508	100	482	99
5	3	615	104	668	106	642	105
5	4	781	112	815	113	798	112
5	5	936	123	940	123	938	123
6	0	110	82	121	82	115	82
6	1	293	92	329	93	311	93
6	2	453	98	510	100	480	99
6	3	613	104	696	108	654	106
6	4	778	111	852	116	815	113
6	5	934	123	957	126	945	124
7	0	111	82	118	82	114	82
7	1	324	93	365	95	344	94
7	2	506	100	579	103	542	102
7	3	650	106	726	109	687	107
7	4	786	112	860	116	822	114
7	5	929	122	967	128	948	124
8	0	115	82	137	84	126	83
8	1	339	94	380	95	359	95
8	2	533	101	574	103	554	102
8	3	688	107	727	109	707	108

**Appendix D-2d. Behavior Problems Index – Headstrong Subscale (continued)**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
8	4	823	114	855	116	840	115
8	5	943	124	960	126	952	125
9	0	112	82	161	85	137	84
9	1	328	93	421	97	375	95
9	2	503	100	589	103	546	102
9	3	653	106	744	110	698	108
9	4	803	113	885	118	844	115
9	5	938	123	970	128	954	125
10	0	112	82	154	85	133	83
10	1	344	94	436	98	390	96
10	2	535	101	640	105	588	103
10	3	682	107	772	111	728	109
10	4	829	114	880	118	855	116
10	5	951	125	965	127	958	126
11	0	123	83	152	85	136	83
11	1	348	94	406	96	374	95
11	2	523	101	602	104	559	102
11	3	673	107	763	111	714	108
11	4	823	114	874	117	847	115
11	5	948	124	960	126	953	125
12	0	148	84	180	86	165	85
12	1	393	96	450	98	422	97
12	2	568	103	625	105	598	104
12	3	711	108	780	112	747	110
12	4	844	115	898	119	872	117
12	5	957	126	973	129	965	127
13	0	124	83	175	86	148	84
13	1	348	94	441	98	392	96
13	2	545	102	602	104	572	103

**Appendix D-2d. Behavior Problems Index – Headstrong Subscale (continued)**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
13	3	699	108	754	110	724	109
13	4	819	114	885	118	850	116
13	5	940	123	967	128	953	125
14	0	153	85	174	86	163	85
14	1	420	97	441	98	431	97
14	2	591	103	610	104	600	104
14	3	724	109	749	110	736	109
14	4	855	116	866	117	860	116
14	5	954	125	960	126	957	126
15	0	181	86	183	86	181	86
15	1	460	98	452	98	455	98
15	2	631	105	615	104	623	105
15	3	759	111	755	110	757	110
15	4	864	116	873	117	868	117
15	5	957	126	962	127	960	126

**Appendix D-2e. Behavior Problems Index – Hyperactive Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
4	0	177	86	192	87	185	87
4	1	455	98	513	100	484	99
4	2	651	106	740	110	694	108
4	3	833	115	884	118	859	116
4	4	958	126	960	126	959	126
4	5	997	141	994	137	995	139
5	0	154	85	190	87	172	86
5	1	407	96	503	100	456	98
5	2	609	104	709	108	660	106
5	3	809	113	843	115	827	114
5	4	938	123	943	124	940	123
5	5	984	132	996	139	990	135
6	0	156	85	212	88	183	86
6	1	421	97	533	101	476	99
6	2	618	104	733	109	674	107
6	3	790	112	872	117	830	114
6	4	919	121	953	125	935	123
6	5	981	131	993	136	987	133
7	0	126	83	209	88	167	85
7	1	366	95	549	102	455	98
7	2	583	103	745	110	663	106
7	3	775	111	873	117	823	114
7	4	902	119	953	125	927	122
7	5	970	128	986	133	978	130
8	0	145	84	198	87	172	86
8	1	393	96	527	101	461	99
8	2	583	103	722	109	653	106
8	3	759	111	843	115	801	113

## Appendix D-2e. Behavior Problems Index – Hyperactive Subscale (continued)

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
8	4	904	120	940	123	922	121
8	5	980	131	990	135	985	133
9	0	151	85	204	88	178	86
9	1	413	97	509	100	461	99
9	2	598	104	709	108	654	106
9	3	756	110	861	116	808	113
9	4	902	119	943	124	922	121
9	5	984	132	984	132	984	132
10	0	160	85	216	88	189	87
10	1	421	97	553	102	488	100
10	2	608	104	740	110	675	107
10	3	782	112	868	117	826	114
10	4	912	120	951	125	932	122
10	5	978	130	987	133	982	131
11	0	160	85	230	89	192	87
11	1	423	97	570	103	490	100
11	2	622	105	757	110	684	107
11	3	782	112	883	118	828	114
11	4	890	118	947	124	916	121
11	5	968	128	980	131	974	129
12	0	181	86	245	90	214	88
12	1	455	98	585	103	523	101
12	2	624	105	768	111	699	108
12	3	789	112	900	119	847	115
12	4	913	120	969	128	942	124
12	5	973	129	997	141	985	133
13	0	190	87	248	90	217	88
13	1	472	99	608	104	537	101
13	2	649	106	789	112	715	109

**Appendix D-2e. Behavior Problems Index – Hyperactive Subscale (continued)**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
13	3	795	112	893	119	841	115
13	4	901	119	956	126	927	122
13	5	972	129	990	135	980	131
14	0	180	86	253	90	215	88
14	1	472	99	611	104	539	101
14	2	673	107	771	111	720	109
14	3	819	114	871	117	845	115
14	4	918	121	939	123	928	122
14	5	979	130	981	131	980	131
15	0	209	88	266	91	237	89
15	1	525	101	627	105	575	103
15	2	713	108	767	111	738	110
15	3	837	115	855	116	846	115
15	4	923	121	928	122	926	122
15	5	982	131	979	130	980	131

**Appendix D-2f. Behavior Problems Index – Peer Conflicts/Withdrawn Subscale: Raw, Percentile, and Standard Scores by Age and Sex of Child**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
4	0	420	97	424	97	422	97
4	1	901	119	908	120	904	120
4	2	979	130	984	132	981	131
4	3	997	141	984	132	999	145
5	0	427	97	425	97	427	97
5	1	911	120	898	119	905	120
5	2	981	131	973	129	977	130
5	3	997	141	973	129	999	145
6	0	409	97	429	97	419	97
6	1	879	118	909	120	894	119
6	2	969	128	979	130	973	129
6	3	999	145	999	145	999	145
7	0	408	97	417	97	412	97
7	1	879	118	896	119	887	118
7	2	966	127	977	130	971	128
7	3	994	138	997	141	996	139
8	0	400	96	403	96	402	96
8	1	859	116	860	116	860	116
8	2	946	124	955	125	950	125
8	3	987	133	997	141	992	136
9	0	388	96	415	97	402	96
9	1	838	115	890	118	864	116
9	2	941	123	971	128	956	126
9	3	991	135	997	141	994	138
10	0	403	96	405	96	404	96
10	1	858	116	870	117	864	116
10	2	948	124	959	126	954	125
10	3	994	137	994	138	994	138

**Appendix D-2f. Behavior Problems Index – Peer Conflicts/Withdrawn Subscale (continued)**

Child Age	Raw Score	Boys		Girls		Total	
		Percentile	Standard	Percentile	Standard	Percentile	Standard
11	0	407	96	411	97	409	97
11	1	867	117	877	117	872	117
11	2	950	125	957	126	953	125
11	3	990	135	991	135	990	134
12	0	393	96	432	97	413	97
12	1	849	115	912	120	882	118
12	2	946	124	977	130	962	127
12	3	989	134	997	141	993	137
13	0	414	97	429	97	421	97
13	0	878	117	900	119	889	118
13	2	956	126	965	127	960	126
13	3	992	136	994	137	993	136
14	0	418	97	429	98	423	97
14	1	884	118	909	120	896	119
14	2	953	125	972	129	962	127
14	3	986	133	992	136	989	134
15	0	421	97	427	97	424	97
15	1	893	119	907	120	900	119
15	2	960	126	971	128	966	127
15	3	988	134	992	136	990	135

**Appendix D-2g. Behavior Problems Index – Total Raw, Percentile, and Standard Scores by Age, Sex, and School Experience of Child**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
4	0	59	77	17	68	71	78	66	77	65	77	42	74
4	1	153	85	67	77	165	85	156	85	159	85	112	82
4	2	235	89	134	83	230	89	213	88	233	89	173	86
4	3	317	93	209	88	313	93	271	91	316	93	240	89
4	4	382	95	275	91	387	96	336	94	384	96	306	92
4	5	437	98	342	94	470	99	459	98	453	98	401	96
4	6	481	99	400	96	569	103	549	102	524	101	476	99
4	7	542	102	425	97	647	106	574	103	593	104	501	100
4	8	607	104	450	98	704	108	615	104	654	106	533	101
4	9	651	106	509	100	751	110	656	106	699	108	583	103
4	10	705	108	609	104	801	113	680	107	752	110	645	106
4	11	766	111	709	108	854	116	722	109	808	113	715	109
4	12	811	113	784	112	884	118	779	112	847	115	781	112
4	13	851	116	842	115	906	120	811	113	878	117	827	114
4	14	891	118	892	119	931	122	837	115	911	120	864	116
4	15	920	121	942	124	951	125	869	117	935	123	905	120
4	16	943	124	967	128	965	127	902	119	954	125	935	123
4	17	960	126	976	130	976	130	943	124	968	128	959	126
4	18	968	128	983	132	982	131	975	129	974	129	979	131
4	19	977	130	983	132	986	133	984	132	981	131	983	132
4	20	987	133	983	132	990	135	992	136	988	134	987	133
4	21	993	137	992	136	994	138	992	136	993	137	996	140
4	22	996	140	992	136	996	140	992	136	996	140	996	140
4	23	998	143	992	136	998	143	992	136	998	143	996	140
4	24	998	143	992	136	998	143	992	136	998	143	996	140
4	25	998	143	992	136	998	143	992	136	998	143	996	140
4	26	998	143	992	136	998	143	992	136	998	143	996	140

**Appendix D-2g. Behavior Problems Index – Total Scores (continued)**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
4	27	998	143			998	143			998	143		
4	28	998	143			998	143			998	143		
5	0	43	74	32	72	51	75	28	71	47	75	30	72
5	1	123	83	113	82	159	85	105	81	142	84	109	81
5	2	181	86	201	87	249	90	174	86	216	88	188	87
5	3	242	90	276	91	326	93	235	89	285	91	257	90
5	4	314	93	351	94	391	96	320	93	354	94	336	94
5	5	370	95	407	96	444	98	375	95	408	97	392	96
5	6	426	97	438	98	516	101	438	98	473	99	438	98
5	7	498	100	475	99	585	103	528	101	543	102	500	100
5	8	561	102	525	101	644	106	590	103	604	104	556	102
5	9	616	104	588	103	691	107	646	106	655	106	615	104
5	10	684	107	675	107	733	109	702	108	709	108	687	107
5	11	747	110	750	110	773	111	750	110	761	111	751	110
5	12	790	112	794	112	816	114	792	112	803	113	793	112
5	13	833	114	826	114	855	116	840	115	844	115	832	114
5	14	869	117	851	116	878	117	889	118	873	117	868	117
5	15	895	119	876	117	899	119	917	121	897	119	895	119
5	16	920	121	895	119	926	122	938	123	923	121	915	121
5	17	942	124	925	122	951	125	958	126	947	124	940	123
5	18	959	126	957	126	964	127	979	131	962	127	968	128
5	19	973	129	976	130	975	129	993	137	974	129	984	132
5	20	981	131	988	134	984	132	993	137	929	131	993	137
5	21	986	133	995	138	989	135	993	137	988	134	997	140
5	22	990	135	995	138	993	137	993	137	992	136	997	140
5	23	996	140	995	138	997	140	993	137	997	140	997	140
5	24	996	140	995	138	997	140	993	137	997	140	997	140
5	25	996	140	995	138	997	140	993	137	997	140	997	140

## Appendix D-2g. Behavior Problems Index – Total Scores (continued)

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
5	26	996	140	995	138	997	140	993	137	997	140	997	140
5	27	996	140			997	140			997	140		
5	28	996	140			997	140			997	140		
6	0	43	74			53	76			48	75		
6	1	126	83			148	84			137	84		
6	2	193	87			222	89			207	88		
6	3	254	90			293	92			274	91		
6	4	323	93			381	95			351	94		
6	5	380	95			465	99			421	97		
6	6	436	98			528	101			482	99		
6	7	500	100			595	104			547	102		
6	8	555	102			650	106			602	104		
6	9	605	104			706	108			654	106		
6	10	652	106			764	111			707	108		
6	11	696	108			795	112			745	110		
6	12	758	110			822	114			788	112		
6	13	818	114			852	116			835	115		
6	14	859	116			881	118			870	117		
6	15	890	118			913	120			902	119		
6	16	918	121			940	123			928	122		
6	17	943	124			954	125			949	124		
6	18	952	125			968	128			959	126		
6	19	960	126			975	128			958	128		
6	20	969	128			981	131			976	130		
6	21	975	129			988	134			981	131		
6	22	985	133			991	135			988	134		
6	23	994	138			997	141			996	139		
6	24	994	138			997	141			997	141		
6	25	996	139			997	141			998	143		

**Appendix D-2g. Behavior Problems Index – Total Scores (continued)**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
6	26	997	141			997	141			998	143		
6	27	999	145			997	141			999	146		
6	28	999	145			997	141			999	146		
7	0	41	74			65	77			53	76		
7	1	117	82			176	86			146	84		
7	2	192	87			267	91			229	89		
7	3	262	90			343	94			301	92		
7	4	330	93			420	97			374	95		
7	5	398	96			497	100			446	98		
7	6	461	99			561	102			510	100		
7	7	522	101			619	105			570	103		
7	8	588	103			669	107			627	105		
7	9	646	106			721	109			683	107		
7	10	688	107			770	111			728	109		
7	11	728	109			808	113			768	111		
7	12	764	111			846	115			805	113		
7	13	800	113			881	118			840	115		
7	14	833	114			909	120			870	117		
7	15	858	116			932	122			894	119		
7	16	882	118			955	125			917	121		
7	17	900	119			975	129			937	123		
7	18	917	121			980	131			948	124		
7	19	936	123			981	131			958	126		
7	20	955	125			984	132			969	128		
7	21	967	128			987	133			977	130		
7	22	975	129			992	136			983	132		
7	23	980	131			997	141			988	134		
7	24	987	133			997	141			992	136		

## Appendix D-2g. Behavior Problems Index – Total Scores (continued)

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
7	25	990	135			999	145			994	137		
7	26	993	136			999	145			998	140		
7	27	996	139			999	145			997	143		
7	28	999	145			999	145			999	146		
8	0	49	75			60	77			54	76		
8	1	135	83			160	85			147	84		
8	2	213	88			245	90			229	89		
8	3	287	92			323	93			305	92		
8	4	357	94			403	96			380	95		
8	5	420	97			500	100			461	99		
8	6	483	99			567	103			526	101		
8	7	550	102			614	104			583	103		
8	8	614	104			663	106			639	105		
8	9	661	106			701	108			681	107		
8	10	701	108			740	110			720	109		
8	11	738	110			781	112			760	111		
8	12	779	112			823	114			801	113		
8	13	817	114			856	116			837	115		
8	14	846	115			878	117			862	116		
8	15	868	117			900	119			885	118		
8	16	901	119			927	122			913	120		
8	17	926	122			949	124			938	123		
8	18	936	123			967	128			952	125		
8	19	950	125			979	130			965	127		
8	20	962	127			989	134			976	130		
8	21	977	130			996	139			986	133		
8	22	988	134			999	145			993	137		
8	23	993	136			999	145			997	140		

**Appendix D-2g. Behavior Problems Index – Total Scores (continued)**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
8	24	996	139			999	145			998	142		
8	25	997	141			999	145			999	146		
8	26	999	145			999	145			1000	149		
8	27	999	145			999	145			1000	149		
8	28	999	145			999	145			1000	149		
9	0	46	75			96	80			71	78		
9	1	141	84			223	89			182	86		
9	2	230	89			284	91			257	90		
9	3	309	92			347	94			328	93		
9	4	382	95			427	97			405	96		
9	5	438	98			509	100			473	99		
9	6	477	99			579	103			529	101		
9	7	528	101			640	105			585	103		
9	8	588	103			688	107			638	105		
9	9	631	105			734	109			683	107		
9	10	674	107			777	111			726	109		
9	11	719	109			816	114			767	111		
9	12	772	111			850	116			810	113		
9	13	821	114			874	117			847	115		
9	14	846	115			900	119			873	117		
9	15	875	117			920	121			897	119		
9	16	903	119			933	122			919	121		
9	17	917	121			951	125			935	123		
9	18	932	122			972	129			951	125		
9	19	951	125			985	133			968	128		
9	20	969	128			991	135			980	131		
9	21	982	131			994	138			988	134		
9	22	987	133			997	141			992	136		

## Appendix D-2g. Behavior Problems Index – Total Scores (continued)

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
9	23	990	135			997	141			993	137		
9	24	993	136			997	141			995	139		
9	25	997	141			999	145			998	142		
9	26	997	141			999	145			998	142		
9	27	997	141			999	145			998	142		
9	28	997	141			999	145			998	142		
10	0	51	75			78	79			65	77		
10	1	147	84			206	88			177	86		
10	2	232	89			297	92			264	91		
10	3	309	92			383	96			346	94		
10	4	389	96			465	99			427	97		
10	5	463	99			537	101			501	100		
10	6	524	101			602	104			563	102		
10	7	579	103			662	106			621	105		
10	8	628	105			720	109			674	107		
10	9	677	107			767	111			722	109		
10	10	721	109			799	113			760	111		
10	11	751	110			830	114			790	112		
10	12	783	112			862	116			823	114		
10	13	826	114			882	118			854	116		
10	14	861	116			897	119			879	118		
10	15	889	118			913	120			901	119		
10	16	907	120			932	122			919	121		
10	17	922	121			949	124			936	123		
10	18	933	122			960	126			948	124		
10	19	945	124			969	128			957	126		
10	20	961	126			978	130			970	128		
10	21	974	129			986	133			979	131		

**Appendix D-2g. Behavior Problems Index – Total Scores (continued)**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
10	22	982	131			991	135			987	133		
10	23	989	134			994	138			991	135		
10	24	993	136			996	140			995	139		
10	25	998	142			998	143			997	141		
10	26	998	142			999	146			1000	149		
10	27	998	142			999	146			1000	149		
10	28	998	142			999	146			1000	149		
11	0	50	75			76	78			62	77		
11	1	135	83			196	87			163	85		
11	2	209	88			289	92			246	90		
11	3	300	92			374	95			333	94		
11	4	387	96			452	98			417	97		
11	5	465	99			545	102			501	100		
11	6	534	101			615	104			571	103		
11	7	592	103			663	106			624	105		
11	8	639	105			700	108			667	106		
11	9	678	107			737	110			705	108		
11	10	717	109			784	112			747	110		
11	11	749	110			821	114			782	112		
11	12	785	112			860	116			818	114		
11	13	817	114			896	119			853	116		
11	14	847	115			919	121			879	118		
11	15	875	117			938	123			904	120		
11	16	890	118			958	126			921	121		
11	17	904	120			966	127			933	122		
11	18	921	121			969	128			943	124		
11	19	945	124			973	129			957	126		
11	20	964	127			979	131			971	128		

## Appendix D-2g. Behavior Problems Index – Total Scores (continued)

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
11	21	973	129			984	132			978	130		
11	22	981	131			988	134			984	132		
11	23	987	133			993	136			988	134		
11	24	993	136			997	141			995	138		
11	25	997	140			997	141			998	142		
11	26	998	143			997	141			999	146		
11	27	1000	149			997	141			1000	149		
11	28	1000	149			997	141			1000	149		
12	0	79	79			99	81			89	80		
12	1	210	88			253	90			232	89		
12	2	295	92			355	94			326	93		
12	3	358	95			439	98			400	96		
12	4	431	97			518	101			477	99		
12	5	516	101			603	104			561	102		
12	6	586	103			687	107			638	105		
12	7	643	105			748	110			697	108		
12	8	690	107			787	112			740	110		
12	9	727	109			827	114			779	112		
12	10	764	111			874	117			821	114		
12	11	810	113			915	121			864	116		
12	12	844	115			938	123			893	119		
12	13	871	117			949	125			912	120		
12	14	900	119			960	126			931	122		
12	15	916	121			972	129			945	124		
12	16	928	122			983	132			957	126		
12	17	943	124			992	136			968	128		
12	18	959	126			995	139			978	130		
12	19	975	129			998	142			987	133		

**Appendix D-2g. Behavior Problems Index – Total Scores (continued)**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
12	20	990	135			998	142			995	138		
12	21	997	140			998	142			998	142		
12	22	999	145			998	142			1000	149		
12	23	999	145			998	142			1000	149		
13	0	63	77			102	81			82	79		
13	1	181	86			252	90			215	88		
13	2	267	91			348	94			306	92		
13	3	361	95			426	97			392	96		
13	4	459	98			508	100			482	99		
13	5	523	101			601	104			559	102		
13	6	591	103			668	107			628	105		
13	7	655	106			730	109			690	107		
13	8	697	108			786	112			739	110		
13	9	739	110			826	114			780	112		
13	10	783	112			857	116			819	114		
13	11	814	113			883	118			847	115		
13	12	837	115			903	119			867	117		
13	13	859	116			918	121			888	118		
13	14	882	118			935	123			906	120		
13	15	902	119			949	124			924	121		
13	16	920	121			961	126			939	123		
13	17	946	124			971	128			958	126		
13	18	966	127			982	131			974	129		
13	19	979	131			990	135			984	132		
13	20	987	133			997	140			992	136		
13	21	994	137			999	145			997	140		
13	22	998	143			999	145			999	146		
13	23	999	146			999	145			1000	149		

## Appendix D-2g. Behavior Problems Index – Total Scores (continued)

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
14	0	90	80			100	81			94	80		
14	1	228	89			247	90			237	89		
14	2	324	93			351	94			337	94		
14	3	404	96			460	98			431	97		
14	4	474	99			533	101			502	100		
14	5	549	102			582	103			565	102		
14	6	620	105			644	106			631	105		
14	7	676	107			715	108			694	108		
14	8	722	109			771	111			746	110		
14	9	773	111			809	113			791	112		
14	10	810	113			839	115			825	114		
14	11	840	115			865	117			852	116		
14	12	866	117			888	118			876	117		
14	13	891	118			904	120			897	119		
14	14	920	121			920	121			921	121		
14	15	941	123			939	123			939	123		
14	16	957	126			956	126			957	126		
14	17	969	128			968	128			968	128		
14	18	977	130			975	129			976	130		
14	19	982	131			985	133			984	132		
14	20	986	133			995	138			991	135		
14	21	989	134			999	146			994	137		
14	22	992	136			999	146			996	139		
14	23	997	140			999	146			999	145		
15	0	97	80			104	81			100	81		
15	1	248	90			274	91			260	90		
15	2	345	94			394	96			368	95		
15	3	443	98			483	99			463	99		

**Appendix D-2g. Behavior Problems Index – Total Scores (continued)**

Child Age	Raw Score	Boys				Girls				Total			
		Ever in School		Never in School		Ever in School		Never in School		Ever in School		Never in School	
		Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard	Percentile	Standard
15	4	543	102			562	102			552	102		
15	5	618	104			630	105			624	105		
15	6	674	107			678	107			676	107		
15	7	720	109			717	109			719	109		
15	8	763	111			754	110			759	111		
15	9	801	113			794	112			798	112		
15	10	828	114			826	114			827	114		
15	11	853	116			853	116			853	116		
15	12	882	118			878	117			880	118		
15	13	904	120			899	119			901	119		
15	14	917	121			918	121			918	121		
15	15	934	123			933	122			934	123		
15	16	949	124			945	124			948	124		
15	17	967	127			959	126			963	127		
15	18	981	131			973	129			977	130		
15	19	985	133			981	131			983	132		
15	20	988	134			987	133			988	134		
15	21	994	137			993	136			994	137		
15	22	996	140			998	142			997	140		
15	23	999	146			998	142			1000	149		



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**APPENDIX E. SAMPLE SPSSX PROGRAM FOR  
MERGING NLSY79 CHILD FILES**

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**Appendix E. Sample SPSSx Program for Merging NLSY79 Child Files**

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*****/
* The sample SPSSx program reads a child-based file extracted from the NLSY79 * Child & Young
Adult Data. It then reads a main Youth file extracted from * the NLSY79 main Youth data set. The two
files are sorted by case ID and * merged to create a child-based file with additional mother
characteristics
* attached to each child case ID.
* NOTE: Users who start with data in a system file format can skip the steps that read the ascii files.
*****/

file handle chdfile/name=Child file specifications.
file handle momfile/name=Mother file specifications.
file handle kidsdat/name=Temporary child-based system file.
file handle momsdat/name=Temporary mother-based system file.

data list file=chdfile records=1
  /1 C0000100 1-7
     C0000200 8-12
     C1526000 13-14
     C1531500 15-16
     C1531600 17-18.

compute kidflag=1. /* Use flag to restrict final file after merge. */
compute momid=C0000200. /* Use same var name for ID in files to be merged. /

variable labels momid 'ID Code Of Mother Of Child'.
variable labels C0000100 'ID Code Of Child'.
variable labels C0000200 'ID Code Of Mother Of Child'.
variable labels C1526000 'Child Conditn Requires Attention fr Dr 96' .
variable labels C1531500 'Child Health Covered By Insurance 96' .
variable labels C1531600 'Child Health Covered By Medicaid 96'.
variable labels kidflag. 'Observation From Child Dataset' /

sort cases by C0000100. /* Sort by child ID */

descriptives variables=all.

title 'NLSY79 Child: Sample merge program-Child & main Youth file' .
subtitle ' Extract child-based health insurance variables'.
frequencies general=C1526000 C1531500 C1531600/.
save outfile=kidsdat/.
*****

data list file momfile records=1
  /1 R0000100 1-5
     R0214800 6-7
     R5625500 8-9
     R5625600 10-11
     R5625601 12-13
     R5625602 14-15
     R5625603 16-17
     R5625604 18-19

```

```
R5625605 20-21
R5625606 22-23.
compute momid=R0000100. /* Use same var name for mom ID in both files. */
```

```
variable labels momid 'NLSY79 Identification Code (1-12686) 79'.
variable labels R0000100 'NLSY79 Identification Code (1-12686) 79'.
variable labels R0214800 'Sex Of R 79'.
variable labels R5625500 'Children Have any Health-Hospitl Plan 96'.
variable labels R5625600 'Hlth Plan-Current Employer Policy 96'.
variable labels R5625601 'Hlth Plan-Previous Employer Policy 96'.
variable labels R5625602 'Hlth Plan-Spouse-Partnr Curr Employer 96'.
variable labels R5625603 'Hlth Plan-Spouse-Partnr Prev Employer 96'.
variable labels R5625604 'Hlth Plan-Direct Purchase frm Med Co. 96'.
variable labels R5625605 'Hlth Plan-Medicaid-Pub Assist-Welfare 96'.
variable labels R5625606 'Hlth Plan - Other Source 96'.
```

```
select if (R0214800=2). /* Restrict main Youth file to females */
```

```
sort cases by momid.
descriptives variables=all.
subtitle 'NLSY79 Females: Extract mother-based health insurance vars'.
```

```
save outfile=momsdat/ .
```

```
*****
```

```
match files table=momsdat/file=kidsdat/by momid.
select if (kidflag=1).
```

```
descriptives variables=all .
subtitle 'Check final merge of NLSY79 Child & Mother files' .
frequencies general=C1526000 C1531500 C1531600
R5625500 R5625600 R5625601
R5625602 R5625603 R5625604
R5625605 R5625606/format=onepage.
finish.
```

---

**APPENDIX F. SAMPLE SAS PROGRAM FOR  
MERGING NLSY79 CHILD FILES**

---



## Appendix F. Sample SAS Program for Merging NLSY79 Child Files

```

/*****
* The sample SAS program reads a child-based file extracted from the NLSY79 Child & Young Adult
Data. It then reads a main Youth file extracted from the NLSY79 main Youth data set. The two files are
sorted by case ID and merged to create a child-based file with additional mother characteristics
attached to each child case ID.
* NOTE: Users who start with data in a system file format can skip the steps that read the ascii files.
*****/

options nocenter;

filename chdfile 'Child file specification';
filename momfile 'Mother file specification';
data one(drop=C0000200);
infile chdfile;
input @1 C0000100 7.
      C0000200 5.
      C1526000 2.
      C1531500 2.
      C1531600 2.;

kidflag=1; /* Use flag to restrict final child-based file after merge. */
momid=C0000200; /* Use same var name for mom ID in both files to be merged. */

label momid = "ID Code Of Mother Of Child";
label C0000100 = "ID Code Of Child";
label C1526000 = "Child Conditn Requires Attention fr Dr 96";
label C1531500 = "Child Health Covered By Insurance 96";
label C1531600 = "Child Health Covered By Medicaid 96";
label kidflag = "Observation From Child Dataset";
run;

proc sort; by C0000100; run; /* Sort by child ID; mother ID is embedded in child ID */

proc format;
value yesnof 1 = 'Yes' 0 = 'No'; run;

proc contents;
title1 'NLSY79 Child: Sample Merge program-Mother vars from main Youth file';
title2 ' Extract child-based child health insurance variables';
run;

proc means; run;
proc freq;
tables C1526000 C1531500 C1531600;
format C1526000 C1531500 C1531600 yesnof.;
run;
*****,
data two(drop=R0000100);
infile momfile;
input @1 R0000100 5.

```

```

R0214800 2.
R5625500 2.
R5625600 2.
R5625601 2.
R5625602 2.
R5625603 2.
R5625604 2.
R5625605 2.
R5625606 2.;

momid=R0000100; /* Assign same ID name in both child & mother-based files */

label momid = "NLSY79 Identification Code (1-12686) 79";
label R0214800 = "Sex Of R 79";
label R5625500 = "Children Have any Health/Hospitl Plan 96";
label R5625600 = "Hlth Plan-Current Employer Policy 96";
label R5625601 = "Hlth Plan-Previous Employer Policy 96";
label R5625602 = "Hlth Plan-Spouse/Partnr Curr Employer 96";
label R5625603 = "Hlth Plan-Spouse/Partnr Prev Employer 96";
label R5625604 = "Hlth Plan-Direct Purchase frm Med Co. 96";
label R5625605 = "Hlth Plan-Medicaid/Pub Assist/Welfare 96";
label R5625606 = "Hlth Plan - Other Source 96";

if R0214800=2; /* Restrict main Youth file to females */
run;

proc sort; by momid; run;

proc contents;
title 'NLSY79 Females: Extract child health insurance vars';
run;

proc means; run;
*****;

data three;
merge one(in=kids) two(in=females); by momid;
if kids=1; /* Merge child-based and mother-based files: output as child-based file. */
run;

proc means;
title 'Check final merge of NLSY79 Child & Mother files';
run;

proc freq;
tables C1526000 C1531500 C1531600
R5625500 R5625600 R5625601 R5625602 R5625603 R5625604 R5625605 R5625606
C1531500*(C1526000 R5625500);
format R5625500 C1526000 C1531500 yesnof.;
run;

proc print data=three(obs=20);

```

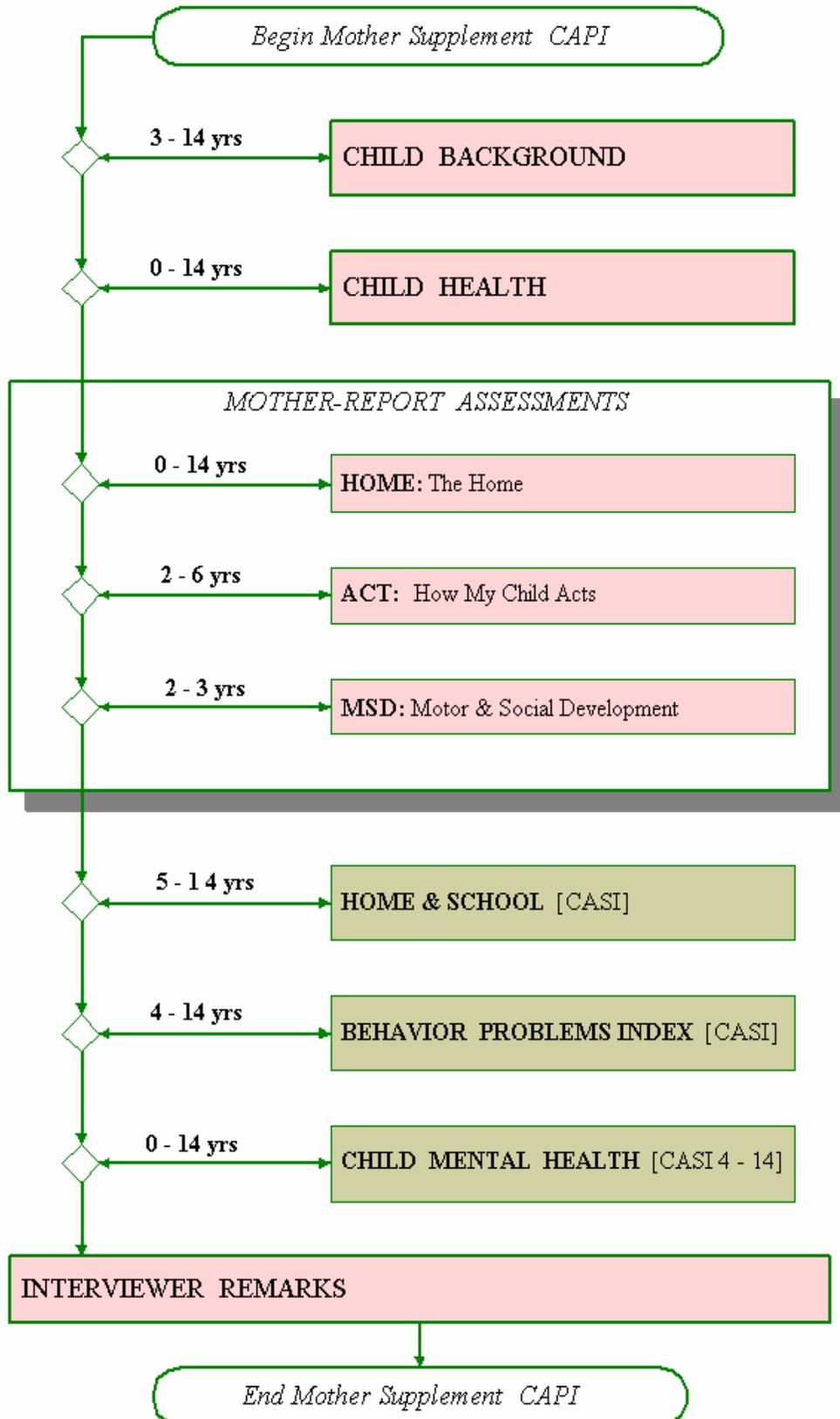
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**APPENDIX G. NLSY79  
CHILD AND MOTHER SUPPLEMENTS  
FLOWCHARTS**

---

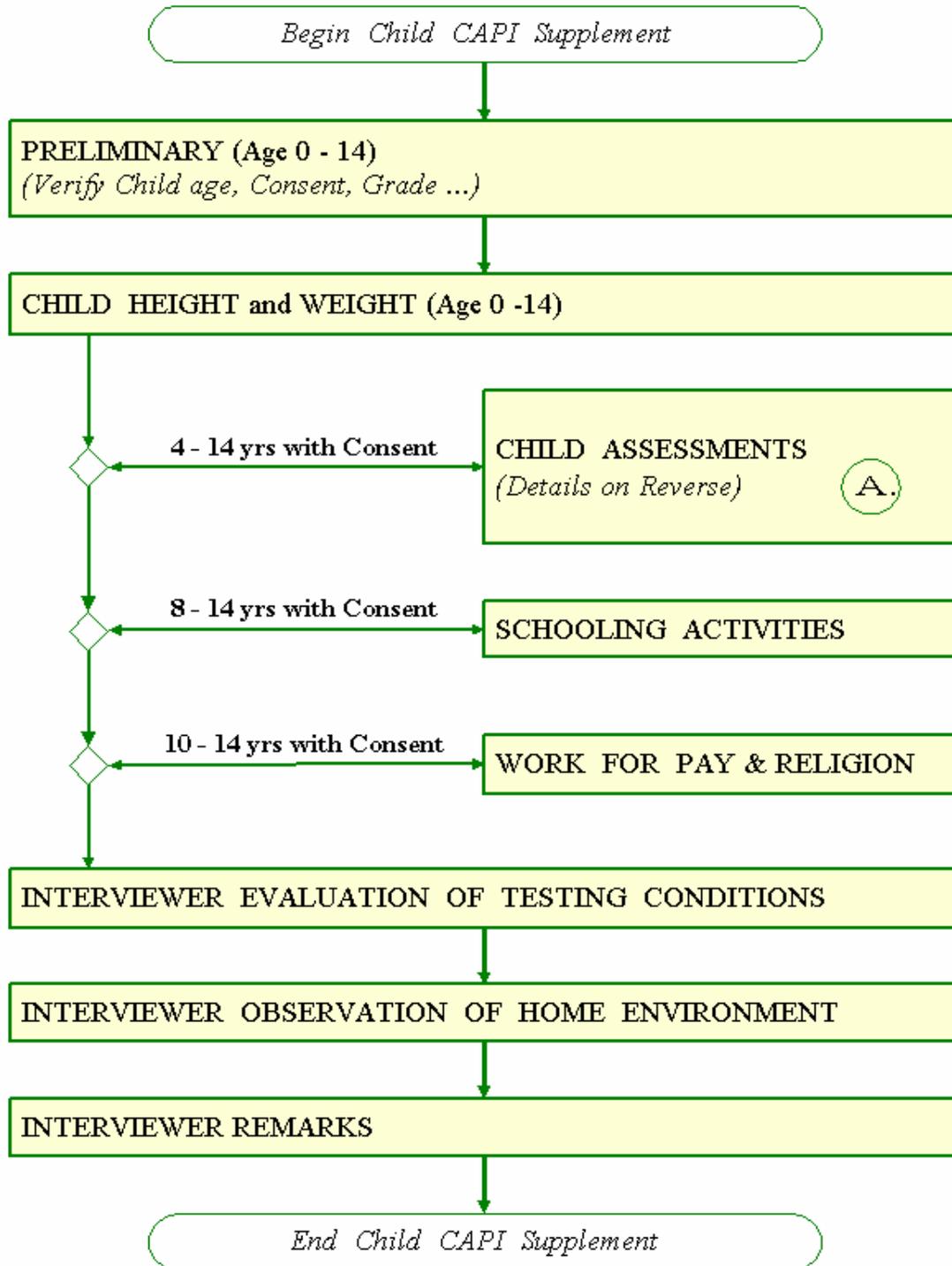


Appendix G-1. R20-2002 NLSY79 Child Survey: Mother Supplement Flowchart

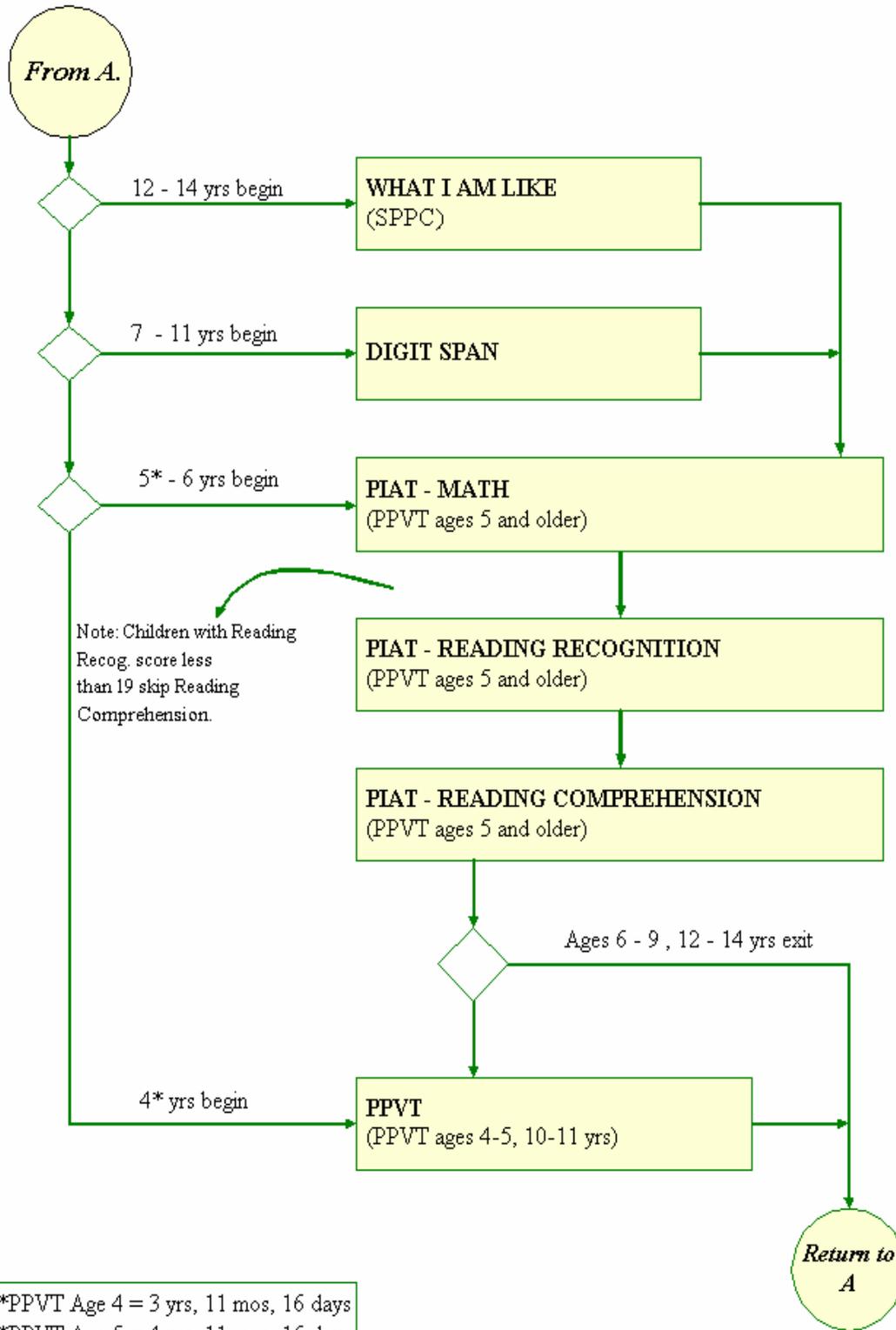


Appendix G-2. R20-2002 NLSY79 Child Supplement Flowchart

R20-2002 NLSY79 Child Survey:  
Child Supplement Flow Chart



CHILD ASSESSMENTS





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**APPENDIX H. CHILD SURVEY CONTENT  
BY SURVEY YEAR**

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**Appendix H. NLSY79 Children (birth to age 14): Survey Content by Survey Year**

CV = created variable; C = Child Supplement; M = Mother Supplement; \* = Child Self-Administered Supplement; Y = Main Youth

Survey Year:	86	88	90	92	94	96	98	00	02
<b>A. Child background</b>									
Child's date of birth	CV								
Child's age	CV								
Sex of child	CV								
Child currently attending/enrolled in regular school (or preschool)	C	C	C	C	C	C	C	C	M
Child ever attended regular school, nursery school, or preschool	C		C	C	C	C	C	C	M
Current/last school attended		C		C	C	Y	Y	Y	Y
Current/last grade attended	C	C	C	C	C	C	C	C	M
Head Start program information		C	C	C	C	C	C	C	M
<b>B. Child health</b>									
Child's eye and hair color	C								
Place of child's birth			C	C					
Does health limit school or play	C	C	C	C	C	C	C	C	M
Any physical, emotional, or mental condition requiring: frequent treatment, medicine, or special equipment	C	C	C	C	C	C	C	C	M
Type/duration of health conditions	C	C	C	C	C	C	C	C	M
Accidents/injuries needing medical attention in last 12 months; details	C	C	C	C	C	C	C	C	M
Accidents/injuries needing hospitalization since last int./since birth; details		C	C	C	C	C	C	C	M
Number of illnesses requiring medical attention or treatment	C	C	C	C	C	C	C	C	M
Date of last routine health checkup	C	C	C	C	C	C	C	C	M
Menstrual period information	C	C	C	C	C	C	C	C	M
Right/left handedness						C	C	C	M
Date of last dental checkup/work	C	C	C	C	C	C	C	C	M
Source of health insurance, if any	C	C	C	C	C	C	C	C	M
Behavioral, emotional, or mental problems; did insurance cover doctor visit	C	C	C	C	C	C	C	C	M
Any medicines or prescription drugs taken to help control activity/behavior	C	C	C	C	C	C	C	C	M
Height and weight of child	C	C	C	C	C	C	C	C	C
<b>C. Child assessments</b>									
Parts of the Body (1–3 years): number of body parts child can identify	C	C							
Memory for Locations (8 months–4 years): how long the child can remember the location of the doll	C	C							
Verbal Memory test (3–7 years): ability to remember/repeat word sequences	C	C	C	C	C				
SPPC (age 8 and older through 1994; ages 12–14 since 1996): what child thinks he/she is like, how he/she thinks and feels	C	C	C	C	C	C	C	C	C
Memory for Digit Span test (age 7 & older, 7–11 in 2000): memory for numbers and sequence of digits	C	C	C	C	C	C	C	C	C

**Appendix H. Child Survey Content by Survey Year**

Survey Year:	86	88	90	92	94	96	98	00	02
PIAT Math (PPVT age 5 & older)	C	C	C	C	C	C	C	C	C
PIAT Reading (PPVT age 5 & older)	C	C	C	C	C	C	C	C	C
Peabody Picture Vocabulary Test (PPVT age 3 & older through 1996, ages 4–5 & 10–11 since 1998): vocabulary	C	C	C	C	C	C	C	C	C
HOME inventory (all ages) (in 2000: ages 0–3 in Child, 4 yrs + in Mother Supp.)	M	M	M	M	M	M	M	C, M	M
Temperament Scales (< age 7; in 2000 < 4 years old in Child Supplement)	M	M	M	M	M	M	M	C, M	M
Motor and Social Development Scale (< 4 years old; in 2000 in Child Supp.)	M	M	M	M	M	M	M	C	M
Behavior Problems Index (4+ years)	M	M	M	M	M	M	M	M	M
<b>D. Child schooling</b>									
Time spent on homework, reading for fun						C	C	C	C
Style of teaching in English classes						C	C	C	C
Parent involvement in child's schooling (19 items)						C	C	C	C
<b>E. School and family background (children ages 10–14 years 1986–1994; ages 5–14 years starting in 1996)</b>									
Type of school child attends		M	M	M	M	M	M	C	M
Reason child not attending school		M	M	M	M	M	M	C	M
Grades child has repeated		M	M	M	M	M	M	C	M
Reason child last repeated a grade		M	M	M	M	M	M	C	M
Has child had behavior problems at school; grade this first happened		M	M	M	M	M	M	C	M
Number of different schools child has attended						M	M	C	M
Time child spends on homework each week						M	M	C	M
Extent of parent involvement in school						M	M	C	M
Child ever suspended/expelled from school; grade this first happened		M	M	M	M	M	M	C	M
Parent ranking of child in class		M	M	M	M	M	M	C	M
Does child get remedial help in school		M	M	M	M	M	M	C	M
Does child attend advanced classes		M	M	M	M	M	M	C	M
Parent rating of child's school (series)				M	M	M	M	C	M
Parent perception of child's probable educational attainment			M	M	M	M	M	C	M
Parent perception of difficulty raising child				M	M	M	M	C	M
Parent rating of aspects of child's life (series): health, friendships, relationship with mother, feelings about self, future prospects, relationships with siblings				M	M	M	M	C	M
Number of child's friends that parent knows			M	M	M	M	M	C	M
How often parent knows who child is with when not at home				M	M	M	M	C	M
Frequency of child's attendance at religious services in the past year			M	M	M	M	M	C	M
Importance parent puts on child's religious training			M	M	M	M	M	C	M
<b>E. Interviewer evaluation of testing conditions</b>									
	C	C	C	C	C	C	C	C	C
<b>F. Home observations: Interviewer observations of home environment</b>									
	C	C	C	C	C	C	C	C	C

**Appendix H. Child Survey Content by Survey Year**

Survey Year:	86	88	90	92	94	96	98	00	02
<b>CHILD SELF-ADMINISTERED SUPPLEMENT (10–14 years old) NOTE: CSAS was not used in the 1986 survey</b>									
<b>A. Home &amp; Family</b>									
In last month, have child and parents gone to: movies, shopping, outing, church		*	*	*	*	*	*	*	*
In last week, have child and parents done: crafts, schoolwork, games together		*	*	*	*	*	*	*	*
Does child help around house		*	*	*	*	*	*	*	*
Any rules about: homework, TV, whereabouts, dating, parties		*	*	*	*	*	*	*	*
How much say child has in making rules		*	*	*	*	*	*	*	*
How often child argues with parent(s) about the rules		*	*	*	*	*	*	*	*
How often each parent talks over decisions, listens to R's side		*	*	*	*	*	*	*	*
Who usually decides about: buying clothes, spending money, friends, curfew, allowance, TV, religious training (child, mother, father, etc.)		*	*	*	*	*	*	*	*
<b>B. Relations with Parents</b>									
How often each parent knows who child is with when not home				*	*	*	*	*	*
Does child think parents spend enough time with him/her				*	*	*	*	*	*
How often each parent misses events/activities important to R				*	*	*	*	*	*
How close child feels to each parent				*	*	*	*	*	*
How well child and each parent share ideas/talk about things that matter				*	*	*	*	*	*
In dealing with child, how often child and mother/father agree with each other				*	*	*	*	*	*
Does child live with biological father, stepfather, or neither					*	*	*	*	*
Do biological parents (and mother and stepfather, if applicable) get along, agree about rules, argue					*	*	*	*	*
Does child feel caught in middle; can child talk to each parent about the other					*	*	*	*	*
What child tells parent about activities (TV and movies watched, whereabouts, teachers, etc.)						*	*	*	*
How often child feels (series): sad, happy, nervous, bored, lonely, tired, excited, too busy, pressured				*	*	*	*	*	*
R been away from mother/father for at least 2 months, except summer camp		*	*	*	*	*	*	*	*
Where, how old was child the last time away from mother/father		*	*	*	*	*	*	*	*
<b>C. School and activities</b>									
Current grade attending		*	*	*	*	*	*	*	*
Characteristics of child's school (8 items)		*	*	*	*	*	*	*	*
Level of satisfaction with school		*	*	*	*	*	*	*	*
Weapons at school									*
Usual activities between school and dinner		*	*	*	*	*	*	*	*
If child goes home after school, is an adult usually present		*	*	*	*	*	*	*	*
Level of schooling child anticipates		*	*	*	*	*	*	*	*
Is child member of any clubs, teams, or school activities in/out of school		*	*	*	*	*	*	*	*
Perceptions of gender roles (six items)					*	*	*	*	*
Usual activities in summer				*	*	*	*	*	*

**Appendix H. Child Survey Content by Survey Year**

Survey Year:	86	88	90	92	94	96	98	00	02
Does child feel safe in neighborhood				*	*	*	*	*	*
Usual time watching TV on weekday, weekend			*	*	*	*	*	*	*
Number of times in last year child engaged in a series of criminal/delinquent acts		*	*	*	*	*	*	*	*
<b>D. Employment <sup>1</sup></b>									
Work for pay (babysitting, paper route, yard work, etc.) excluding chores around home; type of work		*	*	*	*	*	*	*	*
Usual frequency child works; hours worked in usual week in last 3 months		*	*	*	*	*	*	*	*
Money earned in a usual week		*	*	*	*	*	*	*	*
<b>E. Religion <sup>2</sup></b>									
Present religion, attendance at religious services in past year		*	*	*	*	*	*	*	
Does child go with/without parents		*	*	*	*	*	*	*	*
Do friends go, go to the same place		*	*	*	*	*	*	*	*
<b>F. Friendships and peers</b>									
Number of close friends of each sex		*	*	*	*	*	*	*	*
How much child tells parents about boy/girl friends, friends' parents							*	*	*
Are close friends in the same or a different grade or not in school		*	*	*	*	*	*	*	*
How often child is lonely, wants more friends		*	*	*	*	*	*	*	*
Does child feel pressure from friends to (series): smoke; work hard in school; try drugs; drink alcohol; skip school; or commit a crime or do something violent?				*	*	*	*	*	*
Risk-taking behaviors and attitudes (six items)					*	*	*	*	*
<b>G. Smoking – Drinking - Drugs</b>									
Cigarette use; age first smoked; frequency		*	*	*	*	*	*	*	*
Alcohol use (more than a sip or two); age first drank; frequency		*	*	*	*	*	*	*	*
Marijuana use; age first used; frequency		*	*	*	*	*	*	*	*
Use of substances (like glue, gas, sprays, fluids) which are "sniffed/huffed"; age first used; frequency					*	*	*	*	*
Other drug use (LSD, cocaine, uppers, downers); age first used; frequency		*	*	*	*	*	*	*	*
<b>H. Dating and relationships</b>									
Age child had first date/went out alone with someone of the opposite sex		*	*	*	*	*	*	*	*
How often child usually has a date; is it usually the same person		*	*	*	*	*	*	*	*
Best age/youngest age child can imagine for getting married, having first child		*	*	*	*	*	*	*	*
<b>I. Sex education &amp; sexual activity</b>									
Any courses/time in class on sex education; grade, month/year		*	*	*	*	*	*	*	*
Who in family child talks to about sex		*	*	*	*	*	*	*	*
When during the menstrual cycle pregnancy is most likely to occur		*	*	*	*	*	*	*	*
Age at first sex		*	*	*	*	*	*	*	
Age, gender, and residence of children				*	*	*	*	*	

**Appendix H. Child Survey Content by Survey Year**

Survey Year:	86	88	90	92	94	96	98	00	02
<b>J. Computer use</b>									
Does child have a computer at home					*	*	*	*	*
What child uses computer for most often					*	*	*	*	*
Has child ever used computer at school					*	*	*	*	*
Where, from whom has child learned most about computers					*	*	*	*	*
Has child ever had a class/training, in school or elsewhere, on: computer use, programming, or word processing					*	*	*	*	*
How often child uses computer to do homework, play games, use e- mail, etc.					*	*	*	*	*

<sup>1</sup> CSAS questions on work for pay moved to the Child Supplement in 2002.

<sup>2</sup> CSAS questions on religion moved to the Child Supplement in 2002.



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**APPENDIX I. YOUNG ADULT  
CAPI QUESTIONNAIRE  
2002 FLOWCHART**

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Appendix I. Young Adult CAPI Questionnaire 2002 Flowchart

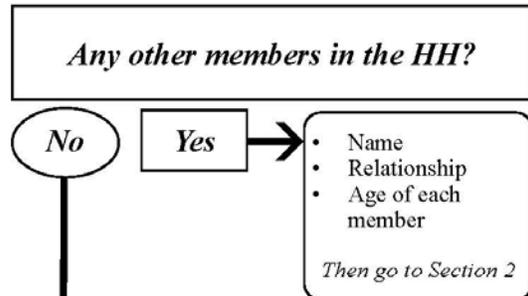
## Young Adult 2002

### Household Composition

*Universe:* All

*Time:* Varies by number of household members

*Contents:* Information about the household

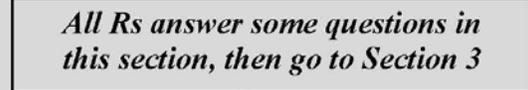


### Section 2 - Family Background

*Universe:* All

*Time:* Can be long if R has moved frequently or is a new Young Adult

*Contents:* Migration; parental and/or sibling contact; characteristics of father, race and ethnicity; religion

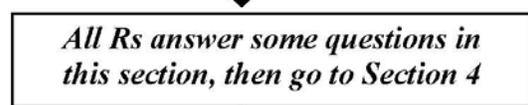


### Section 3 - Dating and Relationship History

*Universe:* All

*Time:* Can be long if R is married, cohabiting, or in a serious relationship

*Contents:* Dating, marriage/cohabitation history, spouse/partner occupation, quality of current relationships

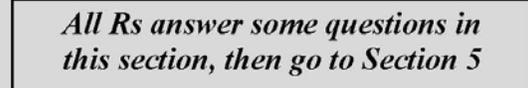


### Section 4 - Regular Schooling

*Universe:* All

*Time:* Shortest if R is not enrolled in school, medium if R is in college, longest if R is in high school

*Contents:* Enrollment status, highest grade attended/completed, dates of attendance, degrees received, details about school experiences and/or college applications and funding



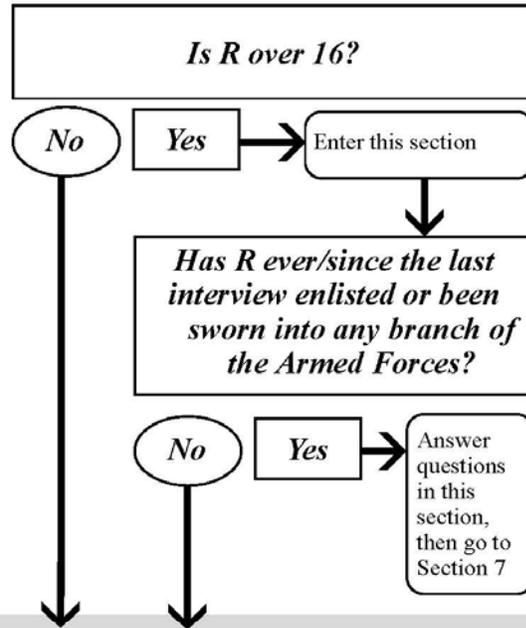
Appendix I. Young Adult CAPI Questionnaire 2002 Flowchart (ctd.)

**Section 5 - Military**

*Universe:* Rs over 16 years of age

*Time:* Short

*Contents:* Name of military branch, dates of entry and exit, jobs and training, satisfaction with military

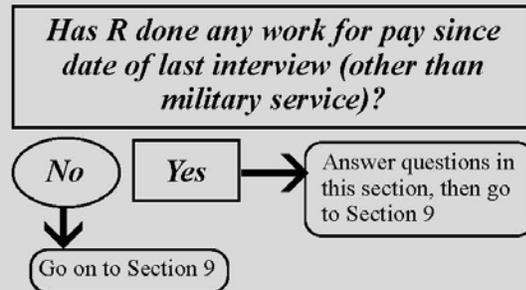


**Section 7 - Jobs/Employer Supplements**

*Universe:* All

*Time:* Depends on number of jobs R has had since date of last interview

*Contents:* Name, dates of employment and hours worked for each employer, additional details asked for jobs of greater duration, most detail asked about current/most recent employer



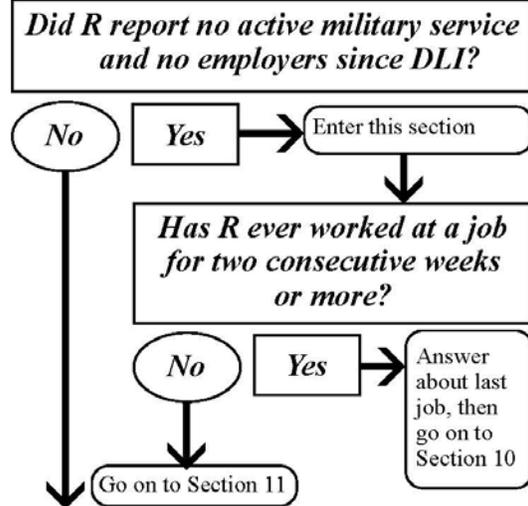
Appendix I. Young Adult CAPI Questionnaire 2002 Flowchart (ctd.)

**Section 9 - Last Job Lasting Two Weeks or More**

*Universe:* Rs with no civilian or military jobs since date of last interview

*Time:* Short

*Contents:* Name of employer, date of employment, usual activities/duties

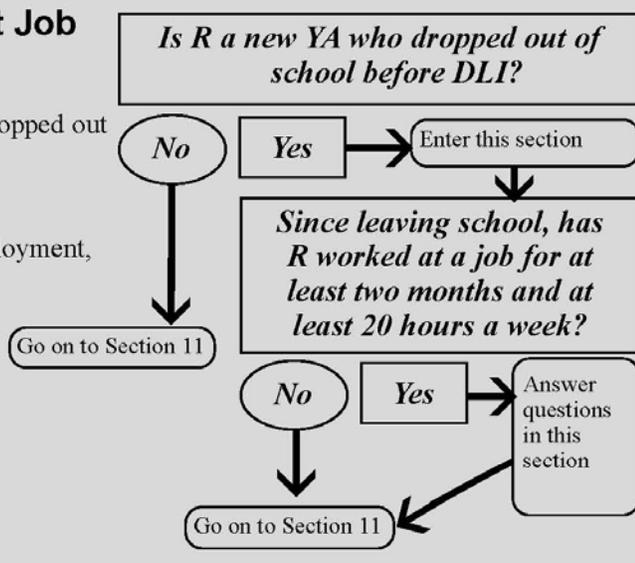


**Section 10 - First Significant Job After Leaving High School**

*Universe:* First time Young Adults who dropped out of school before the last interview

*Time:* Short

*Contents:* Name of employer, date of employment, usual activities/duties, wages



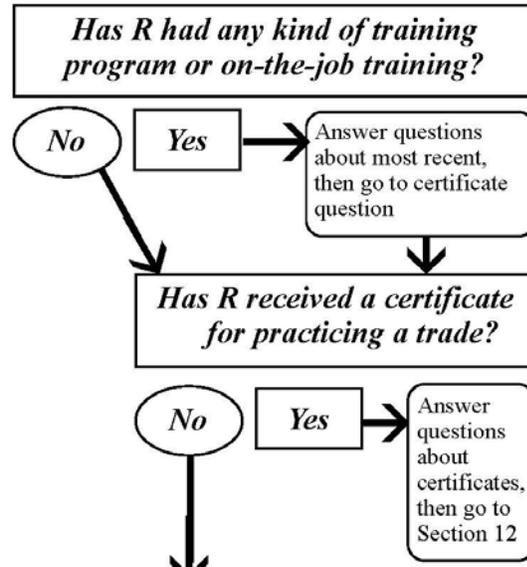
Appendix I. Young Adult CAPI Questionnaire 2002 Flowchart (ctd.)

**Section 11 - Other Training**

*Universe:* All

*Time:* Short

*Contents:* Type of most recent job training, details about training, professional certificates or licenses received

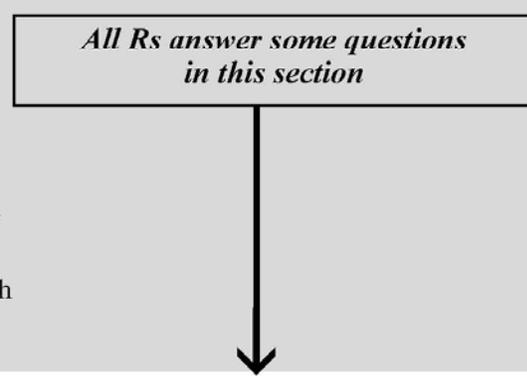


**Section 12 - Fertility**

*Universe:* All

*Time:* Short for Rs with no children, longest for female Rs with child(ren) born since DLI

*Contents:* Verification of children born before DLI, new children (since DLI); birth, health, and residence of biological children; future childbirth plans

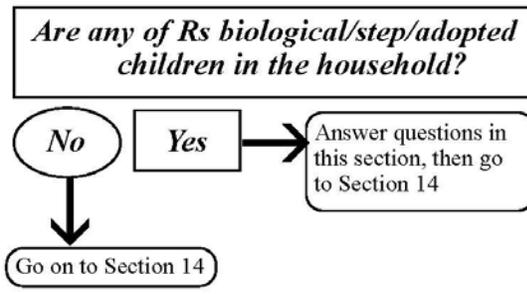


**Section 13 - Child Care**

*Universe:* Rs with children living in the household

*Time:* Short

*Contents:* Parental interaction with youngest child, child care arrangements for youngest child, payment for child care



Appendix I. Young Adult CAPI Questionnaire 2002 Flowchart (ctd.)

**Section 14 - Health**

*Universe:* All

*Time:* Medium

*Contents:* Health limitations, recent illnesses and accidents, menstruation, visits to health care professionals, height and weight, health insurance coverage

*All Rs answer some questions in this section*

**Section 15 - Income and Assets**

*Universe:* All

*Time:* Shortest if R is single and financially dependent; longest if R is married and financially independent

*Contents:* R's (and spouse/partner's) income, child support, reciprocity, home and auto ownership, debts, financial hardship

*All Rs answer some questions in this section*

**Section 16 - Attitudes**

*Universe:* New YAs and YAs last interviewed before 2000

*Time:* Long

*Contents:* Attitudes about: self-esteem, depression, mastery, and risk-taking

*Was R interviewed as a Young Adult in 2000?*

Yes No → Answer questions in this section, then go to Self-Report Section

**Self-Report Section**

*Universe:* All

*Time:* Varies, can be long

*Contents:* Family relationships, substance use/abuse, computer usage, sex education, sexual experience, neighborhood quality, deviance, volunteer work, and future goals

*All Rs answer some questions in this section*

Go on to Q17 - Locator

**Appendix I. Young Adult CAPI Questionnaire 2002 Flowchart (ctd.)**

**Q17 - Locator**

*Universe:* All

*Time:* Medium

*Contents:* Addresses and phone numbers of R's  
contact people

*All Rs answer some questions  
in this section*

**QIR - Interviewer Remarks**

*Contents:* Information about problems or  
confusion that came up during the interview

*Interviewers fill out this  
section for all Rs*

**Exit**

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**APPENDIX J. YOUNG ADULT SURVEY  
CONTENT BY SURVEY YEAR**

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**Appendix J: NLSY79 Young Adult: Survey Content 1994-2002**

	Survey Year:				
	94	96	98	00	02
<b>I. LABOR MARKET EXPERIENCE VARIABLES</b>					
<b>A. Current labor force and employment status</b>					
Survey week labor force and employment status	*	*	*		
Hours worked in survey week	*	*	*		
Hours per week usually worked	*	*	*		
Job search activities	*	*	*		
<b>B. Work experience since January 1 of previous year through 1998 or date of last interview in 2000 and 2002</b>					
Weeks worked	*	*	*	*	*
Hours usually worked per week	*	*	*	*	*
Number of weeks unemployed, out of labor force	*	*	*		
Spells of unemployment	*	*	*	*	*
Characteristics of last job lasting 2 weeks or more and of first significant job after leaving high school	*	*	*	*	*
<b>C. Characteristics of jobs (more than 10 hours/week, more than 9 weeks in duration) since January 1 of previous year through 1998 or date of last interview in 2000 and 2002</b>					
Occupation and industry (Census code)	*	*	*	*	*
Class of worker	*	*	*	*	*
Start date and stop date	*	*	*	*	*
Hours per week usually worked	*	*	*	*	*
Shift worked	*	*	*		
Rate of pay	*	*	*	*	*
Hourly rate of pay	*	*	*	*	*
Commuting time to job, method of transportation	*	*	*		
Covered by collective bargaining	*	*	*		
Is R union member	*	*	*		
Availability of fringe benefits (CPS job only starting in 2000)	*	*	*	*	*
Global job satisfaction item	*	*	*	*	*
Size of employer	*	*	*		
Reason for leaving job	*	*	*		
Promotion and promotion potential with employer	*	*	*		
<b>II. HUMAN CAPITAL AND OTHER SOCIOECONOMIC VARIABLES</b>					
<b>A. Early formative influences</b>					
Date of birth	*	*	*	*	*
Ethnic self-identification	*	*	*	*	*
Number of times R has lived away from mother	*	*	*	*	*
Father's employment status, occupation, highest grade completed, ethnicity	*	*	*	*	*
Contact with nonresidential parent(s)	*	*	*	*	*
Contact with sibling R feels closest to				*	*
Current religion, religious attendance, importance of religion	*	*	*	*	*
<b>B. Education</b>					
Current enrollment status, grade	*	*	*	*	*
Reason stopped attending school	*	*	*	*	*
Date of last enrollment	*	*	*	*	*

**Appendix J. Young Adult Survey Content by Survey Year**

	Survey Year:				
	94	96	98	00	02
Periods of nonattendance, grades when occurred, reason why	*	*	*	*	*
Grades repeated or skipped	*	*	*	*	*
Highest grade attended, highest grade completed	*	*	*	*	*
GED or diploma received, date received	*	*	*	*	*
Is or was the school R attended public, private, or religious	*	*	*	*	*
High school curriculum	*	*	*	*	*
Time spent on homework in school, out of school		*	*	*	*
Style of teaching in English classes		*	*	*	*
Parent involvement with R's schooling (19 items in 1996–98, 17 items in 2000 and 2002)		*	*	*	*
Job or career counseling received in high school	*	*	*	*	*
Characteristics of R's school (nine items)	*	*	*	*	*
Level of satisfaction with school	*	*	*	*	*
Number of high schools attended	*	*	*	*	*
Colleges/universities applied to				*	*
Date of college enrollment	*	*	*	*	*
College degree received, date received (asked in 2000 and 2002)	*	*	*	*	*
Type of college attending (2- or 4-year)	*	*	*		
Field of study or specialization in college	*	*	*	*	*
College tuition	*	*	*	*	*
Educational loans or financial aid in college	*	*	*	*	*
Other means of paying college expenses	*	*	*	*	*
Highest grade R would like or expects to complete	*	*	*	*	*
Highest grade R's best friend would like to complete	*	*	*		
<b>C. Vocational training outside regular school (information on only the most recent program was obtained in 2000)</b>					
Type(s) of training	*	*	*	*	*
Services provided by training program	*	*	*	*	*
Duration of training programs	*	*	*	*	*
Was training completed	*	*	*	*	*
Hours per week usually spent in training	*	*	*	*	*
Was training related to specific job or employer, related to a promotion	*	*	*		
Method of financing training	*	*	*	*	*
Does R have certificate or journeyman's card	*	*	*	*	*
<b>D. Physical and mental health</b>					
Does health limit work or school activity	*	*	*	*	*
Type and duration of health limitation	*	*	*	*	*
Recent accidents, injuries, illnesses, hospitalization	*	*	*	*	*
Height, weight	*	*	*	*	*
Right- or left-handedness		*	*		
Menstrual period information	*	*	*	*	*
Health insurance coverage for R, children	*	*	*	*	*
CES-Depression Scale (seven items)	*	*	*	*	*
<b>E. Relationship and fertility history and household characteristics</b>					
Number, ages, and demographic characteristics of all household residents (only information on age and relationship was obtained beginning in 2000)	*	*	*	*	*
Number of close friends of each sex, their ages relative to R's age				*	*

**Appendix J. Young Adult Survey Content by Survey Year**

	Survey Year:				
	94	96	98	00	02
Month and year or age at first date	*	*	*	*	*
Number of people R has dated in the past 12 months	*	*	*	*	*
How often R usually has a date	*	*	*	*	*
Marital status	*	*	*	*	*
Unmarried R's: Status of current relationship	*	*	*	*	*
Relationship quality of steady dating relationship				*	*
Has R ever (since last interview) lived with someone R was not married to	*	*	*	*	*
Month and year or age of spouse or partner when R and spouse or partner began living together	*	*	*	*	*
Characteristics of current spouse or partner: Ethnicity, religion, education, employment, income	*	*	*	*	*
Relationship history: Characteristics of previous spouses or partners	*	*	*	*	*
Relationship quality: Happiness rating, positive activities series, topics of arguments series	*	*	*	*	*
Relationship plans, expectations	*	*	*	*	*
Fertility history	*	*	*	*	*
Use of various birth control methods	*	*	*	*	*
Parenting attitudes				*	*
Prenatal care (females)	*	*	*	*	*
Health care and nutrition during pregnancy (females)	*	*	*		*
Cigarette and alcohol use during pregnancy (females)	*	*	*	*	*
Drug use during pregnancy (females)	*	*	*		
Postnatal infant care (females)	*	*	*	*	*
Expected number of children	*	*	*	*	*
R's opinions or beliefs about parenting: actual parenting behaviors				*	*
<b>F. Financial characteristics and program participation</b>					
Income of R and spouse from farm or own business	*	*	*	*	*
Income of R and spouse from wages or salary (military income included starting in 2000)	*	*	*	*	*
Income of R and spouse from unemployment compensation	*	*	*	*	*
Income of R and spouse from public assistance	*	*	*	*	*
Income of R and spouse from Food Stamps	*	*	*	*	*
Income of R and spouse from Social Security, other sources	*	*	*	*	*
Income of R and spouse from military service (combined with civilian wages starting in 2000)	*	*	*		
Income of R and spouse from child support	*	*	*	*	*
Child support expected versus amount received	*	*	*	*	*
Income of R and spouse from other sources	*	*	*	*	*
Possession of various assets (R and spouse)	*	*	*	*	*
Asset market values (R and spouse)	*	*	*		
Household income				*	*
Financial strain				*	*
Amount of debts	*	*	*	*	*
<b>G. Military service (current or past)</b>					
Branch of Armed Forces	*	*	*	*	*
Months spent in Armed Forces	*	*	*	*	*
Military occupation(s)	*	*	*	*	*

**Appendix J. Young Adult Survey Content by Survey Year**

	Survey Year:				
	94	96	98	00	02
Activation for reservists; reactivation for regular branches					*
Participation in VEAP or GI bill	*	*	*	*	*
Type and amount of military training	*	*	*	*	*
Formal education received while in service	*	*	*	*	*
<b>H. Attitudes toward work and self</b>					
Knowledge of World of Work series	*	*	*		
Characteristics of job R is willing to take (for R's who are unemployed or out of labor force)	*	*	*		
Reaction to hypothetical job offers	*	*	*		
Pearlin Mastery Scale (seven items)	*	*	*	*	*
Self-Esteem Scale (Rosenberg) (10 items)	*	*	*	*	*
Attitude toward women working	*	*	*		*
<b>I. Child care (youngest child in household in 2000 and 2002) and parenting behavior</b>					
Child care arrangements in last month (youngest child only)	*	*	*	*	*
Number of hours per week (youngest child only)	*	*	*	*	*
Parenting behavior towards youngest child				*	*
Cost per week (all children)	*	*	*	*	*
Did child care problems force R to turn down job offer or to lose work	*	*	*	*	*
<b>J. Looking for work</b>					
R looking for work or employed when found current or most recent job	*	*	*		
Methods of job search used	*	*	*		
Job offers rejected (while looking for each job)	*	*	*		
Desired characteristics of job sought	*	*	*		
<b>III. ATTITUDES AND BEHAVIORS (located in self-report booklet through 1998)</b>					
<b>A. Computer use</b>					
Does R have a computer at home or have access to one elsewhere	*	*	*	*	*
What R uses computer for most often	*	*	*		
Has R ever used computer at school or college, or at work	*	*			
How R has learned about computers	*	*	*		
Has R ever had a class or training in computer use, programming, or word processing	*	*	*		
How often R uses computer for various activities	*	*	*	*	*
<b>B. Substance use</b>					
Extent, frequency of R's alcohol use; age first used	*	*	*	*	*
Where and with whom was first drink	*	*			
Alcohol abuse behavior in past year series (had an argument, missed school or work, drove a car, and so on)	*	*	*	*	*
Does R usually drink beer, wine, or liquor	*	*	*		
Where and with whom R usually drinks	*	*	*		
R's perception of how many drink at least sometimes (series): Students in R's grade, people R's age with whom R hangs out, people R's age in R's neighborhood	*	*	*	*	*
Extent, frequency of cigarette use; age first used	*	*	*	*	*
Extent, frequency of marijuana use; age first used; various details	*	*	*	*	*
Extent, frequency of amphetamine use				*	*
Extent, frequency of use of substances (glue, gas, sprays, fluids) that are "sniffed/huffed"	*	*	*	*	*
Extent, frequency of cocaine use	*	*	*	*	*

**Appendix J. Young Adult Survey Content by Survey Year**

	Survey Year:				
	94	96	98	00	02
Extent, frequency of "crack" use	*	*	*	*	*
Age at which R first used each drug	*	*	*		
Extent, frequency of use of other drugs (LSD, uppers, downers); age at which R first used	*	*			*
Frequency of use of hallucinogens (LSD, PCP, peyote, mescaline)			*	*	*
Frequency of use of sedatives or downers (barbiturates, sleeping pills)			*	*	*
Frequency of use of other drugs (stimulants, heroin, steroids, MDMA/"Ecstasy", crystal meth./"Ice")				*	*
While high, has R ever: Hurt self or someone else; stayed home from school or work; gone late to school or work; driven a car	*	*	*		
Due to drug use, have R's grades suffered; has R ever hurt chances for a raise or for a better job	*	*	*		
Has R ever taken sedatives, tranquilizers, stimulants, painkillers, steroids, heroin, hallucinogens, or an injection of any drug without doctor's orders	*	*	*		
<b>C. Attitudes and expectations</b>					
Risk-taking behaviors and attitudes (six items)	*	*	*	*	*
Best age for R to marry; youngest age at which R can imagine getting married	*	*	*		
Best age and youngest age R can imagine to have first child	*	*	*		
Aspirations for future (marriage, fertility, employment, relationships)	*	*	*	*	*
<b>D. Sex education and sexual intercourse</b>					
Any courses or time spent in class on sex education	*	*	*	*	*
Grade R first had this course	*	*	*	*	*
Who in family R talks to about sex	*	*	*		*
Who outside family R talks to about sex					*
Ever had sexual intercourse; age at first intercourse	*	*	*	*	*
Number of partners in last 12 months	*	*	*	*	*
When last sexual intercourse occurred	*	*	*	*	*
During last sexual intercourse, did R and partner use birth control and, if so, which method(s)	*	*	*	*	*
Relationship with and characteristics of partner at last intercourse			*	*	*
Has R ever been pregnant, number of times (through 1998)	*	*	*	*	*
Month and year in which R got pregnant the first time, R's age at the time	*	*	*	*	*
In the month before the last time R got pregnant, did R or R's partner use birth control and, if so, which method(s)	*	*	*	*	*
Did R or R's partner use a birth control method on every occasion of sexual intercourse that month	*	*	*		
R ever had an abortion and, if so, how many	*	*	*		
Month and year of R's first abortion, and R's age at the time	*	*	*		
<b>E. Home and neighborhood environment</b>					
Does R live with biological father or stepfather	*	*	*	*	*
Do biological parents (and mother and stepfather, if applicable) get along, agree about who sets rules, argue	*	*	*	*	*
Does R feel caught in the middle; can R talk about each parent with the other	*	*	*	*	*
Extent of neighborhood problems (series): Disrespect for laws, incidence of crime or violence, incidence of unemployment, and so forth	*	*	*	*	*
Number of times R has run away from home	*	*	*	*	*
R's age the first time R ran away	*	*	*	*	*

**Appendix J. Young Adult Survey Content by Survey Year**

	Survey Year:				
	94	96	98	00	02
<b>F. Criminal activities</b>					
Crimes or delinquent activities R has committed in the last year (got in a fight, stole something, and so on)	*	*	*	*	*
Has R ever been convicted on any charges except a minor traffic violation; if so, what was R's age at the time	*	*	*	*	*
Number of times R has been convicted of something	*	*	*	*	*
Date of most recent conviction	*	*	*		
Charges on which R was convicted (for example, assault, robbery, or theft)	*	*	*	*	*
Has R ever been convicted on charges in adult court	*	*	*		
Has R ever been on probation; has R been on probation since last interview	*	*	*	*	*
When R's (most recent) probation period ended	*	*	*		
Has R ever been sentenced to spend time in a youth or adult corrections institution	*	*	*	*	*
Date of most recent release from corrections facility	*	*	*		
Number of times R has been referred to a court-related counseling or diversion program by police, courts, school, or own parents; if so, age at which this first occurred	*	*	*		
Date on which (most recent) counseling program ended	*	*	*		
<b>G. Volunteer activities</b>					
Volunteer work performed in last 2 years or since last interview	*	*	*	*	*
Was any of the volunteer work: Court ordered, church- or school-sponsored, other	*	*	*	*	*
Types of organizations R is or was involved with (for example, service, church, youth)	*	*	*	*	*
<b>H. Mental health</b>					
Has R received any help for an emotional, behavioral, or family problem in the last 12 months	*	*	*	*	*
Type of problem(s)	*	*	*	*	*
Has R felt or has anyone suggested that R needed help for any behavioral, emotional, or mental problem in the past 12 months?	*	*	*		
Does R regularly take any medicine or prescription drugs to help control activity level or behavior	*	*	*	*	*

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**APPENDIX K. CHILD ASSESSMENT SCORES  
1986-1994**

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**Appendix K: Raw, Standard, and Percentile Assessment Scores on the NLSY79 Child File, 1986-1994**

Assessment	1986 Scores			1988 Scores			1990 Scores			1992 Scores			1994 Scores		
	Raw	Std	%-tile	Raw	Std	%-tile	Raw	Std	%-tile	Raw	Std	%-tile	Raw	Std	%-tile
<b>Total HOME Score<sup>1</sup></b>		C5715	C5712		C7919	C7916		C9919	C9916		C11922	C11919		C15000	C14997
0-2 Years	C5700			C7900			C9900			C11903			C14981		
3-5 Years	C5704			C7904			C9904			C11907			C14985		
6-9 Years	C5708			C7908			C9908			C11911			C14989		
10 & Over Years	C5708			C7912			C9912			C11915			C14993		
<b>HOME Cognitive Stimulation Score<sup>1</sup></b>		C5716	C5713		C7920	C7917		C9920	C9917		C11923	C11920		C15001	C14998
0-2 Years	C5702			C7902			C9902			C11905			C14983		
3-5 Years	C5706			C7906			C9906			C11909			C14987		
6-9 Years	C5710			C7910			C9910			C11913			C14991		
10 & Over Years	C5710			C7914			C9914			C11917			C14995		
<b>HOME Emotional Support Scale<sup>1</sup></b>		C5717	C5714		C7921	C7918		C99021	C9918		C11924	C11921		C15002	C14999
0-2 Years	C5703			C7903			C9903			C11906			C14984		
3-5 Years	C5707			C7907			C9907			C11910			C14988		
6-9 Years	C5711			C7911			C9911			C11914			C14992		
10 & Over Years	C5711			C7915			C9915			C11918			C14996		
<b>Temperament</b>															
Activity	C5718			C7922			C9922			C11925			C15003		
Predictability	C5719			C7923			C9923			C11926			C15004		
Fearfulness	C5720			C7924			C9924			C11927			C15005		
Positive Affect	C5721			C7925			C9925			C11928			C15006		
Compliance	C5722			C7926			C9926			C11929			C15007		
Insecure Attachment	C5723			C7927			C9927			C11930			C15008		
Sociability	C5724			C7928			C9928			C11931			C15009		
Difficulty Composite	C5725			C7929											
Difficulty Composite – Abbrev.	C5725.10			C7929.10			C9929.10			C11932			C15010		
Neg. Hedonic Tone Composite	C5726			C7930			C9930			C11933			C15011		
Friendliness Composite	C5727			C7931											
Friendliness Composite – Abbrev.	C5727.10			C7931.10			C9931.10			C11934			C15012		
<b>Motor &amp; Social Development Same Gender</b>	C5728	C5730	C5729	C7932	C7934	C7933	C9932	C9934	C9933	C11935	C11937	C11936	C15013	C15015	C15014
		C5732	C5731		C7936	C7935		C9936	C9935		C11939	C11938		C15017	C15016

<sup>1</sup> Internal Norms provided

### Appendix K (continued): Raw, Standard, and Percentile Assessment Scores on the NLSY79 Child File, 1986-1994

Assessment	1986 Scores			1988 Scores			1990 Scores			1992 Scores			1994 Scores		
	Raw	Std	%-tile	Raw	Std	%-tile	Raw	Std	%-tile	Raw	Std	%-tile	Raw	Std	%-tile
<b>Behavior Problems</b>	C5733	C5747	C5740	C7937	C7951	C7944	C9937	C9951	C9944	C11940	C11954	C11947	C15018	C15032	C15025
Antisocial	C5734	C5748	C5741	C7938	C7952	C7945	C9938	C9952	C9945	C11941	C11955	C11948	C15019	C15033	C15026
Anxious/Depressed	C5735	C5749	C5742	C7939	C7953	C7946	C9939	C9953	C9946	C11942	C11956	C11949	C15020	C15034	C15027
Headstrong	C5736	C5750	C5743	C7940	C7954	C7947	C9940	C9954	C9947	C11943	C11957	C11950	C15021	C15035	C15028
Hyperactive	C5737	C5751	C5744	C7941	C7955	C7948	C9941	C9955	C9948	C11944	C11958	C11951	C15022	C15036	C15029
Dependent	C5738	C5752	C5745	C7942	C7956	C7949	C9942	C9956	C9949	C11945	C11959	C11952	C15023	C15037	C15030
Peer Conflict	C5739	C5753	C5746	C7943	C7957	C7950	C9943	C9957	C9950	C11946	C11960	C11953	C15024	C15038	C15031
<b>Behavior Problems Same Gender</b>		C5761	C5754		C7965	C7958		C9965	C9958		C11968	C11961		C15046	C15039
Antisocial		C5762	C5755		C7966	C7959		C9966	C9959		C11969	C11962		C15047	C15040
Anxious/Depressed		C5763	C5756		C7967	C7960		C9967	C9960		C11970	C11963		C15048	C15041
Headstrong		C5764	C5757		C7968	C7961		C9968	C9961		C11971	C11964		C15049	C15042
Hyperactive		C5765	C5758		C7969	C7962		C9969	C9962		C11972	C11965		C15050	C15043
Dependent		C5766	C5759		C7970	C7963		C9970	C9963		C11973	C11966		C15051	C15044
Peer Conflict		C5767	C5760		C7971	C7964		C9971	C9964		C11974	C11967		C15052	C15045
<b>Behavior Probs. Trichotomous Items</b>													C15053	C15054	C15055
External													C15056	C15057	C15058
Internal													C15059	C15060	C15061
<b>Body Parts<sup>1</sup></b>	C5779			C7972	C7975	C7974									
<b>Memory for Location<sup>1</sup></b>	C5781	C5784	C5783	C7976	C7979	C7978									
<b>Verbal Memory</b>															
A + B: Words/Sentences	C5785	C5787	C5786	C7980	C7982	C7981	C9972	C9974	C9973	C11975	C11977	C11976	C15065	C15067	C15066
C: Story	C5788	C5790	C5789	C7983	C7985	C7984	C9975	C9977	C9976						
<b>Self-Perception</b>															
Scholastic	C5791			C7986			C9978			C11978			C15068		
Self-Worth	C5793			C7988			C9980			C11980			C15070		
<b>Digit Span</b>	C5795	C5798		C7990	C7993		C9982	C9985		C11982	C11985		C25072	C15075	
Forward	C5796			C7991			C9983			C11983			C25073		
Backward	C5797			C7992			C9984			C11984			C25074		
<b>PIAT Math</b>	C5799	C5801	C5800	C7994	C7996	C7995	C9986	C9988	C9987	C11986	C11988	C11987	C25076	C15078	C15077
<b>PIAT Reading Recognition</b>	C5802	C5804	C5803	C7997	C7999	C7998	C9989	C9991	C9990	C11989	C11991	C11990	C25079	C15081	C15080
<b>PIAT Reading Comprehension</b>	C5805	C5807	C5806	C8000	C8002	C8001	C9992	C9994	C9993	C11992	C11994	C11993	C25082	C15084	C15083
<b>PPVT</b>	C5809	C5810	C5811	C8004	C8005	C8006	C9996	C9997	C9998	C11966	C11997	C11998	C25086	C15087	C15088

<sup>1</sup> Internal Norms provided

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**APPENDIX L. CHILDREN INTERVIEWED BY  
AGE AND RACE, 1986-1992**

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### Appendix L. NLSY79 Children and Young Adults Interviewed by Single Year of Age and Race/Ethnicity, 1986-1992

Child Age at Interview	1986				1988				1990				1992			
	Hisp	Black	White	Total	Hisp	Black	White	Total	Hisp	Black	White	Total	Hisp	Black	White	Total
< 1	96	157	321	574	97	132	321	550	80	112	217	409	76	84	178	338
1	111	167	345	623	101	134	309	544	94	139	224	457	81	93	249	423
2	111	172	300	583	113	149	314	576	104	127	230	461	84	124	238	446
3	121	184	289	594	117	169	360	646	105	117	212	434	91	131	213	435
4	137	167	283	587	102	157	304	563	104	139	217	460	117	136	226	479
5	91	157	228	476	108	169	306	583	112	158	247	517	109	121	216	446
6	83	161	201	445	130	173	274	577	100	148	205	453	111	145	211	467
7	68	112	146	326	99	158	256	513	105	165	188	458	111	146	252	509
8	48	105	117	270	82	169	232	483	136	155	170	461	108	149	194	451
9	27	78	93	198	62	130	153	345	86	146	166	398	93	156	187	436
10	21	74	60	155	52	103	123	278	81	149	147	377	136	153	174	463
11	15	41	25	81	36	77	121	234	63	118	94	275	92	155	146	393
12	4	17	15	36	29	84	69	182	49	94	65	208	86	140	143	369
13	4	9	5	18	16	52	39	107	33	83	54	170	68	108	90	266
14		2	2	4	10	20	20	50	27	62	39	128	47	95	67	209
15		1		1	1	15	9	25	16	50	19	85	28	72	49	149
16+					3	4	3	10	9	32	11	52	45	125	60	230
<b>Total</b>	<b>937</b>	<b>1,604</b>	<b>2,430</b>	<b>4,971</b>	<b>1,158</b>	<b>1,895</b>	<b>3,213</b>	<b>6,266</b>	<b>1,304</b>	<b>1,994</b>	<b>2,505</b>	<b>5,803</b>	<b>1,483</b>	<b>2,133</b>	<b>2,893</b>	<b>6,509</b>

NOTE: Page numbers in italics refer to index items located in tables and appendices.

**A**

accidents..... (see *injuries*)  
 achievement/performance measures  
   PIAT Math..... 61, 89  
   PIAT Reading Recognition..... 91  
   PIAT Reading Comprehension..... 93  
 activities..... 27, 28, 30, 33, 34, 39, 42, 43, 44,  
   50, 52, 53, 55, 57, 59, 109, 125, 126, 141, 143, 147,  
   148, 184, 185, 186, 189, 190, 192, 193, 261, 275, 277,  
   278, 280  
 AFDC..... 124  
 after school..... 34, 42  
 age of child..... 8, 13, 14, 20, 29, 32, 37, 40, 41, 100  
 age of mother..... 8, 38, 40, 42, 47, 158  
 age of young adult..... 128  
 age variables..... 11, 12, 41  
 alcohol..... 34, 35, 39, 44, 45, 51, 59, 125, 126,  
   152, 157, 162, 262, 277, 278  
 amphetamines..... 58  
 antisocial behavior...34, 79 (also see *Behavior Problems*)  
 aptitude/ability measures  
   Memory for Digit Span..... 87  
   Memory for Location..... 82  
   Parts of the Body..... 81  
   PPVT-R..... 96  
   Verbal Memory (McCarthy)..... 83  
 areas of interest..... 11, 37, 37, 38, 41, 43, 46, 49, 50,  
   60, 72, 115, 116, 162, 165, 167  
 aspirations..... 46, 119, 138  
 assets..... 123, 124, 277  
 attitudes..... 4, 17, 27, 34, 39, 45, 80, 99, 109, 114,  
   124, 125, 139, 141, 142, 143, 144, 146, 147, 148, 149,  
   262, 277, 279

**B**

Behavior Problems Index ...28, 30, 31, 38, 50, 60, 68, 70,  
 78, 80, 102, 103, 104, 105, 151, 158, 213, 214, 215,  
 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226,  
 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237,  
 238, 239, 240, 241, 242, 260  
 birth control..... 125, 126, 277, 279  
 birth histories..... 49, 121, 122, 130

**C**

CAPL..... 5, 27, 28, 29, 30, 31, 33, 35, 36,  
 37, 38, 41, 42, 45, 46, 50, 56, 57, 70, 71, 72, 78, 80,  
 85, 86, 90, 92, 95, 97, 101, 109, 112, 115, 121, 123,  
 125, 127, 128, 130, 159, 160, 165, 167, 199, 265, 267,  
 268, 269, 270, 271, 272  
 CASI..... 28, 29, 30, 31, 45, 57  
 Census industry and occupation coding..... 127  
 CES-D..... 45, 114, 124, 125, 140, 152, 276  
   (see *depression*)  
 child background..... 34, 38, 41, 158  
 child care..... 29, 37, 46, 47, 122, 123, 157,  
   161, 162, 167, 278

Child Self-Administered Supplement ..... 27, 28, 34, 35,  
 36, 38, 45, 46, 53, 54, 102, 158, 160, 167, 259  
 Child Supplement..... 8, 27, 28, 30, 32, 33, 34, 35, 37,  
 38, 40, 41, 42, 43, 44, 50, 53, 71, 74, 76, 77, 81, 84,  
 85, 86, 88, 89, 92, 94, 100, 101, 102, 158, 159, 194,  
 199, 254, 259, 260, 263  
 cigarette use..... 39, 58, 125, 278  
 cocaine..... 58, 59, 114, 151, 262, 278  
   (see *drug use*)  
 college..... 119, 133, 148, 149, 276, 278  
 community service..... 43, 44  
 completion rates..... 67, 69, 70, 74,  
   93, 95, 101, 102, 103, 104, 165  
 computer use..... 34, 35, 39,  
   42, 109, 125, 126, 263, 278  
 constructed variables..... 158, 162  
   (see *key variables*)  
   Child..... 29, 37, 38, 157  
   Young Adult..... 109, 127, 130, 161  
 contraception..... 125, 126  
   (see *birth control*)  
 convictions..... 126  
 counseling..... 276, 280  
   career..... 276  
   court-related..... 280  
 cousins..... 19  
 County and City Data Book..... 131  
 CPS..... 116, 126, 127, 275  
 crack.....  
   (see *cocaine*)  
 crime..... 262, 279, 280  
 cross generations..... 142, 144

**D**

data collection..... 3, 4, 5, 7, 10, 12, 17, 24, 27, 29, 36,  
 49, 57, 58, 61, 65, 83, 84, 90, 102, 104, 141, 142, 145,  
 148, 150, 152  
 dating ...28, 34, 43, 54, 116, 118, 119, 141, 144, 261, 277  
 delinquency..... 59, 87, 114, 140  
   (see *crime*)  
 demographics..... i, 41  
 depression..... 34, 45, 55, 79, 114, 124, 125, 140,  
   142, 147, 178  
 discipline..... 53, 73, 74, 184  
 documentation..... 3, 29, 37, 54, 62, 65, 86, 98, 131,  
   134, 153, 157, 161, 166, 168, 169, 170  
 drinking..... (see *alcohol*)  
 drug use..... 39, 51, 59, 87, 109, 140, 144, 151,  
   152, 262, 277, 279 (see *substance use*)  
 dwelling..... 111, 112, 117  
   (see *housing*)

- E**
- education.....4, 17, 34, 38, 47, 50, 57, 89, 97, 99, 109, 118, 119, 144, 145 (*also see schooling, grade, and college*)  
 family .....47, 118  
 enrollment.....28, 33, 38, 47, 55, 57, 119, 163, 275, 276  
 errata & user notes ..... 168  
 ethnicity .....10, 65, 69, 70, 75, 78, 101, 104, 117, 129, 275 (*also see race*)  
 expectations .....28, 30, 31, 34, 39, 46, 125, 126, 141, 147, 277, 279
- F**
- family background .....27, 30, 38, 39, 59, 99, 117, 157, 161, 162, 260  
 family rules .....43, 54
- father.....28, 36, 37, 40, 48, 54, 56, 71, 74, 117, 118, 125, 127, 184, 185, 186, 187, 188, 189, 192, 193, 261, 279  
 fertility .....41, 42, 49, 50, 51, 71, 116, 118, 121, 122, 123, 125, 130, 145, 152, 157, 162, 167, 276, 277, 279  
 friends .....43, 45, 48, 71, 118, 143, 148, 185, 189, 192, 260, 261, 262, 276
- G**
- gender roles.....39, 261  
 geocode data ..... 130, 132, 133, 134  
 grade .....  
 27, 28, 31, 33, 35, 37, 38, 39, 40, 47,  
 55, 56, 57, 117, 118, 119, 141, 259, 260, 261, 262,  
 275, 276, 278
- H**
- handedness..... 28, 30, 151, 152, 259, 276  
 Head Start ..... 28, 30, 38, 56, 144, 259  
 health .....6, 17, 23, 27, 28, 30, 31, 33, 36, 38, 39, 45, 48, 49, 50, 51, 59, 76, 78, 102, 109, 122, 123, 141, 142, 148, 149, 150, 151, 152, 153, 157, 158, 161, 162, 191, 194, 245, 246, 249, 250, 259, 260, 276, 280  
 health care.....49, 51, 123  
 health conditions ..... 50  
 health insurance ..... 49, 122  
 height ..... 27, 33, 50, 151, 152, 259  
 HOME .....28, 29, 30, 32, 33, 36, 38, 41, 43, 52, 53, 60, 63, 68, 70, 71, 72, 73, 74, 75, 99, 102, 103, 104, 122, 138, 140, 141, 144, 145, 149, 159, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 260, 283  
 home environments.....39  
 hospitalizations ..... 28, 123, 152  
 housing ..... 112  
 How My Child Usually Acts.....(*see Temperament*)
- I**
- immunization .....50
- incarceration ..... 112, 280  
 income ..... 74, 123, 124, 138, 162, 277  
 index age (group)..... 99  
 industry coding ..... 127  
 infant care ..... 49, 51, 277  
 injuries ..... 28, 30, 49, 123, 151, 152, 259, 276  
 instrumentation ..... 27  
 intercohort analyses ..... 141  
 interview dates ..... 12, 47, 117, 163  
 interview frequency ..... 12, 15  
 interview status ..... 164  
 interviewer  
 evaluation ..... 28, 33  
 observation ..... 33, 36, 71, 74, 101, 184, 185, 194  
 remarks ..... 34, 100, 101, 126
- J**
- jail ..... 112  
 jobs ..... 34, 44, 51, 120, 121, 126, 127, 157, 275  
 job search ..... 120, 126, 275, 278
- K**
- key variables.....41, 47, 48, 127, 128, 129  
 (*also see constructed variables*)
- L**
- labor market unemployment variable ..... 132  
 life cycle .. 12, 20, 109, 137, 145, 147, 148, 149, 157, 163  
 linking data files ..... 163  
 linking procedures ..... 162
- M**
- marijuana ..... 35, 58, 59, 114, 126, 151, 262, 278  
 maternal employment ..... 29, 52, 148  
 maternal work history ..... 49  
 memory  
 Digit Span ..... 87  
 Memory for Location ..... 82  
 Verbal Memory ..... 83  
 Memory for Digit Span ..... 28, 33, 61, 87, 88, 259  
 Memory for Location ..... 60, 61, 82, 83, 144  
 menses ..... 30, 36, 37, 50, 123  
 mental health ..... 30, 48  
 merging files ..... 164, 245, 249  
 military ..... 4, 6, 7, 21, 22, 51, 109, 119, 121, 123, 124, 126, 133, 157, 162, 277, 278  
 missing data ..... 133, 164  
 mother report ..... 28, 33, 39, 71, 72, 151  
 Mother Supplement ..... 11, 27, 28, 29, 30, 31, 33, 34, 36, 38, 40, 41, 43, 45, 46, 50, 53, 57, 70, 71, 72, 73, 78, 79, 80, 102, 122, 158, 159, 167, 199, 253, 259  
 Motor and Social Development ..... 31, 41, 49, 50, 60, 61, 70, 76, 77, 102, 104, 105, 144, 151, 260
- N**
- neighborhood ..... 34, 45, 46, 126, 149, 262, 278, 279  
 safety ..... 46

- O**
- occupation coding..... 127  
 ordering information..... 169  
 oversamples ..... 4, 6, 7, 10, 21, 22, 47, 65, 70, 102,  
 103, 109, 110, 129, 143, 168
- P**
- parent-child interaction..... 52, 55, 148  
 Parts of the Body ..... 60, 68, 81, 259  
 PDA.....  
 28, 35, 35, 36, 167  
 Pearlin scale..... 45, 114, 124, 125, 140, 147, 178, 278  
 peer relationships..... 34, 39  
 performance/achievement measures  
 PIAT Math ..... 89  
 PIAT Reading Comprehension ..... 93  
 PIAT Reading Recognition ..... 91  
 PIAT  
 Math..... 28, 33, 41, 68, 70, 90, 91, 92, 97, 99,  
 100, 103, 104, 105, 144, 260, 284  
 Reading Comprehension ..... 33, 34, 70, 93, 94,  
 95, 96, 103, 104, 105, 284  
 Reading Recognition..... 61, 70, 91, 92, 93, 103, 104,  
 105, 284  
 pooling..... 17  
 PPVT ..... 11, 28, 32, 33, 34, 36, 37, 41, 42,  
 61, 68, 70, 74, 89, 90, 92, 94, 96, 97, 98, 99, 100, 102,  
 103, 104, 105, 138, 144, 145, 260, 284  
 age..... 41, 42, 61, 70, 89, 90, 92, 94, 96, 98  
 pregnancy ..... 49, 51, 114, 121, 122, 125, 140, 141,  
 150, 151, 152, 163, 262, 277  
 prenatal care ..... (see infant care)  
 preschool ..... 33, 56, 91, 100, 259  
 probation ..... 160, 280
- R**
- race ..... 10, 23, 41, 65, 69, 75, 78, 101, 104,  
 110, 117, 118, 129, 152, 162 (also see ethnicity)  
 relationship history ..... 157, 162  
 religion ..... 27, 28, 30, 36, 38, 118, 157, 262,  
 263, 275, 277  
 religious attendance..... 30, 39, 275  
 risk behaviors ..... 59  
 risk taking ..... 125  
 Rosenberg scale..... 45, 114, 124, 125, 139, 140, 147, 278
- S**
- sample ..... (also see oversamples)  
 changes..... 10  
 child ..... 4, 7, 10, 39, 65,  
 80, 92, 137, 149, 165  
 identification ..... 47  
 selection ..... 19, 24, 137  
 size ..... 6, 7, 10, 12, 19, 142  
 young adult..... 5, 91, 109, 110, 111, 129  
 sampling weights ..... 7, 21, 22, 47, 69, 73, 129, 165  
 school ..... 27, 28, 30, 31, 33, 34, 35, 36, 37,  
 38, 39, 42, 43, 44, 45, 46, 47, 55, 56, 57, 58, 59, 71,  
 78, 79, 85, 90, 91, 100, 119, 121, 133, 141, 143, 146,  
 147, 148, 151, 152, 157, 158, 163, 190, 191, 193, 194,  
 213, 259, 260, 261, 262, 263, 275, 276, 278, 279, 280  
 attitudes..... 39  
 parental involvement ..... 30, 33, 119  
 type of..... 56, 119  
 school survey  
 principal questionnaire..... 57, 58  
 student questionnaire ..... 57, 58  
 schooling ..... 4, 17, 27, 30, 38, 39, 55, 56, 57, 71,  
 109, 119, 120, 121, 138, 141, 142, 148, 157, 158, 162,  
 260, 261, 276  
 self-esteem ..... 55, 124, 139  
 Self Perception Profile (SPPC) ..... 36, 60, 86  
 sexual activity ..... 34, 35, 39, 59, 109, 125, 141,  
 142, 145, 147, 262  
 siblings ..... 19, 35, 45, 48, 101, 112, 142, 149,  
 163, 260  
 smoking..... (see cigarette use)  
 spouse..... 40, 47, 48, 55, 118, 199, 123, 124,  
 140, 246, 250, 277  
 substance use..... 34, 35, 45, 59, 109, 126, 141, 143,  
 147, 151, 278  
 (also see amphetamine, cigarette use, cocaine, drug  
 use, marijuana)  
 survey instruments ..... 5, 27, 29, 129, 158, 167
- T**
- television (TV) viewing ..... 43, 90  
 Temperament ..... i, iii, vi, 28, 30, 36, 41, 43, 49, 60,  
 61, 63, 68, 70, 75, 76, 102, 103, 104, 105, 144, 151,  
 159, 195, 197, 260, 283  
 tobacco ..... (see cigarette use)  
 training ..... 42, 47, 109, 116, 120, 121, 146, 157, 162,  
 260, 261, 263, 276, 278  
 vocational ..... 276
- U**
- unemployment..... 132  
 user notes & errata ..... 168
- V**
- Verbal Memory (McCarthy) ..... 60, 83  
 volunteer work ..... 43, 44, 126, 280
- W**
- welfare ..... 124, 246, 250 (also see AFDC)  
 women's roles..... 125  
 work activities..... 126  
 work for pay ..... 27, 34, 44, 126, 263  
 world of work..... 124, 125, 278
- Y**
- Young Adult questionnaire ..... 45, 112, 115  
 Young Adult sample ..... (see sample, young adult)