NLSY79 USER'S GUIDE

A Guide to the 1979–2000 National Longitudinal Survey of Youth Data

Prepared for the U.S. Department of Labor by Center for Human Resource Research The Ohio State University Columbus, Ohio December 2001

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Acknowledgments

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This document pays tribute to the initiators of the NLS, Herbert S. Parnes and Howard Rosen, who had the vision to see that the collection of longitudinal data on the labor force experiences of American men and women could provide a basis for policies fostering more efficient and equitable labor markets. Additional thanks go to the NLSY79's current Principal Investigator, Randall Olsen, who modernized and expanded the NLSY79. Special thanks to the previous guide compiler, Gale James; to the NLSY79 main and child archivists, Karima Nagi, Paula Baker, and Canada Keck; and to the other members of the documentation team: Linda Boyer, Tiffany Chase, Jennifer Hering, Amanda McClain, and Jay L. Zagorsky.

Shawn Miller Editor

Help and Information

This manual is one of a set of user-oriented documents available to the NLS research community containing information on the Original Cohorts (Older Men, Young Men, Mature Women, and Young Women), the NLSY79, the Children of the NLSY79, and the NLSY97. Appendix A in this document contains a quick reference guide to essential information about the NLSY79. Persons needing more information on the NLS in general or the NLS cohort groups are encouraged to obtain copies of the NLS Handbook. Persons interested in data collected on the Children of the NLSY79 will want to examine the NLSY79 Child Handbook 1986-1990. Summaries of research completed on the NLS over the past several decades are published on line in the NLS Annotated Bibliography of Research, located at http://www.nlsbibliography.org. Persons needing detailed information on the other cohorts should read the NLS of Mature Women User's Guide, NLS of Young Women User's Guide, and the NLSY97 User's Guide; contact NLS User Services for more information on the men's cohorts. The Handbook, User's Guides, and other NLS publications are available online at http://www.bls.gov/nls/. Ordering information for NLS publications and data sets is available from NLS User Services, 921 Chatham Lane, Suite 100, Columbus, OH 43221-2418; Phone (614) 442-7366, fax (614) 442-7329, or e-mail at usersvc@postoffice.chrr.ohio-state.edu. Orders can also be placed online at http://www.bls.gov/nls/ by choosing the "Ordering Data" link.

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Chapter 1: Introduction

1.1 The National Longitudinal Survey of Youth 1979 (NLSY79)

The NLSY79 is a nationally representative sample of 12,686 young men and women who were 14-22 years old when they were first surveyed in 1979. These individuals are now in their late thirties and forties, and have been personally interviewed for over 2 decades. Since their first interview, many of the respondents have made the transitions from school to work, and from their parents' homes to becoming parents and homeowners. Data collected yearly from 1979 to 1994, and biennially from 1996 to the present, chronicle these changes and provide researchers an opportunity to study in great detail the experiences of a large group of young adults who can be considered representative of all American men and women born in the late 1950s and early 1960s.

The primary purpose of the NLSY79 is the collection of data on each respondent's labor force experiences, labor market attachment, and investments in education and training. However, the actual content of the NLSY79 is much broader due to the interests of governmental agencies besides the Department of Labor. At several points throughout the survey, various agencies have funded special sets of questions. In addition to major funding, supportive funding has been provided by the U.S. Department of Health and Human Services, the National Institute on Aging, the National Institute on Alcohol Abuse and Alcoholism, the U.S. Department of Defense and the Armed Services and the National Institute of Education. Examples of other topical areas include:

- (1) Military participation–Support from the Department of Defense and the Armed Services made possible the 1979–84 interviews of 1,280 youth enlisted in the military.
- (2) Vocational aptitude-The Armed Services Vocational Aptitude Battery (ASVAB), a study which was jointly sponsored by the Departments of Defense and Labor, was administered to the civilian and military youth samples in 1980.
- (3) High school performance–Beginning in 1979, a five-year cooperative effort of the National Center for Research in Vocational Education and The Ohio State University's Center for Human Resource Research resulted in a survey of the high schools of civilian NLSY79 respondents and the collection of detailed transcript information on potential high school graduates.
- (4) Time-use–In 1981, the National Institute of Education sponsored a set of time-use questions.
- (5) Alcohol and substance use–Funding from the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse has made possible multiple fieldings of expanded sets of alcohol and substance use questions.
- (6) Children's issues–Assessments of NLSY79 children, the development of the fertility and the child care components of the youth surveys, and a child school survey were made possible through funding from the National Institute of Child Health and Human Development.
- (7) Department of Justice–A self-report supplement to the 1980 survey collected data on the respondent's participation in and income from various delinquent and criminal activities.

This detailed guide is designed for researchers who are either working or planning to work with the National Longitudinal Survey of Youth 1979 (NLSY79). Users who are interested in a general overview of the NLS surveys should refer to the *NLS Handbook*. Users may also wish to read recent issues of *NLS News*, a quarterly newsletter, available on-line at http://www.bls.gov/nls/nlsnews.htm. For those not familiar with the NLS, a brief overview of the NLSY79 and the other NLS cohorts follows.

1.2 The NLS

The National Longitudinal Surveys (NLS) are a set of surveys sponsored by the Bureau of Labor Statistics (BLS), U.S. Department of Labor. These surveys have gathered information at multiple points in time on the labor market experiences of diverse groups of men and women. Each of the NLS samples consists of several thousand individuals, some of whom have been surveyed over several decades. The earliest NLS interviews began in 1966 under the original sponsorship of the Office of Manpower, Automation, and Training (now the Employment and Training Administration). These cohorts were chosen in an effort to understand specific issues pertaining to the U.S. labor market, such as retirement, the return of housewives to the labor force, and the school-to-work transition. Since that time, however, the content of the surveys has been expanded to provide useful information on an extremely broad range of topics.

The first four NLS cohorts (Older Men, Mature Women, Young Men, and Young Women) were selected in the mid-1960s because each faced important labor market decisions that were of special concern to policy makers. Although the initial plan called for only a 5-year period of interviewing, high retention rates and widespread research interest led investigators to continue the surveys. In 1977, a survey of all known NLS data users and the recommendations of a panel of experts convened by the Department of Labor resulted in two decisions. The first was to continue the surveys of the four Original Cohorts for an additional five years (as long as attrition did not become a problem). The second decision was to begin a new longitudinal study of a panel of young men and young women.

This new study was initiated to permit a replication of the analysis of the 1960s Young Men and Young Women cohorts and to assist in the evaluation of the expanded employment and training programs for youth legislated by the 1977 amendments to the Comprehensive Employment and Training Act (CETA). To these ends, in 1978 a national probability sample was drawn of young women and young men living in the United States and born between January 1, 1957, and December 31, 1964. This sample included an overrepresentation of blacks, Hispanics, and economically disadvantaged non-black/non-Hispanics. With funding from the Department of Defense and the Armed Services, an additional group of young persons serving in the military was selected for interviewing. This sample of civilian and military youth, called the National Longitudinal Survey of Youth 1979 (NLSY79), was first interviewed in early 1979 and has been re-interviewed regularly since that date.

The Children of the NLSY79 survey, begun in 1986, further enhanced the NLS. With funding from the National Institute of Child Health and Human Development (NICHD) and a number of additional government agencies and private foundations, detailed information on the development of children born to NLSY79 women has supplemented the data on mothers and children collected during the regular youth surveys. During these biennial surveys, a battery of child cognitive, socio-emotional, and physiological assessments are administered to NLSY79 mothers and their children. In addition to these assessments, the Children of the NLSY79 are also asked a number of questions in an interview setting. In 1994, children age 15 and older, the "Young Adults," first responded to a separate survey with questions similar to those asked of their mothers and a wide array of attitudinal and behavioral questions tailored to their age group.

With the aging of the NLSY79 cohort, another longitudinal cohort has been started. The National Longitudinal Survey of Youth 1997 (NLSY97) collects information on the circumstances that influence or are influenced by the labor market behaviors of youth ages 12–16 as of December 31, 1996. Data on the youths' educational experiences, along with their family and community backgrounds, are also included in the survey. Documenting the transition from school to work, this survey is designed to be representative of the population born during the period 1980 to 1984.

Information on sample sizes, interview years, and the current survey status of each respondent group is presented in Table 1.2.1 below.

Survey Group	Age Cohort	Birth Year Cohort	Initial Sample Size	Initial/Latest Survey Year	# of Surveys to Date	Survey Status
Older Men	45–59 (as of 3/31/66)	4/1/06-3/31/21	5020	1966/1990	13 ¹	Ended
Mature Women	30–44 (as of 3/31/67)	4/1/22–3/31/37	5083	1967/2001	20	Continuing
Young Men	14–24 (as of 3/31/66)	4/1/41–3/31/52	5225	1966/1981	12	Ended
Young Women	14–24 (as of 12/31/67)	1/1/43–12/31/53	5159	1968/2001	21	Continuing
NLSY79	14–21 (as of 12/31/78)	1957–1964	12686	1979/2000	19	Continuing
NLSY79 Children	Birth-14	—	3	1986/2000	8	Continuing
NLSY79 Young Adults ²	15 & older	—	3	1994/2000	4	Continuing
NLSY97	12–16 (as of 12/31/96)	1980–1984	8984	1997/2001	4	Continuing

Table 1.2.1 The NLS: Survey Groups, Sample Sizes, Interview Years & Status

¹ Twelve interviews occurred from 1966–83. The 1990 interview surveyed living respondents and next-of-kin of deceased respondents. ² NLSY79 Young Adult respondents were initially interviewed as part of the NLSY79 Children sample. Beginning in 1994, those 15 and

older were surveyed separately. In 1998, youths 21 and older were not interviewed and in 2000 the full age range was interviewed.

³ The sizes of the NLSY79 Children and Young Adult samples are dependent on the number of children born to NLSY79 respondents. Since this number is still increasing, original sample sizes are omitted. Administration of the NLSY79 Project. Responsibility for the administration of the NLS resides with the Bureau of Labor Statistics (BLS), an agency of the U.S. Department of Labor. Established in 1884, BLS is responsible for the analysis and publication of data series on employment and unemployment, prices and living conditions, compensation and working conditions, productivity, occupational safety and health, and economic growth and employment projections. Its mission is to promote the development of the U.S. labor force by gathering information about the labor force and disseminating it to policy makers and the public so participants in those markets can make more informed, and thus more efficient, choices.

The NLS supports BLS in this mission. The surveys are part of a longitudinal research program that includes in-house analyses, extramural grants, and other special projects. The NLS program is housed in the Office of Employment Research and Program Development, headed by an Assistant Commissioner. Direction of the NLS program is the responsibility of the Director of National Longitudinal Surveys.

BLS contracts with the Center for Human Resource Research (CHRR) at The Ohio State University to manage the NLS Original Cohorts and NLSY79, to share in the design of the survey instruments, to disseminate the data, and to provide user services. The Census Bureau collects data for the Original Cohorts through an interagency agreement with BLS. Data collection for the NLSY79 and the NLSY79 Children samples is subcontracted to the National Opinion Research Center (NORC) at the University of Chicago. BLS contracts with NORC to manage the NLSY97 cohort and to collect the data for this survey; CHRR is subcontracted for instrument programming, data dissemination, documentation, and variable creation. The project is assisted in its efforts by the NLS Technical Review Committee. Meeting twice each year, committee members provide recommendations regarding questionnaire design, additional survey topics, potential research uses, methodological issues, data distribution, and user services. The committee is multidisciplinary, reflecting the wide range of social scientists using NLS data.

Ultimate responsibility rests with BLS for overseeing all aspects of the work undertaken by the other organizations. For more information about the NLS program, contact:

The National Longitudinal Surveys Bureau of Labor Statistics 2 Massachusetts Avenue NE, Room 4945 Washington, D.C. 20212-0001 (202) 691-7410; fax: (202) 691-7425 e-mail: NLS_info@bls.gov www: http://www.bls.gov/nls/

1.3 NLSY79 Samples

The NLSY79 sampling design enables researchers to analyze the experiences of groups such as women, Hispanics, blacks, and the economically disadvantaged. The following three subsamples comprise the NLSY79:

- a cross-sectional sample of 6,111 respondents designed to be representative of the noninstitutionalized civilian segment of young people living in the United States in 1979 and born between January 1, 1957, and December 31, 1964 (ages 14–21 as of December 31, 1978)
- (2) a supplemental sample of 5,295 respondents designed to oversample civilian Hispanic, black, and economically disadvantaged non-black/non-Hispanic youth living in the United States during 1979 and born between January 1, 1957, and December 31, 1964
- (3) a sample of 1,280 respondents designed to represent the population born between January 1, 1957, and December 31, 1961 (ages 17–21 as of December 31, 1978), and who were enlisted in one of the four branches of the military as of September 30, 1978

Users can identify a respondent's sample type by using variable R01736. With a few exceptions, all members of the cross-sectional sample have been eligible for interview during each NLSY79 survey. Funding constraints imposed limitations on the numbers of military and supplemental sample members who were eligible for interview after the 1984 and 1990 surveys, respectively. Following the 1984 interview, 1,079 members of the military subsample were no longer eligible for interview; 201 respondents randomly selected from the entire military subsample remained in the survey. Following the 1990 interview, none of the 1,643 members of the economically disadvantaged, non-black/non-Hispanic subsample were eligible for interview. Table 1.3.1 presents sample sizes for several survey years.

User Notes: Although the entire economically disadvantaged, non-black/non-Hispanic subsample was dropped following the 1990 survey, the 'Reason for Noninterview' variable has only 1,621 respondents listed as "supplemental poor white sample dropped." The remaining 22 respondents died prior to the dropping of the subsample. These individuals continue to be classified as "deceased." For further information, refer to the "Reasons for Noninterview" section in chapter 2.

Year	1979	1984	1990	1994	1996	1998	2000
Total Sample	12686	12069	10436	8891	8636	8399	8033
Cross-Sectional Sample	6111	5814	5498	5457	5290	5159	4949
Males	3003	2839	2664	2648	2554	2459	2356
Non-black/non-Hispanic	2439	2303	2157	2150	2085	2007	1926
Black	346	329	318	310	301	289	272
Hispanic	218	207	189	188	168	163	158
Females	3108	2975	2834	2809	2736	2700	2593
Non-black/non-Hispanic	2477	2365	2271	2243	2177	2161	2065
Black	405	393	365	363	358	346	343
Hispanic	226	217	198	203	201	193	185
Supplemental Sample	5295	5040	4755	3256	3171	3065	2921
Males	2576	2442	2280	1599	1555	1480	1412
Poor non-black, non- Hispanic	742	699	664²	_	_	_	_
Black	1105	1055	979	973	946	883	847
Hispanic	729	688	637	626	609	597	565
Females	2719	2598	2475	1657	1616	1585	1509
Poor non-black/non-Hispanic	901	851	819 ¹	_	_	_	_
Black	1067	1034	984	987	971	951	912
Hispanic	751	713	672	670	645	634	597
Military Sample	1280	1215	183 ²	178	175	175	163
Males	824	774	168	164	160	161	152
Non-black/non-Hispanic	609	575	70	68	68	66	64
Black	162	151	68	62	61	63	61
Hispanic	53	48	30	34	31	32	27
Females	456	441	15	14	15	14	11
Non-black/non-Hispanic	342	331	7	7	7	6	6
Black	89	86	5	5	5	5	3
Hispanic	25	24	3	2	3	3	2

¹ Subsample dropped after the 1990 interview.

² Two hundred and one members of the military sample were retained for future interviewing after the sample was dropped in 1985; 183 of these respondents were interviewed in 1990.

1.4 Multiple Respondent Households

The NLSY79 sample design selected as respondents individuals aged 14 to 21 as of December 31, 1978, who were connected to a surveyed household during 1978. Respondents interviewed in 1979 originated from 8,770 unique households; 2,862 households included more than one NLSY79 respondent.

The most common relationships between respondents living in multiple respondent households at the time the survey began were those of sibling or spouse (see Table 1.4.1). During the 1979 survey, 5,863

respondents were members of a household containing multiple interviewed siblings. More than 330 respondents were members of a household in which their spouse was also interviewed.

Type of Household	Number of Respondents	Number of Households
Single Respondent	5908	5908
Multiple Siblings		
Two Siblings	3386	1693
Three Siblings	1725	575
Four Siblings	604	151
Five Siblings	130	26
Total Multiple Siblings	5863	2448
Spouse	334	167
Other	581	247
Totals	12686	8770

Table 1.4.1 Number of NLSY79 Civilian Respondentsby Type of Household: 1979

Note: Siblings may be biological, step, or adopted. Some households may include both siblings and spouses, as well as respondents with other relationships not presented in this table.

1.5 NLSY79 Children

The child sample began in 1986; the expanded mother-child data collection has occurred biennially since then. The child sample includes children born to female NLSY79 respondents. The number of children born to interviewed mothers has increased from 5,255 in 1986 to more than 8,323 in 2000. Interviews were completed during 2000 with 6,417 children, or more than 77 percent of the children born to interviewed NLSY79 mothers.

Starting with the 1994 survey, the children are treated as two separate groups. The first includes children who were under age 15 (as of December 31 of the survey year). These children are directly assessed (i.e. completed one or more of the assessment instruments), and information about the child is obtained from the child's mother. The second group comprises NLSY79 children who are at least 15 years of age by the end of the survey's calendar year. These "young adults," most of whom were assessed during earlier child surveys, are administered a separate set of instruments, including a full NLSY79-style interview, that gathers information on a wide range of topics.

Sample sizes for NLSY79 mothers and children across survey years are presented in Table 1.5.1. Important issues related to changes over time in the NLSY79 child and mother sample sizes are discussed in the NLSY79 Child and Young Adult Data Users Guide, NLSY79 Children 1992: Description and Evaluation, and the NLSY79 Child Handbook: A Guide to the 1986–1990 NLSY79 Child Data.

	1979	1986	1988	1990	1992	1994	1996	1998	2000
NLSY79 Female Respondents									
Interviewed	6283	5418	5312	4510	4535	4480	4361	4299	4113
NLSY79 Female Respondents with Children									
# Interviewed	_	2922	3346	3088	3325	3464	3489	3533	3425
# Interviewed who also had one or more children interviewed	_	2774	3196	2772	2964	3212	3228	3221	2934
Children of NLSY79 Female Respondents									
Total Born									
Born to Interviewed Mothers	_	5255	6543	6427	7255	7862	8125	8395	8323
Under Age 15 as of December 31						6622	6010	5343	4438
Age 15 and over as of December 31						1240	2113	3052	3885
Total Interviewed ¹	—	4971	6266	5803	6509	7089	7103	7067 ²	6417
Under Age 15 as of December 31						6109	5431	4924	3392
Age 15 and over as of December 31						980	1672	2143	3025

Table 1.5.1 NLSY79 Mother & Child Samples: 1979–2000 Surveys

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.

¹ 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.

² This total includes 37 children who were assessed or interviewed whose mothers were **not** interviewed.

The child sample interviewed during 2000 includes substantial numbers of Hispanic and black children and children of each age from birth through late adolescence. While the majority of children in the sample had been under 10 years of age in all survey years through 1994, the 1996 survey saw the number of children in the initial sample who are 10 years or older become the majority for the first time in the survey's history. Table 1.5.2 presents, by select age ranges and race/ethnicity, the number of children across survey years for whom interviews were completed.

	1986	1988	1990	1992	1994	1996	1998	2000	
Total Interviewed	4971	6266	5803	6509	7089	7103	7067	6417	
By Age ¹									
Birth to 9 Years	4676	5380	4508	4430	4154	3480	2978	1912	
10 to 14 Years	294	851	1158	1700	2084	1951	1996	1480	
15 Years & Older	1	35	137	379	851	1672	2143	3025	
		Ву	Race/Ethni	city ²					
Hispanic	937	1158	1304	1483	1546	1520	1550	1193	
Black	1604	1895	1994	2133	2350	2330	2229	1914	
Non-black/non-Hispanic	2430	3213	2505	2893	3193	3253	3288	3310	

Table 1.5.2 NLSY79 Child	Sample Sizes by	y Age & Race/Ethnicit	v: 1986–2000
		, , , , , , , , , , , , , , , , , , , ,	

¹ Starting in 1994, children who are aged 15 by December 31st 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..

² Decision rules used in assigning race/ethnicity are described in the NLSY79 User's Guide.

The overall sample of children interviewed in 2000 represents a cross-section of children born to women who were 35–43 years of age in 2000. The large number of children born to female respondents range in age from birth to 29 years. It is estimated that the number of children in the sample represents a majority of the children to be born to this contemporary cohort of American women. When weighted, the number of children born to these women can be considered fully representative of children born to a nationally representative sample of women who were between the ages of 14 and 21 on December 31, 1978.

1.6 Special Data Collections

The NLSY79 survey combines respondent interviews with round-specific household enumerations and a series of separately fielded administrative data collections. Annual or biennial surveys collect information directly from NLSY79 sample members about their work, family, and other life course experiences. Round-specific household enumerations describe the composition of the household unit and the characteristics of each household member on the date of the interview. A set of administrative data collections has transcribed data related to NLSY79 sample members found in internal school records. These separately fielded collections include:

- (1) *School Characteristic Information* provided by secondary school administrators during 1980 for the 1979 NLSY79 sample group. School characteristic data were collected during 1995 and 1996 from the primary and secondary schools attended by Children of the NLSY79.
- (2) *School Transcripts*, including coursework and attendance records. Transcripts were collected and coded during the early 1980s, with some amount of data available for 8,951 NLSY79 respondents. School record information was collected during 1995 and 1996 for Children of the NLSY79 who were five years of age and older.
- (3) Aptitude and Achievement Scores from standardized tests administered during a young person's schooling. Scores were transcribed from school records between 1980 and 1983 for NLSY79 respondents and during 1995 and 1996 for the Children of the NLSY79.

1.7 NLSY79 Data Sets

Almost all NLSY79 data are currently available to the public on CD-ROM at a nominal charge. The CD-ROM contains the cumulative longitudinal record of each respondent from 1979 to the most recent interview date. In addition to this main data set, special data files also exist. Brief descriptions of the current releases of the NLSY79 appear in the following table. Subsequent data releases will be announced in *NLS News*, the quarterly NLS newsletter, which is available online at http://www.bls.gov/nls/.

NLSY79 Main Files	1979–2000	The longitudinal record of each respondent including information from the separately fielded 1980 high school survey, 1980 ASVAB administration, and 1980–83 transcript data collections. Data on the NLSY79 main file are supplemented by the four special data files described below.
NLSY79 Child/YA File	1986–2000	Information from a battery of child cognitive, socio-emotional, and physiological assessments administered to NLSY79 mothers and their children during the 1986, 1988, 1990, 1992, 1994, 1996, 1998, and 2000 NLSY79 surveys, the <i>Child</i> and <i>Mother Supplements</i> , and the <i>Young Adult Survey</i> have been combined with other data collected during the main youth surveys. This data set permits examination of the links between maternal–family behaviors or attitudes and the subsequent development of more than 10,000 children.
NLSY79 Work History	1979–2000	Constructed from work experience data collected during the main NLSY79 surveys, this file provides a week-by-week longitudinal work record of each respondent from January 1, 1978, through the current survey date. It is arranged in three primary arrays: (a) the <i>STATUS</i> array of the respondent's labor force/military status; (b) an <i>HOUR</i> array of the usual hours worked per week at all jobs; and (c) a <i>DUALJOB</i> array containing additional job numbers for respondents who worked at more than one job simultaneously in any week. In addition, there are 21 years of job-specific data for up to five jobs.
NLSY79 Geocode Files	1979–2000	Information on state, county, and SMSA/MSA/CMSA/PMSA of respondents' current residence, location of most recent college attended, and select environmental variables from the <i>County and City Data Books</i> for county or SMSA of current residence is available to persons whose research work is related to the National Longitudinal Surveys and who satisfactorily complete the Bureau of Labor Statistics' geocode accessing agreement procedure.

Table 1.7.1 NLSY79: Current Data Releases

1.8 Organization of the Guide

The remainder of the guide is organized as follows:

Chapter 2 contains the technical information on the NLSY79. It includes information on sample sizes and retention rates, sampling design and fielding procedures, sample representativeness and attrition, and weighting and design effects.

Chapter 3 provides information on how NLS variables are collected, created, and arranged on the CD-ROM. This chapter details how users can access variables on the CD-ROM and explains the accompanying documentation.

Chapter 4 presents summary discussions of variable sets arranged alphabetically by topic. Persons interested in reviewing, for example, variables that contain information on a respondent's labor market status or geographic residence should thumb to the respective topical section with that name. Each topical section includes variable summaries, references to relevant survey instruments or documentation items, cautionary notes to users about inconsistencies in the data, and helpful hints on how to use the data.

Chapter 5 presents information and explanations of the different types of item nonresponse occurring in the NLSY79. It also outlines the significance of incidences of item nonresponse.

Appendices are the sixth section of the *NLSY79 User's Guide*. These appendices contain a quick reference guide with useful NLS information, a glossary of NLSY79 terms, summaries of the content of the various topical NLSY79 areas of interest, and information on standard errors and design effects.

Chapter 2: Sample Design & Fielding Procedures

2.1 Sample Design

Because this section contains a large amount of detail, a rough overview of the sample design is first provided. In 1978, the National Opinion Research Center (NORC) at the University of Chicago created a list of housing units in selected areas of the United States for the first NLSY79 interview. NORC interviewers went to a random sample of these homes and performed a short interview called the screener, which provided basic information on every resident of the household. NORC also extracted a random sample of Department of Defense records to ensure the survey covered members of the military.

Together these two processes provided information, such as name, age, sex, race, and address, on more than 155,000 people. This information was then used to identify all individuals aged 14 to 21 as of December 31, 1978. Based on this screener information, each appropriately aged individual was assigned to one of the sample groups. Then, in 1979, NORC interviewers asked individuals on this list to participate in the first NLSY79 interview. Any person who completed the first round interview is considered a member of the NLSY79 cohort.

Three independent probability samples comprise the NLSY79. These samples are designed to represent the entire population of youth aged 14 to 21 as of December 31, 1978, residing in the United States on January 1, 1979. The three samples are:

- a cross-sectional sample (6,111) designed to be representative of the noninstitutionalized civilian segment of young people living in the United States in 1979 and born January 1, 1957, through December 31, 1964
- (2) a set of supplemental samples (5,295) designed to oversample civilian Hispanic, black, and economically disadvantaged, non-Hispanic, non-black youth born in the same time period
- (3) a military sample (1,280) designed to represent the population born January 1, 1957, through December 31, 1961, serving in the military as of September 30, 1978. The inclusion of the military sample allows comparative civilian/military analyses by ensuring more than the pro rata share of cohort members in the military

Users can identify a respondent's sample type by using variable R01736. Beginning in 1986, additional information was collected about children born to female NLSY79 respondents. The child sample, when weighted, is representative of American children born to the population of women born in 1957 through 1964 and living in the United States in 1979. The sampling procedures used by NORC to select the civilian and military subsamples differed and are discussed separately below. For additional information on NLSY79 sampling procedures, see Frankel et al. (1983) and the *Interviewer's Manual* for the 1978 household screening (NORC 1978). Sampling issues related to the Children of the NLSY79 are discussed in Baker et al. (1993) and in the *NLSY79 Child & Young Adult Data Users Guide*.

2.2 Screening

To find people of the correct age and ethnic composition, NORC screened a large number of individuals in two separate procedures. First, household screening interviews were conducted to select the NLSY79 civilian cross-sectional and supplemental subsamples from the civilian population. Then, a second screening was done to identify the military sample. While the civilian screening made use of field interviewers going to preselected households, the military sample was drawn from Department of Defense internal records.

NORC administered the civilian sample screening interview in approximately 75,000 dwellings and group quarters. These interviews occurred in 1,818 sample segments of 202 Primary Sampling Units (PSUs), which included most of the fifty states and the District of Columbia. The screening interview was designed to elicit information that would identify persons eligible for inclusion in the NLSY79 sample. The civilian screening interviews were completed within 91.2 percent of the cross-sectional and 91.9 percent of the supplemental occupied dwelling units selected for screening.

Cross-Sectional Sample: Approximately 18,000 of the screening interviews were carried out among 918 sample segments in 102 Primary Sampling Units (PSUs), which were selected from the NORC Master Probability Sample of the United States.

Supplemental Sample: A total of 57,000 screening interviews for the supplemental sample were carried out among 900 sample segments in a 100-PSU sample specifically designed to produce statistically efficient samples of Hispanics, blacks, and economically disadvantaged, non-black/non-Hispanics.

The NLS sample design, which selected every eligible person connected to the household, generated a representative sample of siblings and spouses living in the same household and satisfying the age restrictions stated above. However, NLSY79 samples do not contain nationally representative samples of siblings and spouses of all ages and living arrangements. When the NLSY79 is used to study sibling pairs and married couples, care must be used in generalizing from the findings of such studies.

Procedures were also developed to establish "linkages" between dwellings and certain types of individuals who might be temporarily absent. As part of the initial screening for the civilian sample, household respondents were asked if there were any persons with primary family connections to the household who were away from the household at the time. Included in this group were college students, military personnel, and those in prisons or other institutions. Household screener respondents were also asked to name persons who might occasionally stay at the dwelling who did not have any other "usual place of residence." For each individual identified in this process, an attempt was made to determine whether the individual would be "linked" to some other household, e.g., college students living off campus in their own dwelling units. All individuals without other linkages were included in the household composition for purposes of subsampling.

Military Sample: Persons on active military duty as of September 30, 1978, were sampled from rosters provided by the Department of Defense. No formal screening interview was conducted.

2.3 Sampling Process

Civilian Samples: All civilian sample selection was accomplished through a multi-stage stratified area probability sample of dwelling units and group quarter units. A moderate degree of oversampling of dwelling units within sample listing segments was employed in order to increase the sample composition with respect to the targeted groups of the supplemental sample.

Base year samples of Hispanics, blacks, and economically disadvantaged, non-blacks, non-Hispanics were selected from individuals identified in both the 102 PSU cross-sectional sample and the 100 PSU special purpose sample. To the extent that individuals identified in the screening phase were obtained with different probabilities of selection (because of selective oversampling), the weighting of base year samples attempts to minimize these probability differences. Since the use of oversampling tends to decrease sample efficiency (i.e. variance), attempts were made to hold required oversampling to a minimum.

User Notes: At all selected dwellings, attempts were made to obtain appropriate classification information for all persons living in the dwelling. In order to minimize the potential for "interviewer effect," survey interviewers were not informed about specific groups that would be included in the subsequent interviews. However, the distribution of month of birth by birth year departs from randomness for the youngest members of the cohort, those born in 1964 (refer to Figure 2.3.1). This non-randomness most likely comes from two sources. First, some of the screening was done by supervisors and other higher level staff who were familiar with the specific age groups that belonged in the survey; this could have introduced interviewer bias. Second, families who wanted to find out more information could contact NORC or the Department of Labor and find out the age ranges the survey was trying to capture. This extra information could have led to non-random self-selection at the edge of the age range.

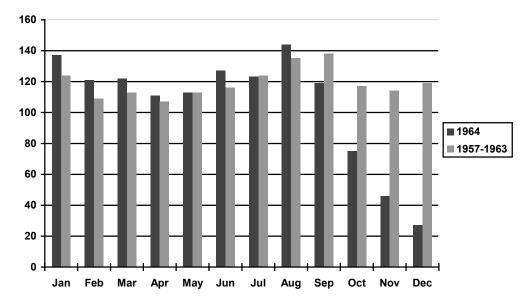


Figure 2.3.1 Number of Respondents Born Each Month by Birth Year¹

¹ The month and year of birth is taken from the 1978 screener (R00003. and R00005.). Respondents were asked about their dates of birth again in 1981, but the use of these values does not change the results indicated above. The 1957–63 value can be found by averaging the total number of birth dates reported for each month over all of the years.

Assignment of a youth to either the cross-sectional or supplemental sample, was made using information collected during the household screening interviews and a set of coding instructions prepared by NORC. During the 1978 household screening interviews—from which the sample of NLSY79 respondents was drawn—information was collected on the sex, race, and ethnic origin of each household member and on the total income of the family unit during the past 12 months. A detailed set of coding procedures transformed these raw data into a combined racial/ethnic identifier and an economically disadvantaged qualifier. These criteria were used not only to assign a youth to one of the various subsamples, e.g., the economically disadvantaged, non-black/non-Hispanic supplemental sample, but also to specify the primary race/ethnicity variable, which provides the basis for weighting.

Other technical information on the sample assignment process can be found in (1) the *Household Screener* and Interviewer's Manual (NORC 1978), which includes a copy of the screening instrument and detailed instructions to interviewers for administering the race, ethnic origin, and family income questions; (2) the *Technical Sampling Report* (Frankel et al. 1983), which describes the NLSY79 sample selection procedures for the civilian and military subsamples; (3) the 10/4/78 NORC memorandum, which provides the rules used to assign race and poverty status from responses to the screening questions; (4) a copy of the 1978 poverty income levels by family size and farm-nonfarm residence; and (5) the "Race, Ethnicity, & Nationality" section of this *User's Guide*, which summarizes information in these documents as it relates to the assignment of "Hispanic," "Black," and "Non-Hispanic, Non-Black" origins used in the sample identification code variable (R01736.) and the race/ethnicity variable (R02147.). Base year interviews with the three subsamples were conducted between January and mid-August 1979. Table 2.3.1 summarizes base year completion rates for each subsample.

	Designated for Interviewing	Interviewed Initial Survey Year	
Total Cohort	14574	12686	87%
Cross-Sectional Sample ¹	6812	6111	90%
Supplemental Sample ¹	5969	5295	89%
Military Sample	1793	1280	72%

Table 2.3.1 Base Year Interview Completion: NLSY79

¹ As determined through the household screening.

Cross-Sectional Sample: Following the initial screening process, 6,812 individuals from the cross-sectional sample were designated to be interviewed in the base year; of those, 90 percent or 6,111 respondents were actually interviewed in 1979. The cross-sectional sample is designed to maximize the statistical efficiency of samples which are "cross-sectional" with respect to the rural population. Specifically, through the several stages of sample selection (counties, enumeration districts-block groups, sample listing units), probabilities of selection are based upon either total population or total housing units. Except for the economically disadvantaged supplemental sample, sampling of non-black/non-Hispanic respondents was restricted to the 102 PSU National Sample.

Supplemental Sample: After screening, 5,969 individuals from the supplemental sample were designated for base year interviews, and of these, 89 percent or 5,295 respondents were actually interviewed. Stratification specifically relevant for Hispanics, non-Hispanic blacks, and economically disadvantaged, non-black/non-Hispanics was used. Probability proportional to size procedures were based on size measures for these groups rather than for the general population, making it possible to more nearly equalize the distribution of the targeted groups among the various sampling units than would otherwise be the case.

Military Sample: Of the 1,793 military youth selected for interviews, 1,280 or 72 percent were interviewed in 1979. Selection of the military sample was accomplished in two stages. In the first stage, a sample of approximately 200 "military units" was selected. These units were selected with probabilities proportional to the number of persons born in 1957 through 1961 and serving in the military unit as of September 30, 1978.

Within selected units, persons born in 1957 through 1961 were subsampled with probabilities inversely proportional to the first-stage selection probability. Females were oversampled at a rate approximately six

times that of males in order to produce approximately 850 males and 450 females. Within each sex, the sample was stratified on the basis of branch of military service (Army, Navy, Air Force, and Marine Corps) and geographic location (Eastern U.S., Western U.S., Europe, Far East, other). Of those interviewed in 1979, 824 military respondents were male and 456 were female (see Table 2.3.2). The entire military sample was eligible for interview from 1979–84.

	Total	Males	Females
Total Military	1280	824	456
Non-black/non-Hispanic	951	609	342
Black	251	162	89
Hispanic	78	53	25
Military Branch			
Army	578	354	224
Navy	280	212	68
Air Force	293	162	131
Marine Corps	129	96	33

Table 2.3.2 NLSY79 Military Respondents Interviewed in 1979 by Gender, Race & Military Branch

Child Sample: The number of children assessed during a given child survey year is a function of the number of children born to interviewed NLSY79 mothers, the number of children living in the homes of those mothers, and, finally, the number of those children actually interviewed. Of the 5,842 NLSY79 females eligible for the first child interview in 1986, more than 2,900 mothers and 4,971 children were interviewed. From this sample of eligible children, assessment data were collected for 4,786. Table 1.6.1 in Chapter 1 presents sample sizes across subsequent survey years.

2.4 Interview Schedule & Fielding Periods

The original interview schedule, which called for yearly personal interviews with NLSY79 respondents, was retained from 1979 through 1986. In 1987, budget constraints dictated a limited phone interview rather than a personal interview. Personal interviews resumed with the 1988 round and continued yearly until 1994. Since 1994, NLSY79 respondents have been interviewed every other year (1996, 1998, etc.).

The initial NLSY79 interviews were conducted between late January and mid-August 1979. The next several interviews were fielded in the first six months of the year; subsequent surveys have typically begun in late spring and ended in the fall or early winter. Table 2.4.1 provides information on the fielding periods for the youth and child samples.

Cohort	Survey Year(s)	Fielding Period	
NLSY79	1979–80	January–August	
	1981–82	January–July	
	1983–85	January–June	
	1986	February–July	
	1987	March–October	
	1988–91	June-December	
	1992	May-December	
	1993	June-November	
	1994	June-December	
	1996	April–October	
	1998	March-September	
	2000	April 2000–January 2001	
NLSY79 Children	1986	February-July	
	1988	June-December	
	1990	July-December	
	1992	May-December	
	1994	June-December	
	1996	April–October	
	1998	March-September	
	2000	May 2000–January 2001	

Table 2.4.1 Fielding Periods: NLSY79 & NLSY79 Children

From 1979 until 1986, timing of the fielding period was designed to allow all respondents still in school to be interviewed before they left to take temporary summer jobs. Detailed information was collected for jobs held by respondents while they were in school. Since the youngest respondents in the survey were 23 years old in 1988, the shift in fielding periods after 1987 had a relatively small impact on information on jobs held while in school. An attempt was made during the initial survey years to keep the fielding period for an individual respondent approximately the same from year to year in order to assure that the time between interviews was approximately twelve months.

Researchers conducting analyses on topics where time periods are critical should carefully examine the reference period of the questions, the actual interview date, and the duration since the preceding interview.

2.5 Interview Methods & Target Universe

During each survey round, NORC attempts to reach all youth within the active samples. No respondents have been routinely excluded from locating efforts with the exception of respondents who have died or, in a small number of cases, were judged to be extremely difficult. The permanent NLSY79 sample

designated for interviewing during the 1979–84 interview years consisted of all civilian and military youth who were interviewed in the base year and who were alive at the survey date.

In 1985, when interviewing of the full military sample ceased, the total NLSY79 sample size dropped from 12,686 to 11,607. Retained for interviewing in post-1984 surveys were 201 military respondents randomly selected from the entire military sample of 1,280; the remaining 1,079 military respondents were eliminated from the sample. The 201 military members who were retained included (1) 51 cases that would have been selected as part of a random sample of youth including the military and (2) 150 additional cases selected to provide a sufficient number of original military sample members to avoid overly large sampling variability for the military sample. Beginning in 1991, the 1,643 members of the economically disadvantaged, non-black/non-Hispanic supplemental sample were no longer interviewed. Unless otherwise noted, eligible sample sizes reported in NLS publications include deceased and difficult-to-field respondents but exclude those respondents dropped from the sample. Additional information on numbers and characteristics of noninterviewed respondents can be found in the "Reasons for Noninterview" section later in this chapter.

NLSY79 respondents reside in each of the 50 states as well as the District of Columbia, U.S. territories, and countries abroad. Locating respondents is a coordinated effort of NORC's central office, its locating shop, and local-level field staff. Prior to fielding, NORC's central office sends a short, informative "advance letter" to each respondent reminding him/her of the upcoming interview and confirming the respondent's current address and phone number. Field staff locating efforts begin with this information and locator sheets.

At the local level, interviewers are responsible for contacting all respondents in their caseloads and for tapping additional local resources (post offices, departments of motor vehicles and vital statistics, etc.) to locate those respondents who have moved. If an interviewer is unsuccessful in locating a respondent, the case is transferred to the field manager who undertakes additional locating strategies.

In the event that such local-level efforts fail, the case is forwarded to NORC's locating shop in Chicago where the complete hard copy files on each respondent can be accessed and used for additional locating efforts. Respondents who cannot be located are only a small percentage of the total not interviewed in a given survey year. (For more information about noninterviews, refer to section 2.6 in this chapter.)

In addition to its comprehensive locating efforts, NORC makes every effort to convert initial respondent refusals to completed interviews. For uncooperative respondents, NORC sends "refusal conversion letters" designed to encourage continued participation in the survey. These letters are often written by field managers who have personal knowledge of specific respondents and can customize the letter to an individual respondent's concerns. Over the years, NORC has successfully conducted interviews with 33– 50 percent of respondents who initially refused. NORC's extensive locating methods and its conversion strategy, combined with its close monitoring of response rates for each of the subsamples of the NLSY79, have resulted in relatively high retention rates for a longitudinal panel of this duration.

While personal interviewing has remained the primary contact method used for all but one of the NLSY79 surveys, it is not the exclusive method. Telephone contact within personal survey rounds occurs under certain circumstances, e.g., where the respondent resides in a remote area or field staff determines that phone contact is the preferred method of interviewing a specific respondent. The number of telephone interviews has increased in recent years as respondents have become more dispersed or expressed a preference for phone interviews. The percent of surveys conducted by telephone for each survey year are shown in table 2.5.1.

Year	Number of Phone Interviews	Percent of Total Interviews	Year	Number of Phone Interviews	Percent of Total Interviews
1979	548	4.4	1989	1518	14.3
1980	648	5.3	1990	1317	12.6
1981	654	5.4	1991	1241	13.8
1982	1054	8.7	1992	1164	12.9
1983	324	2.6	1993 ¹	_	_
1984	646	5.3	1994 ¹	_	_
1985	953	8.7	1996	1042	12.1
1986	929	8.7	1998	2069	24.6
1987	8998	85.8	2000	2613	32.5
1988	920	8.8			

Table 2.5.1 Percent of NLSY79 Interviews Conducted by Telephone, 1979–2000

¹ Questions identifying whether interview was conducted by telephone were not included in the 1993 and 1994 surveys.

In rare cases, interviews are conducted in whole or in part with a proxy, a person other than the respondent (for example, four in 1991, two in 1992). A variable, entitled 'Interview Conducted with Proxy Respondent,' is present in the data to identify these interviews. In order to conduct such an interview, individual approval must be obtained by the NORC central office and the circumstances documented.

A Spanish version of all survey instruments, except the Young Adult questionnaire, is prepared and NORC employs bilingual, Spanish-speaking interviewers. During the 1992 interview, for example, 104 respondents requested the use of a Spanish version of the questionnaire.

The average length of a personal interview is approximately one hour. The 1987 telephone interviews were completed within about 40 minutes, while the administration of the child assessments adds approximately 45 minutes to the total survey administration time for each child.

Until 1989, the NLSY79 was conducted using only paper-and-pencil interviews (PAPI). PAPI interviews were performed by interviewers filling in the relevant fields of large printed questionnaire booklets. While these booklets were cheap to produce, interviewers could make mistakes in following complicated skip patterns and filling in answers. Moreover, after all interviews were completed, additional office staff were needed to transcribe the information collected. Computer-assisted personal interviews (CAPI) were designed to eliminate many of these problems. For CAPI interviews, interviewers take laptop computers into the field instead of questionnaire booklets. A computer program automatically selects the next question, prevents interviewers from entering illegal values, and warns interviewers about questionable answers. The computer also eliminates the need for data transcription except for specific items collected verbally and coded later.

While the majority of interviews in 1990 were collected using PAPI materials, a subset of one fourth of respondents were administered each of the surveys using CAPI methods in order to test the viability and reliability of CAPI administration. Due to the success of these experiments, the NLSY79 interviews became fully CAPI administered beginning in 1993. Users interested in the results of these experiments should consult Olsen (1991).

From 1979 until 1994, each respondent was paid \$10 upon completion of the interview. Respondents were paid \$20 beginning with the 1996 interview. NLSY79 mothers participating in the child assessments receive an additional \$5 per child. Through 1994, young adults were paid \$10. In 1996, 1998 and 2000, they received \$20. NLSY79 respondents who participated in the 1980 *ASVAB* testing were paid \$50 each.

Retention vs. Response Rates

Retention rates for NLSY79 respondents throughout the first 16 rounds of the survey exceeded or were very near 90 percent. Rounds 17 and 18 saw retention rates of approximately 85 percent. Retention rate is calculated by dividing the number of respondents interviewed by the number of respondents remaining eligible for interview. All 1979 (round 1) respondents including those reported as deceased are eligible for interviews, with the exception of those who have been permanently dropped from the sample. In the round 19 (2000) survey, 8,033 civilian and military respondents out of the 9,964 eligible were interviewed, for an overall retention rate of 80.6 percent. Retention rates for each survey are shown in table 2.5.2. This table also shows which interviews were conducted with paper-and-pencil interviewing (PAPI) and which were executed with computer-assisted personal interviewing (CAPI).

The number of respondents can also be expressed as a percentage of the number of base year respondents **not** known to be deceased. This is referred to as the response rate and is reported in table 2.5.3 for each survey round. As of 2000, 335 main respondents (more than 3 percent of the respondents eligible for interview) had been reported as deceased. The response rate for those believed to be alive is 83.2 percent.

			Sectional mple	Suppleme	ental Sample	Military	/ Sample	Total	Sample
Year	Type & Mode of Interview	Total	Retention Rate ¹	Total	Retention Rate ¹	Total	Retention Rate ¹	Total	Retention Rate ¹
1979	Personal/PAPI	6111	_	5295	_	1280	_	12686	_
1980	Personal/PAPI	5873	96.1	5075	95.9	1193	93.2	12141	95.7
1981	Personal/PAPI	5892	96.4	5108	96.5	1195	93.4	12195	96.1
1982	Personal/PAPI	5876	96.2	5036	95.1	1211	94.6	12123	95.6
1983	Personal/PAPI	5902	96.6	5093	96.2	1226	95.8	12221	96.3
1984	Personal/PAPI	5814	95.1	5040	95.2	1215	94.9	12069	95.1
1985	Personal/PAPI	5751	94.1	4957	93.6	186 ²	92.5	10894 ³	93.9
1986	Personal/PAPI	5633	92.2	4839	91.4	183	91.1	10655	91.8
1987	Telephone/PAPI	5538	90.6	4768	90.1	179	89.1	10485	90.3
1988	Personal/PAPI	5513	90.2	4777	90.2	175	87.1	10465	90.2
1989	Personal/PAPI/CAPI	5571	91.2	4853	91.7	181	90.0	10605	91.4
1990	Personal/PAPI/CAPI	5498	90.0	4755	89.8	183	91.0	10436	89.9
1991	Personal/PAPI	5556	90.9	3281 ⁴	89.9	181	90.0	9018 ⁵	90.5
1992	Personal/PAPI	5553	90.9	3280	89.8	183	91.0	9016	90.5
1993	Personal/CAPI	5537	90.6	3293	90.2	181	90.0	9011	90.4
1994	Personal/CAPI	5457	89.3	3256	89.2	178	88.6	8891	89.2
1996	Personal/CAPI	5290	86.6	3171	86.8	175	87.1	8636	86.7
1998	Personal/CAPI	5159	84.4	3065	83.9	175	87.1	8399	84.3
2000	Personal/CAPI	4949	81.0	2921	80.0	163	81.1	8033	80.6

Table 2.5.2 Sample Sizes & Retention Rates by Sample Type: NLSY79

¹ Retention rate is defined as the percentage of base year respondents within each sample type remaining eligible who were interviewed in a given survey year. Included in the eligible sample are deceased and difficult to field respondents whom NORC does not attempt to contact.

² A total of 201 military respondents were retained from the original sample of 1,280.

³ The total number of civilian and military respondents in the NLSY79 at the beginning of the 1985 survey was 11,607.

⁴ Economically disadvantaged, non-black/non-Hispanic female and male members of the supplemental subsample are not eligible for interview as of the 1991 survey year. Remaining eligible for interview in post-1990 surveys are 3,652 black and Hispanic respondents of the supplemental sample, of whom 3,281 were interviewed in 1991.

⁵ The total number of civilian and military respondents in the NLSY79 at the beginning of the 1991 survey was 9,964.

	Cross	-Sectional	Sample	Sup	plemental	Sample	I	Military Sa	mple	Т	otal Sampl	е
Year		# Re	esponse		# R	esponse		# F	Response		# Re	sponse
real	Total I	Deceased	Rate	Total	Deceased	Rate	Total	Deceased	d Rate	Total I	Deceased	Rate
1979	6,111	0	_	5,295	0	—	1,280	0	_	12,686	0	_
1980	5,873	4	96.2	5,075	5	95.9	1,193	0	93.2	12,141	9	95.8
1981	5,892	15	96.7	5,108	14	96.7	1,195	0	93.4	12,195	29	96.3
1982	5,876	24	96.5	5,036	19	95.5	1,211	1	94.7	12,123	44	95.9
1983	5,902	27	97.0	5,093	26	96.7	1,226	4	96.1	12,221	57	96.8
1984	5,814	30	95.6	5,040	33	95.8	1,215	4	95.2	12,069	67	95.6
1985	5,751	36	94.7	4,957	43	94.4	¹ 186	0	92.5	¹ 10,894	79	94.5
1986	5,633	43	92.8	4,839	51	92.3	183	1	91.5	10,655	95	92.6
1987	5,538	51	91.4	4,768	56	91.0	179	3	90.4	10,485	110	91.2
1988	5,513	56	91.0	4,777	68	91.4	175	3	88.4	10,465	127	91.2
1989	5,571	60	92.1	4,853	78	93.0	181	3	91.4	10,605	141	92.5
1990	5,498	67	91.0	4,755	82	91.2	183	3	92.4	10,436	152	91.1
1991	5,556	75	92.0	² 3,281	87	92.0	181	4	91.9	² 9,018	166	92.0
1992	5,553	80	92.1	3,280	93	92.1	182	4	92.4	9,015	177	92.1
1993	5,537	89	92.0	3,293	104	92.8	181	4	91.9	9,011	197	92.3
1994	5,457	103	90.8	3,256	117	92.1	178	4	90.4	8,891	224	91.3
1996	5,290	128	88.4	3,171	130	90.0	175	5	89.3	8,636	263	89.0
1998	5,159	151	86.6	3,065	139	87.2	175	5	89.3	8,399	295	86.9
2000	4,949	170	83.3	2,921	158	83.6	163	7	84.0	8,033	335	83.4

Table 2.5.3 Response Rates (Excluding Deceased Respondents) by Sample Type: NLSY79

Note: Response rate is defined as the percentage of base-year respondents remaining eligible and not known to be deceased who were interviewed in a given survey year.

¹ A total of 201 military respondents were retained from the original sample of 1,280; 186 of the 201 participated in the 1985 interview. The total number of NLSY79 civilian and military respondents eligible for interview (including deceased respondents) beginning in 1985 was 11,607.

² The 1,643 economically disadvantaged nonblack/non-Hispanic male and female members of the supplemental subsample were not eligible for interview as of the 1991 survey year. The total number of NLSY79 civilian and military respondents eligible for interview (including deceased respondents) beginning in 1991 was 9,964.

2.6 Reasons for Noninterview

A 'Reason for Noninterview' variable is constructed for each survey year (1980–2000) in the NLSY79 and provides an explanation of why an interview could not be conducted or completed with a respondent. The cause of noninterview is assigned by the NORC interviewer to each respondent designated as a member of the eligible sample for a given survey year. Typical coding categories have included reasons such as an interview being refused by the respondent or by the respondent's parent, the youth and/or the family unit not being successfully located, or the respondent being reported as deceased.

Beginning in the 1980s, two administrative categories were added. One reflected a decision by NORC not to refield certain cases that were determined to be extremely difficult to interview. The second category indicates that, due to funding cutbacks, interviews would not be attempted with certain members of one or more of the NLSY79 subsamples. Thus, beginning in 1985, interviews ceased for 1,079

respondent members of the military subsample; each was permanently assigned a reason for noninterview of "military sample dropped." A second group of respondents, those belonging to the supplemental economically disadvantaged, non-black/non-Hispanic sample, was similarly dropped from interviewing beginning with the 1991 survey. The target universe for each survey year—that is, the respondents whom NORC attempts to interview—thus includes all respondents interviewed in the initial survey year exclusive of those who were (1) reported deceased at an earlier interview; (2) dropped from the sample; or (3) judged to be extremely difficult to interview.

User Notes: Reasons for noninterview may change for a given respondent between noninterview years, even if those years are contiguous. Some codes, such as "parent refusal/break off," have become virtually obsolete over time with the aging of the cohort. Other codes should be considered relatively permanent, such as those applied to the reported death of a respondent. (Users should be aware that false reports of death have been used to avoid being interviewed. NORC attempts to verify these reports by obtaining death certificate information or newspaper obituaries.)

The coding of deceased members of the two subsamples dropped from interviewing in 1985 and 1991 has not been handled consistently. Those respondents of the military sample reported deceased during the 1980–84 surveys, i.e., those with a code of "65 - Deceased" on a 'Reason for Noninterview' variable, have been recoded, beginning in 1985, to "68 - Military Sample Dropped"; this recode occurred for four cases. Thus the count of 1,079 reflects all members of the military subsample, both living and deceased, who were dropped from interviewing; however, this means that the cumulative count of total deceased respondents on any post-1984 'Reason for Noninterview' will be understated.

The 22 members of the supplemental economically disadvantaged, non-black/non-Hispanic sample who had died prior to the dropping of the sample in 1991 were not similarly reclassified as dropped. The count of 1,621 for the economically disadvantaged, non-black/non-Hispanic sample in the 1991 'Reason for Noninterview' variable reflects only the living members of the total 1,643 who were dropped; the 22 deceased members of the supplemental economically disadvantaged, non-black/non-Hispanic subsample remain coded as deceased.

The tables below present the number of respondents not interviewed across survey years by reason, gender, race/ethnicity, and sample type.

					Reason for M	loninterview		
Survey Year	Total Interviewed	Total Not Interviewed	Refusal	Can't Locate	Deceased	Other	Difficult Cases	Dropped ¹
1979	12686	0	0	0	0	0	0	0
1980	12141	545	253	217	9	66	0	0
1981	12195	491	220	114	29	128	0	0
1982	12123	563	177	209	44	50	83	0
1983	12221	465	220	124	57	37	27	0
1984	12069	617	374	151	67	25	0	0
1985	10894	1792	331	152	79	26	125	1079
1986	10655	2031	524	200	95	36	97	1079
1987	10485	2201	508	293	110	68	143	1079
1988	10465	2221	587	248	127	83	97	1079
1989	10605	2081	525	188	141	46	102	1079
1990	10436	2250	662	246	152	52	59	1079
1991	9018	3668	507	202	165	23	71	2700 ²
1992	9016	3670	526	158	177	29	80	2700
1993	9011	3675	541	122	197	24	91	2700
1994	8891	3795	604	146	224	26	95	2700
1996	8636	4050	708	184	263	48	147	2700
1998	8399	4287	731	272	295	136	153	2700
2000	8033	4653	1037	353	335	123	105	2700

Table 2.6.1 Reasons for Noninterview: NLSY79 1979–2000

¹ Two groups of NLSY79 respondents have been dropped from interviewing: (1) 1,079 members of the 1,280 military subsample were dropped after the 1984 survey and (2) the 1,643 members of the supplemental economically disadvantaged, non-black/non-Hispanic subsample were dropped after the 1990 interview.

² The total number of respondents dropped as of the 1991 survey year is actually 2,722. Twenty-two respondents of the 1,643 supplemental economically disadvantaged, non-black/non-Hispanic sample members dropped after 1990 had been reported as deceased prior to 1991 and remain so classified.

	Tota	l Not					Rea	son for I	Noninter	view				
Survey	Interv		Ref	usal	Can't	Locate	Dece	eased	Oth	ner	Difficu	It Case	Drop	oped ¹
Year	М	F	М	F	М	F	М	F	М	F	М	F	М	F
1980	311	234	134	119	129	88	4	5	44	22	0	0	0	0
1981	272	219	109	111	61	53	18	11	84	44	0	0	0	0
1982	315	248	103	74	116	93	30	14	35	15	31	52	0	0
1983	255	210	110	110	71	53	36	21	26	11	12	15	0	0
1984	348	269	186	188	96	55	44	23	22	3	0	0	0	0
1985	1032	760	172	159	93	59	52	27	20	6	57	68	638	441
1986	1166	865	271	253	122	78	65	30	26	10	44	53	638	441
1987	1287	914	273	235	186	107	77	33	43	25	70	73	638	441
1988	1250	971	296	291	138	110	89	38	43	40	46	51	638	441
1989	1207	874	268	257	123	65	96	45	31	15	51	51	638	441
1990	1291	959	322	340	160	86	103	49	34	18	34	25	638	441
1991	1932	1736	264	243	136	66	114	51	16	7	33	38	1369	1331
1992	1922	1748	266	260	106	52	122	55	19	10	40	40	1369	1331
1993	1939	1736	276	265	86	36	140	57	19	5	49	42	1369	1331
1994	1992	1803	310	294	99	47	156	68	13	13	45	50	1369	1331
1996	2128	1922	352	356	124	60	185	78	28	20	70	77	1369	1331
1998	2303	1984	377	354	189	83	207	88	85	51	76	77	1369	1331
2000	2483	2170	513	524	238	115	230	105	75	48	58	47	1369	1331

Table 2.6.2 Reasons for Noninterview by Gender: NLSY79 1980–2000

¹ Two groups of NLSY79 respondents have been dropped from interviewing: (1) 1,079 members of the 1,280 military subsample were dropped after the 1984 survey and (2) the 1,643 members of the supplemental economically disadvantaged, non-black/non-Hispanic subsample were dropped after the 1990 interview. Of the 1,643 supplemental economically disadvantaged, non-black/non-Hispanic subsample members dropped, 22 remain classified as deceased.

Table 2.6.3 Reasons for Noninterview by Race/Ethnicity: NLSY79 1980–2000

	Т	otal N	ot								Reaso	on for N	Ioninte	rview							
	Int	erviev	ved	R	efusal		Can'	t Loca	ate	De	cease	d	C	Other		Diffic	ult Ca	ises	I	Dropp	ed1
Survey Year	Η	В	NB/ NH	Н	В	NB/ NH	Η	В	NB/ NH	Н	В	NB/ NH	Н	В	NB/ NH	Н	В	NB/ NH	Η	В	NB/ NH
1980	112	124	309	33	50	170	65	57	95	4	2	3	10	15	41	0	0	0	0	0	0
1981	93	94	304	24	42	154	36	22	56	7	8	14	26	22	80	0	0	0	0	0	0
1982	120	120	323	35	35	107	57	54	98	9	11	24	15	7	28	4	13	66	0	0	0
1983	95	110	260	37	50	133	40	31	53	10	15	32	7	10	20	1	4	22	0	0	0
1984	105	126	386	46	64	264	40	37	74	13	16	38	6	9	10	0	0	0	0	0	0
1985	181	331	1280	60	58	213	40	50	62	14	22	43	8	6	12	18	22	85	41	173	865
1986	237	384	1410	89	98	337	62	57	81	16	30	49	11	11	14	18	15	64	41	173	865
1987	292	424	1485	101	92	315	82	89	122	22	35	53	21	15	32	25	20	98	41	173	865
1988	304	432	1485	115	118	354	81	74	93	23	42	62	26	18	39	18	7	72	41	173	865
1989	235	404	1442	91	99	335	56	51	81	25	48	68	6	19	21	16	14	72	41	173	865
1990	273	455	1522	110	133	419	71	75	100	25	55	72	12	15	25	14	4	41	41	173	865
1991	240	475	2953	111	130	266	42	95	65	26	62	77	8	8	7	12	7	52	41	173	2486
1992	230	475	2965	109	145	272	38	65	55	28	67	82	7	11	11	7	14	59	41	173	2486
1993	242	452	2981	120	134	287	34	49	39	32	76	89	9	4	11	6	16	69	41	173	2486
1994	279	474	3042	136	137	331	40	49	57	38	86	100	8	9	9	16	20	59	41	173	2486
1996	345	532	3173	143	148	417	66	70	48	48	101	114	19	8	21	28	32	87	41	173	2486
1998	380	637	3270	147	166	418	89	115	68	51	115	129	30	44	62	22	24	107	41	173	2486
2000	468	736	3449	193	255	589	117	125	111	62	133	140	37	37	49	18	13	74	41	173	2486

Key H: Hispanics, B: Blacks, NB/NH: Non-Black/Non-Hispanics

¹ Two groups of NLSY79 respondents have been dropped from interviewing: (1) 1,079 members of the 1,280 military subsample were dropped after the 1984 survey and (2) the 1,643 members of the supplemental economically disadvantaged non-black/non-Hispanic subsample were dropped after the 1990 interview. Of the 1,643 supplemental economically disadvantaged, non-black/non-Hispanic subsample members dropped, 22 remain classified as deceased.

Table 2.6.4 Reasons for Noninterview by Sample Type: NLSY79 1980–2000

	т	otal No	ot								Reaso	n for I	Noninte	erview							
Survey	Int	erview	ed	i	Refusal	l	Ca	n't Loc	ate	D	ecease	d		Other		Diffi	icult Ca	ises		Dropp	oed ¹
Year	С	S	М	С	S	М	С	S	М	С	S	М	С	S	М	С	S	М	С	S	М
1980	238	220	87	153	91	9	60	101	56	4	5	0	21	23	22	0	0	0	0	0	0
1981	219	187	85	133	71	16	30	64	20	15	14	0	41	38	49	0	0	0	0	0	0
1982	235	259	69	86	73	18	56	123	30	24	19	1	7	25	18	62	19	2	0	0	0
1983	209	202	54	103	94	23	43	63	18	27	26	4	15	14	8	21	5	1	0	0	0
1984	297	255	65	204	138	32	54	73	24	30	33	4	9	11	5	0	0	0	0	0	0
1985	360	338	1094	180	146	5	51	94	7	36	43	0	10	14	2	83	41	1	0	0	1079
1986	478	456	1097	284	230	10	78	115	7	43	51	1	14	22	0	59	38	0	0	0	1079
1987	573	527	1101	286	217	5	118	165	10	51	56	3	28	39	1	90	50	3	0	0	1079
1988	598	518	1105	335	248	4	107	128	13	56	68	3	43	36	4	57	38	2	0	0	1079
1989	540	442	1099	316	202	7	90	93	5	60	78	3	19	25	2	55	44	3	0	0	1079
1990	613	540	1097	385	269	8	101	139	6	67	82	3	23	28	1	37	22	0	0	0	1079
1991	555	2014	1099	316	182	9	97	99	6	74	87	4	9	13	1	59	12	0	0	1621	1079
1992	558	2015	1097	323	196	7	82	70	6	80	93	4	12	16	1	61	19	0	0	1621	1079
1993	574	2002	1099	338	192	11	57	62	3	89	104	4	13	10	1	77	13	1	0	1621	1079
1994	654	2039	1102	398	197	9	78	59	9	103	117	4	12	14	1	63	31	1	0	1621	1079
1996	821	2124	1105	486	216	6	86	87	11	128	130	5	23	24	1	98	46	3	0	1621	1079
1998	952	2230	1105	490	233	8	117	146	9	151	139	5	75	60	1	119	31	3	0	1621	1079
2000	1162	2374	1117	689	333	15	162	180	11	170	158	7	58	61	4	83	21	1	0	1621	1079

Key C: Cross-sectional, S: Supplemental, M: Military

¹ Two groups of NLSY79 respondents have been dropped from interviewing: (1) 1,079 members of the 1,280 military subsample were dropped after the 1984 survey and (2) the 1,643 members of the supplemental economically disadvantaged, non-black/non-Hispanic subsample were dropped after the 1990 interview. Of the 1,643 supplemental economically disadvantaged, non-black/non-Hispanic sample members dropped after 1990, 22 remain classified as deceased.

2.7 Sample Representativeness & Attrition

This section reviews the number of respondents by race, sex, and NLSY79 sample type who have continued to be interviewed during all surveys. It also takes a brief look at the racial composition of the cohort at the initial and latest survey points.

Table 2.7.1 shows the number of respondents, excluding dropped respondents, who were interviewed at all survey points. This table exhibits the high degree of NLSY79 retention. From 1979 to 2000 the survey has been administered 19 times; excluding dropped individuals, the average respondent has completed 17.4 interviews.

Year	Percent	Number	Year	Percent	Number
1979	100%	9964	1989	78.5%	7819
1980	96.0%	9571	1990	76.7%	7642
1981	94.3%	9395	1991	75.5%	7521
1982	92.7%	9234	1992	74.2%	7396
1983	91.6%	9125	1993	73.2%	7291
1984	89.7%	8942	1994	71.8%	7153
1985	87.5%	8721	1996	69.6%	6935
1986	85.0%	8472	1998	66.9%	6664
1987	82.3%	8203	2000	63.3%	6310
1988	79.9%	7957			

Table 2.7.1 Percentage of NLSY79 Respondents, ExcludingDropped Respondents, Who Answered Every Survey: 1979–2000

Table 2.7.2 compares the racial composition in 1979 versus 2000 of all sample members who have not been dropped. Additionally, it depicts the number of respondents in each racial/ethnic group who have attrited due to death.

		erviewed ndents		mposition entage)	Retention (1998)	Number of Deaths
Race ¹	1979	2000	1979	2000	as % of 1979	as of 2000
Hispanic	1961	1534	19.7	19.1	78.2	62
Black	3001	2438	30.1	30.3	81.2	133
Non-Black/Non-Hispanic	5002	4061	50.2	50.6	81.2	140

Table 2.7.2 Cohort Characteristics by Race: 1979–2000

¹ See section on "Race, Ethnicity & Nationality" in this guide for details on race classifications.

Tables 2.7.3–2.7.5 show the distribution of the number of interviews completed by respondents, broken down by sex, race, and sample type. The "# who completed" column shows how many respondents completed **exactly** that number of surveys. These numbers refer to *any* surveys completed since the NLSY79 cohort started, not necessarily consecutive surveys completed or surveys completed in particular years. The cumulative percent column shows a cumulative total percent of those completing **at least** a given number of surveys rather than a percentage of those completing an **exact** number of surveys. Readers should note the attrition suggested in Table 2.7.3 greatly over represents the amount of lost information. NLSY79 surveys ask detailed questions about work history, education, training, marital status, and fertility since the date of the respondent's last interview. These retrospective questions capture information lost due to missing interviews. Hence, a perfect response record is not needed for researchers to understand how the respondent's life changes over time, unless he or she leaves the survey forever.

	Total			Males			Females	
# of Surveys ¹	# who Completed	Cumulative Percent	# of Surveys ¹	# who Completed	Cumulative Percent	# of Surveys ¹	# who Completed	Cumulative Percent
19	6310	100	19	2921	100	19	3389	100
18	1271	36.7	18	715	41.9	18	556	31.4
17	567	23.9	17	345	27.6	17	222	20.2
16	392	18.2	16	227	20.7	16	165	15.7
15	240	14.3	15	148	16.2	15	92	12.3
14	181	11.9	14	106	13.3	14	75	10.5
13	144	10.1	13	81	11.2	13	63	9.0
12	116	8.6	12	67	9.6	12	49	7.7
11	104	7.5	11	55	8.2	11	49	6.7
10	89	6.4	10	41	7.1	10	48	5.7
9	89	5.5	9	45	6.3	9	44	4.7
8	77	4.6	8	42	5.4	8	35	3.8
7	93	3.9	7	59	4.6	7	34	3.1
6	73	2.9	6	47	3.4	6	26	2.4
5	58	2.2	5	35	2.5	5	23	1.9
4	43	1.6	4	22	1.8	4	21	1.4
3	36	1.2	3	22	1.3	3	14	1.0
2	40	0.8	2	27	0.9	2	13	0.7
1	41	0.4	1	18	0.4	1	23	0.5
Total	9964	100	Total	5023	100	Total	4941	100

Table 2.7.3 Number of Interviews Respondents Completed out of 19 Surveys by Sex: NLSY79 1979–2000

Note: Universe excludes the 1,079 members of the military subsample and the 1,643 members of the economically disadvantaged, non-black/non-Hispanic oversample dropped from interviewing; it includes the remaining 9,964 eligible members.

¹ Surveys completed in any year, not necessarily consecutive survey years.

То	otal Sampl	e		Hispanic			Black		Non-Bla	ack/Non-H	ispanic
# of Surveys ¹	# who Completed	Cumul. Percent	# of Surveys¹	# who Completed	Cumul. Percent	# of Surveys ¹	# who Completed	Cumul. Percent	# of Surveys ¹	# who Completed	Cumul. Percent
19	6310	100	19	1087	100	19	1880	100	19	3343	100
18	1271	36.7	18	307	44.6	18	426	37.4	18	538	33.2
17	567	23.9	17	151	28.9	17	180	23.2	17	236	22.4
16	392	18.2	16	95	21.2	16	127	17.2	16	170	17.7
15	240	14.3	15	56	16.4	15	71	12.9	15	113	14.3
14	181	11.9	14	46	13.5	14	45	10.6	14	90	12.0
13	144	10.1	13	23	11.2	13	39	9.1	13	82	10.2
12	116	8.6	12	24	10.0	12	30	7.8	12	62	8.6
11	104	7.5	11	31	8.8	11	32	6.8	11	41	7.4
10	89	6.4	10	14	7.2	10	35	5.7	10	40	6.5
9	89	5.5	9	21	6.5	9	24	4.5	9	44	5.7
8	77	4.6	8	24	5.4	8	18	3.7	8	35	4.9
7	93	3.9	7	18	4.2	7	19	3.1	7	56	4.2
6	73	2.9	6	17	3.3	6	19	2.5	6	37	3.0
5	58	2.2	5	11	2.4	5	13	1.9	5	34	2.3
4	43	1.6	4	11	1.8	4	14	1.4	4	18	1.6
3	36	1.2	3	7	1.3	3	7	1.0	3	22	1.3
2	40	0.8	2	7	0.9	2	13	0.7	2	20	0.8
1	41	0.4	1	11	0.6	1	9	0.3	1	21	0.4
Total	9964	100	Total	1961	100	Total	3001	100	Total	5002	100

Table 2.7.4 Number of Interviews Respondents Completed out of 19 Surveysby Race: NLSY79 1979–2000

Note: Universe excludes the 1,079 members of the military subsample and the 1,643 members of the economically disadvantaged, non-black/non-Hispanic oversample dropped from interviewing; it includes the remaining 9,964 eligible members.

¹ Surveys completed in any year, not necessarily consecutive survey years.

То	otal Sampl	е	Cross	Sectional	Sample	Suppl	emental S	ample	Mi	litary Sam	ple
# of Surveys¹	# who Completed	Cumul. Percent	# of Surveys ¹	# who Completed	Cumul. Percent	# of Surveys ¹	# who Completed	Cumul. Percent	# of Surveys ¹	# who Completed	Cumul. Percent
19	6310	100	19	4021	100	19	2190	100	19	99	100
18	1271	36.7	18	688	34.2	18	550	40.0	18	33	50.8
17	567	23.9	17	306	22.9	17	243	25.0	17	18	34.3
16	392	18.2	16	217	17.9	16	154	18.3	16	21	25.4
15	240	14.3	15	138	14.4	15	93	14.1	15	9	14.9
14	181	11.9	14	116	12.1	14	60	11.6	14	5	10.5
13	144	10.1	13	102	10.2	13	40	9.9	13	2	8.0
12	116	8.6	12	74	8.6	12	39	8.8	12	3	7.0
11	104	7.5	11	56	7.4	11	45	7.8	11	3	5.5
10	89	6.4	10	52	6.4	10	37	6.5	10	0	4.0
9	89	5.5	9	53	5.6	9	36	5.5	9	0	4.0
8	77	4.6	8	45	4.7	8	31	4.5	8	1	4.0
7	93	3.9	7	63	4.0	7	29	3.7	7	1	3.5
6	73	2.9	6	42	3.0	6	29	2.9	6	2	3.0
5	58	2.2	5	43	2.3	5	14	2.1	5	1	2.0
4	43	1.6	4	20	1.6	4	21	1.7	4	2	1.5
3	36	1.2	3	24	1.2	3	12	1.1	3	0	0.5
2	40	0.8	2	24	0.8	2	15	0.8	2	1	0.5
1	41	0.4	1	27	0.4	1	14	0.4	1	0	0.0
Total	9964	100	Total	6111	100	Total	3652	100	Total	201	100

Table 2.7.5 Number of Interviews Respondents Completed out of 19 Surveysby Sample Type:NLSY79 1979–2000

Note: Universe excludes the 1,079 members of the military subsample and the 1,643 members of the economically disadvantaged, non-black/non-Hispanic oversample dropped from interviewing; it includes the remaining 9,964 eligible members.

¹ Surveys completed in any year, not necessarily consecutive survey years.

2.8 Sample Weights

In each survey year a set of sampling weights is constructed. These weights provide the researcher with an estimate of how many individuals in the United States each respondent's answers represent. Weighting decisions for the NLSY79 are guided by the following principles: (1) individual case weights are assigned for each year in such a way as to produce group population estimates when used in tabulations, and (2) the assignment of individual respondent weights involves at least three types of adjustment, with additional considerations necessary for weighting of NLSY79 Child data.

The interested user should consult the NLSY79 *Technical Sampling Report* (Frankel, Williams, and Spencer 1983) for a step-by-step description of the adjustment process. A cursory review of the process follows.

Adjustment One: The first weighting adjustment involves the reciprocal of the probability of selection at the first interview. Specifically, this probability of selection is a function of the probability of selection associated with the household in which the respondent was located, as well as the subsampling (if any) applied to individuals identified in screening.

Adjustment Two: This process adjusts for differential response (cooperation) rates in both the screening phase and subsequent interviews. Differential cooperation rates are computed (and adjusted) on the basis of geographic location and group membership, as well as within-group subclassification.

Adjustment Three: This weighting adjustment attempts to correct for certain types of random variation associated with sampling as well as sample "undercoverage." These ratio estimations are used to conform the sample to independently derived population totals.

Sampling Weight Readjustments: Sampling weights for the main survey are readjusted by NORC to account for noninterviews each survey year. The readjustments are necessitated by differential nonresponse and use base year sample parameters for their creation, employing a procedure similar to that described above. The only exception occurs in the final stage of post-stratification. Post-stratification weights in survey rounds two and above have been recomputed on the basis of completed cases in that year's sample rather than the completed cases in the base year sample.

Child weights are based on mother weights with an adjustment factor used to account for different interview rates for children in various age, race, and sex groups. These factors use counts of children known to exist as well as estimates of fertility for women who have attrited. However, child weights do not adjust for children who were eligible to complete an assessment but did not, even though they completed other parts of the interview. Baker et al. (1993) and the current *Child/Young Adult Data Users Guide* present a detailed discussion of child sampling weights.

Because of the complicated sample design, weighted descriptive statistics are recommended whenever inferences are drawn for the total population of youth that the sample represents. However, caution should be exercised when interpreting small changes in population statistics across years, particularly when using the child weights.

2.9 Practical Usage of Weights

The application of sampling weights varies depending on the type of analysis being performed. If tabulating sample characteristics for a single interview year in order to describe the population being represented (i.e., compute sample means, totals, or proportions), researchers should weight the observations using the weights provided. For example, to estimate the average hours worked in 1987 by persons born in 1957 through 1964, simply use the weighted average of hours worked, where weight is the 1987 sample weight. These weights are approximately correct when used in this way, with item nonresponse possibly generating small errors. Other applications for which users may wish to apply weighting, but for which the application of weights may not correspond to the intended result include:

Samples Generated by Dropping Observations with Item Nonresponses: Often users confine their analysis to subsamples for which respondents provided valid answers to certain questions. In this case, a weighted mean will not represent the entire population, but rather those persons in the population who would have given a valid response to the specified questions. Item nonresponse because of refusals, don't knows, or invalid skips is usually quite small, so the degree to which the weights are incorrect is probably quite small. In the event that item nonresponse constitutes only a small proportion of the data for variables under analysis, population estimates (i.e., weighted sample means, medians, and proportions) would be reasonably accurate. However, population estimates based on data items that have relatively high nonresponse rates, such as family income, may not necessarily be representative of the underlying population of the cohort under analysis. For more information on item nonresponse in the NLSY79, see Chapter 5 of this User's Guide.

Data from Multiple Waves: Because the weights are specific to a single wave of the study, and because respondents occasionally miss an interview but are contacted in a subsequent wave, a problem similar to item nonresponse arises when the data are used longitudinally. In addition, occasionally the weights for a respondent in different years may be quite dissimilar, leaving the user uncertain as to which weight is appropriate. In principle, if a user wished to apply weights to multiple wave data, weights would have to be recomputed based upon the persons for whom complete data are available. In practice, if the sample is limited to respondents interviewed in a terminal or end point year, the weight for that year can be used.

Regression Analysis: A common question is whether one should use the provided weights to perform weighted least squares when doing regression analysis. Such a course of action may not lead to correct

estimates. If particular groups follow significantly different regression specifications, the preferred method of analysis is to estimate a separate regression for each group or to use dummy (or indicator) variables to specify group membership.

Users interested in calculating the population average effect of, for example, education upon earnings, should simply compute the weighted average of the regression coefficients obtained for each group, using the sum of the weights for the persons in each group as the weights to be applied to the coefficients. While least squares is an estimator that is linear in the dependent variable, it is nonlinear in explanatory variables, and so weighting the observations will generate different results than taking the weighted average of the regression coefficients for the groups. The process of stratifying the sample into groups thought to have different regression coefficients and then testing for equality of coefficients across groups using an F-test is described in most statistics texts.

Users uncertain about the appropriate grouping should consult a statistician or other person knowledgeable about the data set before specifying the regression model. Note that if subgroups have different regression coefficients, a regression on a random sample of the population would be misspecified.

2.10 Design Effects

Because the samples are multi-stage, stratified random samples instead of simple random samples, respondents tend to come in geographic clusters and clusters of persons tend to be alike in a variety of ways for a variety of reasons. (For more information on the sampling and screening process, users are referred to sections 2.2 and 2.3 of this chapter.) For example, there may be cultural differences by locality or ecological differences in labor market conditions. Depending upon the degree of this homogeneity, the conventionally computed standard deviations for the variables, which assume a simple random sample, may be too small. However, by controlling the rate at which particular strata are sampled, multi-stage, stratified random samples can improve upon simple random samples. The ratio of the correct standard error to the standard error computed under the assumption of a simple random sample is known as the design effect. The technical sampling report for the NLSY79 (Frankel, Williams, and Spencer 1983) and its addendum (CHRR) provide design effects for the various strata.

A single design effect that can be broadly applied to regression analysis cannot be constructed. To illustrate the approximate size of design effects in regression analysis, a regression of rate of pay for the CPS job in 1979 was estimated using race, sex, marital status, and education as explanatory variables. Assuming each of the roughly 200 PSUs has the same number of respondents in the sample of 5,724 persons with observed wages, the design effect was calculated to be 1.52; that is, the true standard errors were larger than the naively computed standard errors by a factor of 1.52. When this exercise was repeated for rate of pay on the CPS job in 1986, the design effect had fallen to 1.37.

This reduction reflects the fact that mobility tends to mix the respondents more uniformly through the country, reducing the clustering of the sample. Many of the persons who started out in the same PSU will have moved to different areas and, hence, no longer share unobservable labor market conditions. These shared unobservable labor market conditions are likely responsible for the spatial correlation of the error terms which generate design effects. Thus, another advantage of longitudinal data is the lessening of design effects over time.

By examining the geocode data for the NLSY79, it is possible to control for some of the environmental factors generating design effects or, if desired, to compute design effects based upon county or metropolitan area clusters which continue to be present. To facilitate study of design effects, scrambled PSU codes from the 1979 survey are available to persons ordering NLSY79 geocode data.

Users interested in information on how to use the standard errors and design effects should refer to Appendix B, "Standard Errors and Design Effects," at the end of this guide. The Technical Sampling Report and Technical Sampling Report Addendum also provide information on standard errors and design effects.

References

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Chapter 3: Guide to the Data

This section provides some practical information about how NLS variables are collected, created, and arranged on the CD-ROM along with accompanying hard copy and electronic documentation. NLS variables are derived, for the most part, directly from survey instruments; arranged both numerically and topically within the NLS documentation system; and presented, within a codebook, along with full and complete information on each variable.

The first section of this chapter describes the different survey instruments used to collect the raw NLSY79 data during the field period. This section also explains how question numbers have been assigned during the various survey years. Next, the guide to the data discusses the primary types of NLS variables and the process by which each is assigned a reference number and title that serve to identify it throughout the NLS documentation system. The third section reviews the codebook, the information about each variable contained on the CD-ROM, and the accompanying paper documentation. This discussion will help users understand how to interpret the various pieces of data presented in the NLS documentation system. Finally, this chapter gives researchers some basic instruction on using the search functions on the CD-ROM to find variables relating to the area of interest.

User Notes: The focus of these sections will be on accessing variables found on what are called the main (or geocode) data files for the NLSY79 and NLSY79 Child data sets. Users of the NLSY79 Work history data should refer to the separate documentation that accompanies that data set.

3.1 Survey Instruments

The primary variables found within the main data set are derived directly from one or more survey instruments, e.g., questionnaires, household interview forms, etc. This section describes each of the NLSY79 survey instruments in the order that they appear within Table 3.1.1. It also explains the conventions used in the NLSY79 documentation system to identify questionnaire items from some of the primary survey instruments. An additional document, the interviewer reference manual, provides background information on specific survey instruments. While not actually a survey instrument, this document is also described within this section.

1978 Household Screener, Household Interview Forms	Children of the NLSY79 Supplements
Interviewing Aids	Interviewing Aid
Face Sheet	Child Face Sheet
Information Sheet	Questionnaire Supplements
Children's Record Forms (CRF)	Child Supplement (CS)
Questionnaires	Mother Supplement (MS)
Questionnaire Supplements	Child Self-Administered Supplement (CSAS)
1979 High School Survey	Child Self-Administered Supplement
1980–83 Transcript Surveys	Confidential Card
1980 Illegal Activities Form J	Young Adult Survey
Employer Supplements (ES)	Young Adult Self-Report Booklet (YASRB) ¹
1983 Fertility Supplement	1995 School Survey
Confidential Abortion Forms	Interviewer Reference Manuals (Q by Qs) and CAPI Help
1988, 1992, 1994 & 1998 Drug Use Supplement	Information
1988 Childhood Residence Calendar	

Table 3.1.1 Types of NLSY79 Survey Instruments & User Aids

¹ Used through 1998, in 2000 fielding, retained questions were incorporated into the CAPI instrument.

Questionnaire Item or Question Number: This generic term refers the user to the printed source of data for a given variable. A questionnaire item may be a question, a check item, or an interviewer's reference item that appears within one of the survey instruments. Each questionnaire item has been assigned a number or a combination of numbers and letters within the NLSY79 documentation system to assist the user in linking each variable to its location in a survey instrument.

NLSY79 questionnaire item assignment is complex and varies across survey years and instruments. For some years, NLSY79 questionnaire item identification is dependent upon various combinations of the deck and column numbers used in data entry that are printed to the right of the answer categories on the survey instrument. In other years, designation is made by section and question numbers. Specific information on the conventions used appears below, after each relevant instrument, under the subheadings "Question Numbering."

NLSY79 Survey Instruments

A unique set of survey instruments has been used during each survey year to collect information from respondents. The term "survey instrument" is used to refer to (1) the questionnaires that serve as the primary source of information on a given respondent; (2) questionnaire supplements fielded during select survey years that contain additional sets of questions; and (3) documents such as the household interview forms or household record cards that collect information on members of each respondent's household.

Users should be aware that, while the source of the majority of variables in the main NLSY79 data sets is the questionnaire or one of the other survey instruments, certain NLSY79 variables are created either from other NLSY79 variables or from information found in an external data source (see "Types of NLSY79 Variables" later in this chapter).

Household Interview Forms

Each NLSY79 interview includes the collection of information on the members of each respondent's household. For NLSY79 respondents, such household data are collected prior to the administration of the main questionnaire and for many years used separate survey instruments called the *Household Interview Forms*. Both the instruments used for the yearly household data collection and the household screening instruments that were used to draw the samples of respondents are described below.

NLSY79 1978 Household Screener and Interviewer's Reference Manual: This document (fully titled *NLSY-National Longitudinal Survey of Labor Force Behavior Interviewer's Manual-Household Screening*, NORC 1978) contains detailed information on the 1978 screening of households conducted by NORC from which the civilian youth samples (the cross-sectional and supplemental samples) were drawn. It provides a copy of the short 25-question screener, question-by-question specifications for administering the form, and a sample completed screener. Most of the information collected on each respondent during the screening is presented within the data set. The screener is the source for important data such as the sex and race/ethnicity variables that were used to assign each respondent to a specific NLSY79 subsample, as well as the relationship codes (e.g., brother, sister, husband, wife) that allow researchers to identify related NLSY79 respondents who shared a household at the time of the screening.

Question Numbering: Question numbers for the 1978 screener were arbitrarily assigned by NORC using an artificial questionnaire section number that followed the last section of the 1979 questionnaire ("Section 25" for all screener variables) even though the actual administration of the screener preceded that of the 1979 questionnaire.

Users should note that screener questions are identified within the documentation as 1979 variables even though these data were collected during 1978. Most variables from the screener use the phrase HOUSEHOLD SCREENER at the beginning of the variable title, appear physically within the codebook after the 1979 household record series, and have been placed within the "Misc. 1979" area of interest.

Household Interview Forms: Yearly household information for the NLSY79 is collected from either the respondent or the head of household prior to the administration of the main questionnaire. NLSY79 Household Interview Forms are used to (1) enumerate all persons currently living in the respondent's household; (2) record information about each person's age, highest grade completed, work experience in

the past year, and relationship to the respondent; and (3) collect, during the 1979–86 surveys, certain family income information. Information on household members is collected using the questions on the *Household Interview Forms*; however, much of the information is actually recorded on the "Household Enumeration" section of the *Face Sheet* discussed below.

During the 1979–86 interviews, different versions of the *Household Interview Forms* were administered depending upon the type of residence of the respondent. Version A was used if the respondent was living with his/her parents (or in-laws), in which case the interview was conducted with the respondent's parents (or in-laws) in order to gather information on household income sources. Version B was used if the respondent was living in group quarters, such as a dormitory or the military, or in temporary facilities, such as a hospital or prison, and was administered to the respondent. If the respondent had a permanent residence elsewhere, the household interview gathered information about that household. Version C was administered to the respondent if s/he was living in his/her own dwelling unit, military family housing, an orphanage, a religious institution, or other individual quarters or was the head of a family unit. Table 4.18.1 in the "Household Composition" section of this guide depicts, by survey year, the universe and residential unit(s) specific to each form.

During the first eight survey rounds, many respondents were younger than 18 and living with their parents; thus, Version A was frequently used. Beginning with the 1987 survey, all respondents were 21 or older and living predominantly on their own; consequently, the household interview forms were consolidated into a single version. For 1979–86, these forms appear as separate documents. Beginning with the 1987 interview, household interview questions were incorporated within each year's questionnaire. Some variation in administration of these forms has occurred over survey years. Users should refer to each survey year's *Interviewer's Reference Manual* for more information.

Interviewing Aids

Certain instruments used during fielding of the NLSY79 and NLSY79 child surveys provide researchers with interview-, respondent-, and child-specific information that appears as variables within the NLSY79 data sets.

Face Sheet: Immediately prior to fielding, a *Face Sheet* is computer-generated for each respondent and forwarded to the interviewer assigned to that case. The *Face Sheet* contains (1) various items of respondent-specific information (name, address, phone number); (2) information about each member of the household or family unit as of the last interview (full name, sex, relationship to youth, education, and whether the household member worked during the year), generated from the most recent administration of the *Household Interview Forms*; (3) a historical overview of previous interview rounds (whether the respondent refused to be interviewed, the case was converted [i.e., the respondent was interviewed after

initially refusing], the interview was complete or incomplete, etc.); and (4) for the 1980–86 survey years, information on the version of the *Household Interview Form* that was used in the previous interview. This information is used to alert the interviewer and field manager to potential problems, assist them in preparing a successful location and fielding strategy, and provide details necessary to conduct an efficient interview, e.g., a listing of previous employers. Information about the respondent's household and family unit from each survey year's *Face Sheet* appears as a set of variables in the "Household Record" area of interest on the NLSY79 main data set. Sample *Face Sheets* for most survey years can be found in the various *Interviewer Reference Manuals*.

Information Sheet: This document contains data on the respondent from the previous interview that will be referred to and used to update information during the interviewing process. Items found on this document include marital status, high school completion status, university last attended, names of previous employers, training program enrollment, and pregnancy status. This information enables the interviewer to accurately route the respondent through the relevant sections of the questionnaire and provides on-the-spot reconciliation of earlier errors. *Information Sheet* items appear within the NLSY79 data set ("Last Interview Information" area of interest). Beginning with the 1993 interviews, the information sheet is incorporated into the CAPI instrument. Sample *Information Sheets* can be found in the *Interviewer Reference Manuals*. In CAPI surveys, information sheet data are stored electronically on the interviewer's lap top and accessed by the survey program during the interview; no paper information sheet is used.

Children's Record Forms (CRF) (1985–92): This interviewing aid containing information on biological (collected each survey) and nonbiological (i.e., adopted or step-; collected biennially) children was used in the 1985-92 survey to (1) provide identification numbers, names, dates of birth, sex, and deceased/adopted status for each child and (2) identify special sections of the main questionnaire (e.g., immunization, feeding, etc.) that needed to be administered for particular children. Sample *Children's Record Forms* can be found in the *Interviewer's Reference Manuals*. Beginning with the 1993 interviews, the information sheet is incorporated into the CAPI instrument. As with information sheets, these data are automatically accessed by the survey program during CAPI interviews, so the hard copy CRF is no longer needed.

Questionnaires

There are separate and distinctly different questionnaires for each survey year of the NLSY79 and the NLSY79 children. Each questionnaire is organized around a set of topical subjects, the titles of which usually appear on either the first page of each section of the questionnaire or as a header.

The questionnaires are critical elements of the NLSY79 documentation system and should be used by each researcher to ascertain the wording of questions, coding categories, and the universe of respondents asked to respond to a given question.

NLSY79 questionnaires record (1) interview dates; (2) responses to the topical survey questions (see discussion below); (3) locating information which will assist NORC in finding the respondent for the next interview; and (4) interviewer remarks on such topics as the race and sex of respondent, language in which the interview was conducted, interviewer's impressions, etc. *Show Cards*, interviewing aids used in conjunction with the questionnaire, list the various possible response categories for selected questions and help the respondent keep the more complicated response categories in mind.

NLSY79 questionnaires explore the following core topics: current labor force status, jobs and employers, work experience and attitudes, training, assets and income, family background, marital history, fertility, regular schooling, military service, and health. Additional sets of questions on such topics as child care, alcohol use, drug use, job search methods, educational/occupational aspirations, school discipline, pre- and post-natal health behaviors, delinquency, childhood residences, and so forth have been fielded during select survey years.

During the 1979–92 paper and pencil (PAPI) interviews, questionnaires and other survey instruments were preprinted paper products used during fielding. With the advent of computer-assisted interviewing (CAPI) in 1993, the "questionnaire" became a series of visual screens that not only told the interviewers what questions to ask but provided helpful instructions on how to administer the interview. Separate supplemental documents such as the job-specific *Employer Supplements* were integrated into the electronic main questionnaire. Generation of a hard copy document became a post-survey process. NLSY79 CAPI questionnaires incorporate some helpful elements of the traditional codebook, with reference numbers assigned to variables and greater specificity on coding and universes provided within each codeblock.

Question Numbering: The conventions used to assign question numbers within the NLSY79 documentation system vary by survey year and are based on various combinations of the questionnaire section number, the question number, and/or the deck and column numbers (Table 3.1.2). Users can locate a variable within the hard copy codebook—which represents each question fielded in the same order as it appears within the questionnaire—by finding the question number which appears (in parentheses) to the right of each reference number.

Survey Year	Designated By	Example
1979	Section # (S) & Question # (Q)	S02Q01: Question 1 in Section 2
1980–82	Section # (S), Deck # (D) & Column #	S06D1314: Question appearing in Section 6, deck 13, column 14
1983–87, 1989–92	Deck # & Column #	Q0413: Question appearing in deck 4, column 13
1988	Section # & Question # (Q)	Q5.3: Question 3 in Section 5
1993–2000	Section #, Question # (Q) & Loop # as applicable	Q5-26.3: Question 26 in Section 5, with the appended .03 representing the third loop

 Table 3.1.2
 NLSY79 Question Numbering Conventions

Deck and column numbers are vestigial items that were used to locate the data when it was input on punch cards. The deck numbers are printed at the upper right hand corner of each page in the survey instruments and at the beginning point for each new deck for the 1980 through 1992 instruments. The column numbers are printed to the left of the response categories. If the variable contains more than one digit, the column reference is to the starting column for that variable.

User Notes: Although NLSY79 questionnaires are to some extent topically arranged, the user should be aware that the absence of a section title on a given subject does not mean that no questions on that topic were fielded during that survey year. For example, the 1987 and 1989 NLSY79 questionnaires contain no section entitled "Child Care"; however, a small number of child care questions were asked in those years and appear within the "Fertility" section of the questionnaires.

Questionnaire Supplements

Separate instruments called "supplements" have been used since the onset of the NLSY79 to administer distinct sets of questions. The NLSY79 has made extensive use of supplements for collecting information from separate universes such as schools or children or for administering confidential sets of questions on illegal activities or abortion. The following section describes each supplemental instrument used for the NLSY79. The use of such separate supplements has diminished with CAPI-administered interviews. In the main youth instrument, almost all supplements are incorporated as electronic modules in the questionnaire. Through 2000, children still use paper supplements for some instruments.

Illegal Activities Form J (1980): This confidential questionnaire supplement, administered during the 1980 survey, contains a series of questions designed to collect information on the extent of respondents' participation in various delinquent and criminal activities such as skipping school, alcohol/marijuana use, vandalism, shoplifting, drug dealing, and robbery. This series supplements those on reported contacts with the criminal justice system collected within the main questionnaire.

Employer Supplement: Information about each employer for whom a NLSY79 respondent has worked since the last interview has been collected since 1980. One *Employer Supplement* is administered for each employer and contains questions about gaps when the respondent was not working, the number of hours worked, the type of work done, and the wages earned at that job. Note: Comparable information for the 1979 survey can be found in the "On Jobs" section of the main questionnaire and within the separate single sheet 1979 *Employer Flap*. Beginning with the 1993 CAPI interviews, all employer supplement questions appear within the body of the main questionnaire.

Question Numbering: Four numbering systems have been used to identify questionnaire items within the *Employer Supplement* (Table 3.1.3). Although data from up to 10 jobs are collected, the main data set includes information on only the first five jobs since few individuals work at more than five jobs between interviews. Data on all ten jobs are used to construct a series of summary variables for hours and weeks worked; see the "Labor Force Status," "Time & Tenure," and "Work Experience" sections for more information.

1980–87 1989–91	A supplement identifier, i.e., the letter B, representing the first supplement, through F, the fifth supplement, is combined with the deck and column numbers preprinted in the instrument. The deck numbers for the first <i>Employer Supplement</i> would be B1, B2, B3, and B4 while the second supplement would use C with each deck and column number. The question number QB140 thus refers to B (the first supplement), 1 (deck 1), 40 (column 40), while QC166 refers to <i>Employer Supplement</i> C, deck 1, column 66.
1988	Letter designations, i.e., ESB, ESC, ESD, ESE, ESF, continue to identify the specific supplement in use; however, deck and column numbers are not used. Appended to the supplement identifier is the actual question number as printed in the supplement. For example, ESB.1 refers to the first supplement, question 1.
1992	A series of supplemental deck numbers are attached to the column numbers preprinted in the supplement. Question numbers 7439–7831 refer to information collected in the first supplement, 7939–8331 to the second supplement, 8439–8831 to the third supplement, 8939–9331 to the fourth supplement, and 9439–9831 to the fifth supplement.
1993–1996	The designation QES and a number, e.g., QES5, indicates that this series of questions collected information about the fifth employer. Hyphenated numbers attached to the QES5, e.g., QES5-26, QES5-27, etc. indicate the specific question number within the series, while a decimal number following a question number, QES5-26.3, reflects the third repetition of that question for that employer.
1998–2000	Beginning in 1998, the number identifying the employer was moved to a decimal after the question number. The question previously labeled QES5-26.3, for example, was now designated as QES-26.05.03. The decimal number ."05" indicates this information was collected about the fifth employer. Again, ."03" represents the third repetition of question 26.

Table 3.1.3 Employer Supplement Question Numbering Conventions: 1980–2000

Fertility Supplement (1983): Respondents (both male and female) who were not interviewed during 1982 were administered a special set of supplementary fertility questions during the 1983 survey. The *Fertility Supplement* was designed to collect complete fertility data, including all live births for males and females, and all pregnancy losses and contraception between pregnancies for females. For those not interviewed in 1982, these questions replaced the fertility questions found in Section 10 of the 1983 questionnaire.

Confidential Abortion Forms: Biennially beginning in 1984, female NLSY79 respondents have completed a short confidential abortion form which elicited information on the number and dates of each abortion. Copies of these supplementary questions are provided within the survey instrument sets. The 1984 form also collected information on the dates that respondents left school prior to 1979 if leaving school was associated with early childbearing.

Drug Use Supplement (1988, 1992, 1994 & 1998): The 1988 supplement contains the confidential set of drug use questions which were, through a random assignment process, self-administered by the respondent in half of the cases and administered by the interviewer in the other half. Questions were asked on age at first use of marijuana and cocaine, extent of lifetime and most recent use, and method(s) practiced in using cocaine. The 1992 and 1994 supplements contain the confidential set of questions on respondents' use of cigarettes, alcohol, marijuana, cocaine, or other drugs. Users should note that while the 1988 and 1992 supplements are bound as separate booklets, the 1994 and 1998 supplements are bound with the main questionnaire.

Childhood Residence Calendar (1988): The 1988 questionnaire contained a special section detailing the living arrangements of respondents from birth through age 18. The *Childhood Residence Calendar*, the interviewing aid used to collect these data, depicts for each year of life the type of parent (biological-, adoptive-, or stepparents) with whom each respondent lived for at least four months and, for those ages when s/he was not living with a parent, in what other arrangements the respondent resided, such as, with grandparents, foster parents, friends, or in a children's home, detention center, or other institution.

Supplemental Data Collections

High School Survey (1980): A supplemental survey of the last secondary school attended by civilian NLSY79 respondents was conducted in 1980. This survey gathered information on each school's grading system, course offerings, dropout rate, student body composition, and faculty characteristics, as well as respondent scores from a variety of intelligence and aptitude tests. Copies of the high school survey instruments, the "School Questionnaire" and the "Student's School Record Information" form, are included within the documentation item called the *NLSY High School Transcript Survey: Overview and Documentation*.

Transcript Surveys (1980–83): Transcript information on up to 64 courses was collected from high school records for civilian NLSY79 respondents who were expected to complete high school within the United States. A copy of the instrument used to collect transcript information, called the "Transcript Coding Sheet," is included within the *NLSY High School Transcript Survey: Overview and Documentation*.

ASVAB: The Armed Services Vocational Aptitude Battery (ASVAB) was administered to most NLSY79 respondents in 1980 as part of a Department of Defense effort to renorm this military enlistment test. The scores from this supplemental data collection are included in the NLSY79 data file. For details, see the "Aptitude, Achievement & Intelligence Scores" section of this guide.

Children of the NLSY79 Interviewing Aids

Child Face Sheet: This interviewer information sheet, used during the 1988–98 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.

Young Adult Face Sheet: This interviewer information sheet used during the 1994-2000 fieldings, contained ID, name, all known locating data, mother's address, and last interview date for the young adult and mother.

Child Supplement (CS)	Mother Supplement (MS)	Child Self-Administered Supplement (CSAS)	Young Adult Survey and Young Adult Self-Report Booklet (YASRB) ¹
Background Child Health	HOME – Short Form How My Child Usually	Interactions with Parents TV Viewing	Household Record Family Background
Body Parts	Acts	Computer Use & Attitudes	Dating/Marital History
Memory for Location	Motor & Social	Responsibilities in the Home	Schooling & Military
Verbal Memory	Development	Time Use after School	Jobs & Training
Self-Perception Profile for	Behavior Problems Index	School Satisfaction	Fertility Health
Children (SPPC)/ What I Am Like	School & Family Background	Religion Peer Relationships	Childcare
Digit Span	Interviewer Remarks	Dating; Marriage & Childbearing	Income & Assets
PIAT Math & Reading		Expectations	Attitudes
PPVT		Sexual Activity & Sex Education	Drug & Alcohol Usage
Interviewer evaluation of		Substance Use	Sexual Activity & Abortion
testing conditions		Work for Pay	Delinquent & Criminal
Interviewer observations of home environment		Interviewer Remarks	Activity

 Table 3.1.4 Contents of the Separate Child Instruments

¹As of 2000, the YASRB was integrated into the CAPI survey.

Children of the NLSY79 Questionnaire Supplements

Variables in the NLSY79 child data set are derived from three sources; questionnaire supplements administered in even numbered years since 1986, the child cognitive and socio-emotional assessments administered during the same surveys, and relevant mother and child info taken from the main NLSY79 survey. The special child supplements and the main topics covered in each are listed in Table 3.1.4.

Child, Mother & Child Self-Administered Supplements: Survey schedules called the *Mother Supplements* (*MS*), the *Child Supplements* (*CS*), and the *Child Self-Administered Supplements* (*CSAS*) are used to (1) administer a battery of cognitive and socio-emotional assessments to children born to female NLSY79 respondents; (2) gather information from each mother on her children's home environment, behavior, health, and motor-social-cognitive development; (3) collect information from children ages 10 years and over on a wide range of topics; and (4) collect from interviewers their evaluation of the testing conditions and observations of the child's home environment. Abbreviated versions of the mother and child supplements called the *Infant Supplement* and the *Mother of Infant Supplement* were used in the 1986 survey for households in which only children under eight months of age resided.

Contents of the *Child Supplement*, *Mother Supplement*, and *Child Self-Administered Supplement* differ somewhat across survey years but typically consist of the sections depicted in Table 3.1.4. Specific content listings for the *Mother Supplement* can be found either on the inside front or back cover of the instrument; accompanying charts indicate the specific assessments administered for children of varying ages.

Child Self-Administered Supplement Confidential Card: Starting with the 1988 survey, a separate confidential form, administered to children age 13 and over, collected information on whether the child had ever engaged in sexual intercourse and, if so, age and date of first intercourse. The 1992, 1994, 1996, and 1998 versions include the dates of any live births.

Young Adult Survey and Young Adult Self-Report Booklet: Beginning in 1994, a new survey entitled the NLSY79 Young Adult Survey was introduced. This survey was designed to ask NLSY79 style questions to the oldest children of NLSY79 mothers. Children who will be age 15 or older by the end of a given survey year complete the young adult instruments rather than the child instruments described above. The CAPI questionnaire gathers information on each young adult's experiences. A separate Young Adult Self-Report Booklet asked respondents sensitive questions about drug and alcohol usage as well as criminal and sexual activity. In 1998, the Young Adult group was capped at age 20. In 2000, the primary mode of administration for the Young Adults was telephone, so the self-report booklet was incorporated into the main survey instrument. Young Adults interviewed in person were given the option of self-administration using the interviewer's laptop.

Question Numbering: Variables on the NLSY79 child data set are derived from three sources: the questionnaire supplements described above, the child cognitive and socio-emotional assessments administered at the time of the survey, and relevant mother and child information taken from the main NLSY79 interview.

Questions from the specific mother and child assessment instruments are identified by "MS" for *Mother Supplement* or "CS" for *Child Supplement*. The two digits that follow this prefix refer to the year of the survey. Through 1992, the next two numbers refer to the deck number printed at the top of each page in the survey instrument, and finally to the column number printed alongside each question in the survey instrument. For instance, question CS861217 refers to deck 12, column 17 of the 1986 *Child Supplement*. Deck numbers for the *Child Self-Administered Supplement* follow consecutively those in the regular *Child Supplement;* questions are numbered in the same manner as the regular *Child Supplement*. Starting in 1994, question numbers more closely parallel those of the main youth CAPI instrument. However, the assessment items from the *Child Supplement* and constructed variables in the file have been assigned mnemonic variable names.

The young adult question numbering conventions parallel those of the main youth CAPI questionnaires (1993, 1994, 1996, 1998, and 2000). Each question number indicates the section, question within that section, and loop number if applicable. As of 1998, loop number is no longer part of the question name because loops are dynamic. For more information, refer to the discussion of question numbering for the main youth earlier in this section.

1995 School Survey: In 1995 a separate child school survey was conducted for children born to female respondents of the NLSY79. The first part of this data collection was a questionnaire addressed to the school principal that solicited a variety of information about characteristics of the school and school policies. Second, the school central staff was asked to complete a questionnaire that focused on the individual youth's academic success, social adjustment, and involvement in a variety of school activities. This questionnaire also gathered selected characteristics and policies relevant to the grade level in which the youth was enrolled. In addition, the youth's transcript was obtained whenever possible.

Interviewer's Reference Manual (Question-by-Question [Q by Q] Specifications)

Each questionnaire or set of survey instruments is accompanied by an *Interviewer's Reference Manual*. This document provides NORC interviewers with background information on the NLSY79 and detailed question-by-question instructions for administering and coding the questionnaire, *Employer Supplement, Household Interview Forms*, and other survey supplements. Separate Q by Q's exist for each NLSY79 survey year as well as for the NLSY79 children's *Child Supplement* and *Mother Supplement*. Printed copies

of the CAPI help screen information, which each interviewer could access during the course of the interview, replace the traditional interviewer's manual instrument beginning with the 1993 release.

3.2 Types of Variables

There are six types of variables present in the NLSY79 data. Some are the raw answers provided by the respondent, while others are constructed. The type of variable impacts: (1) the title or variable description naming each variable; (2) the physical placement of each variable within the codebook; and (3), the location of a variable within a given area of interest. Types of variables include:

- (1) Direct (or raw) responses from a questionnaire or other survey instrument.
- (2) Edited variables constructed from raw data according to consistent and detailed sets of procedures, e.g., occupational codings, *KEY* variables, etc.
- (3) Constructed variables based on responses to more than one data item, either cross-sectionally or longitudinally, and edited for consistency where necessary, e.g., variables on the NLSY79 Supplemental Fertility File ("Fertility and Relationship History/Created" area of interest).
- (4) Constructed variables from data provided on a non-NLS data set, e.g., the *County & City Data Book* information present on the NLSY79 geocode data files.
- (5) Variables provided by NORC or another outside organization based on sources not directly available to the user, e.g., the high school survey and transcript data, scores from the *Armed Services Vocational Aptitude Battery*, etc.
- (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.

User Notes: In general, the Center for Human Resource Research does not impute missing values or perform internal consistency checks across waves. Exceptions to this general rule occur when financial support is available, as is the case with the consistency edits performed since 1982 on the NLSY79 fertility data. When bounded interviewing methods are used, responses from the previous interview appear in the text of a question, both to verify that past information and as a point from which to update current information. Bounded interviewing techniques, using data from the *Information Sheets* or flap items (described above), are intended to impose consistency across waves. Data quality checks most often occur in the process of constructing (1) cumulative and current status variables, e.g., 'Highest Grade Completed,' and (2) NLSY79 employment-related variables, e.g., 'Weeks Working in Past Calendar Year,' 'Total Tenure with Employer,' etc. More information on NLSY79 survey instruments can be found in section 3.1.

Reference Numbers

Every variable in the main NLSY79 data sets has been assigned a reference number or identifier that determines its relative position within the data file and NLS documentation system. Persons contacting

NLS User Services should be prepared to discuss their question or problem in relationship to the reference number(s) of the variable(s) in question.

NLSY79 (exclusive of the NLSY79 Child File): Once assigned to variables within the NLSY79 data files (exclusive of the NLSY79 Child File), reference numbers remain constant through subsequent revisions of the files. Reference numbers are assigned sequentially, with variables referring to the first survey year having a lower reference number than those variables specific to the second year and so forth. Occasionally variables are created in a year later than that in which the data were actually collected. These variables are frequently given a reference number with a decimal value that reflects the year in which the actual data were gathered rather than the year the created variable was constructed, e.g., R01461.01. Beginning with the 1993 survey, decimals are also used to indicate that more than one variable has been derived from a single question.

User Notes: Reference numbers in the main and geocode data sets have traditionally begun with the letter"R." Beginning with the 2000 data release, the work history variables are incorporated with the main data on the same CD. However, these work history variables are assigned reference numbers beginning with "W" for easy identification.

NLSY79 Children: Reference numbers for this data set are the unique identification numbers assigned to each variable that determine its relative position within the codebook. Through 1994, a reference number assigned to a given child variable was specific to a given data release and changed in subsequent releases. All child variables have been arranged in a topical order; variables from the latest release on a given topic are added to those on the same topic from previous years. Different prefixes identified different releases: All variables from the first 1986 release of the NLSY79 child data were preceded by the letter Cxxxxx.xx; second release 1988 variables were preceded by a Dxxxxx.xx, and so forth. Beginning in 1996, all child variables are numbered Cxxxxx.xx.

NLSY79 Young Adults: Reference numbers for this data set are also unique identification numbers assigned to each variable that determine relative position within the codebook. To distinguish them from other NLSY79 variables, young adult reference numbers are prefixed with the letter "Y." These numbers are assigned sequentially to data items in the CAPI questionnaire and the self-report booklet, with decimals indicating that more than one variable has been derived from a single question. Reference numbers for Young Adult variables remain constant through subsequent data releases.

Variable Descriptions or Variable Titles

Each variable within NLSY79 main file data sets has been assigned an 80 character summary title that serves as the verbal representation of that variable throughout the hard copy and electronic documentation systems.

Variable titles are assigned by CHRR archivists who endeavor, within the limitations described below, to capture the core CONTENT of the variable and to incorporate within the title (1) AREAS OF INTEREST that facilitate easy identification of comparable variables; (2) UNIVERSE IDENTIFIERS that specify the subset of respondents for which each variable is relevant; and (3) for some variables, REFERENCE PERIODS that indicate the period of time, e.g., survey year or calendar year, to which data refer. Universe identifiers and reference periods are discussed below.

Universe Identifiers: If two ostensibly identical variables differ only in that they refer to different universes, the variable title will include a reference to the applicable universe by either appending in parentheses to each title the appropriate universe (Example 1) or by identifying the universe before the variable title (Example 2).

Example 1: 'Did R Have Any Job since Last Int? (Unemployed or OLF) (1994)', or Example 2: 'Female - Number of Children R Has Had since Last Interview'

Reference Periods: Variable descriptions may include a phrase indicating the time period to which the data refer. When a date follows a verbal description of a variable and is preceded by the prepositional phrase "in 19XX," the date identifies the calendar year for which the relevant information was collected.

Example: 'Received Income from Child Support in 1991?' This 1992 survey question refers to child support payments received in calendar year 1991.

User Notes: All searches for NLSY79 variables are essentially searches for variable descriptions or titles. Electronic searches of NLSY79 variables via the NLSY79 CD-ROM access methods ultimately produce listings of variables by their reference number and variable description or title.

Flexibility in variable title assignment for raw data items is restricted by (1) the actual wording of the question as it appears within the survey instrument; (2) precedent, i.e., how that type of variable has been titled in previous years; and (3) the maximum allowable length for variable titles. An attempt is also made to include key phrases in variable titles so that large groups of variables with similar or related subject matter can be easily identified.

Users should be careful not to presumptively conclude that two variables with the same or similar titles necessarily have the same (1) universe of respondents, (2) coding categories, or (3) time reference period. While the universe identifier and reference period conventions discussed above have been emphasized, users are urged to consult the questionnaires for skip patterns and exact time periods for a given variable and to factor in the relevant fielding period(s) for the cohort.

Variables with similar content, e.g., information on respondents' labor force status, may have completely different titles, depending on the type of variable (raw versus created). In addition, such variables may be located within different NLSY79 areas of interest.

- Example 1: 'Employment Status Recode' (ESR), in 1979–98, is the created or reconstructed version of the 'Activity Most of Survey Week' raw variable. The 'Activity' variable is derived from the first question of the full series of questions used by the Department of Labor (DOL) to obtain employment status; the title reflects questionnaire content. ESR, on the other hand, reflects the procedure used to recode the 'Activity' variable. This produces a constructed variable for all respondents based upon responses to the 'Activity' question and all other questions used by the DOL to obtain employment status. These other questions serve to qualify and refine employment status beyond the answer to the initial 'Activity' question.
- Example 2: NLSY79 raw fertility variables appear within the various "Children," "Birth Record" or "Birth Record xxxx" areas of interest while edited and constructed versions of these variables appear within the "Fertility and Relationship History/Created" area of interest.

Finally, different archivists, for a period of more than 20 years, have performed the task of assigning variable descriptions to data. While every effort has been made to maintain consistency, users may find some differences in variable title and area of interest assignment.

3.3 NLSY79 Codebook System

All variables present on a main file NLSY79 data set are documented via (1) a codebook; (2) an accompanying codebook supplement; and (3) error updates. This section describes these three primary components of the NLSY79 codebook system and discusses the important types of information found within each. An additional codebook supplement exists for the Geocode data file.

Codebooks

The codebook is the principal element of the NLSY79 documentation system and contains information intended to be complete and self-explanatory for each variable in a data file. The software on the NLSY79 CD-ROMs allows easy access to each variable's codebook information and permits the user to print a codebook extract for preselected variables.

Every variable is presented within the NLSY79 documentation as a block of information called a "codeblock." Each codeblock entry depicts the following important information: reference number, variable title, coding information, frequency distribution, location within the data file, reference to the questionnaire item or source of the variable, and information on the derivation of created variables. Users will find that NLSY79 CAPI codeblocks present greater detail on each variable, including universe totals, universe skip patterns, and more range of acceptable values information. Each of these terms is described more completely below. Codeblocks for many variables include special notes containing additional information designed to assist in the accurate use of data from that variable.

Codebooks are arranged in reference number order. Sample reference number assignments used in recent survey years for the NLSY79, NLSY79 Children, and NLSY79 Young Adults are presented in Tables 3.3.1, 3.3.2, and 3.3.3. As a general rule, raw questionnaire items appear first for a given survey year, followed by items from such instruments as the *Information Sheet, Employer Supplement*, etc. Variables from the main body of the questionnaire are followed by created or constructed variables drawn from an external data source, such as the *County & City Data Book*. Beginning with the 1993 CAPI surveys, questions relating to each job/employer, which were formerly located within the unique *Employer Supplements*, are merged with the main questionnaire items. A comparison of the reference number assignments used for the 1988 PAPI and 1993 CAPI variables appears in Table 3.3.1; Tables 3.3.2 and 3.3.3 provide users with a sample set of reference numbers for the NLSY79 young adults and children. Users should note that not all survey year assignments will be ordered in precisely this manner, and that the work history reference numbers (Wxxxxx.xx) are not represented here.

1988 PAPI		1993 CAPI	
R25000R28927.	All Raw, Edited and Created Variables	R41001.–R44308.	All Raw, Edited and Created Variables
R25000R27467.	Questionnaire Items	R41001.–R43988.	Questionnaire Items including the Employer Supplement series
R27469R27501.	Information Sheet Items	R43989.–R44036.	Information Sheet Items
R27506R27609.	Household Record	R44037.–R44126.	Household Record
R27610R28254.	Employer Supplement (ES) ¹		
R28255R28371.	Children's Record Form	R44127.–R44162.	Children's Record Form
R28372R28690.	Childhood Residence Calendar ²		
R28704R28729.	Created Variables	R44163.–R44205.	Created Variables
R28735R28811.	Supplemental Fertility File Variables		
R28825R28927.	Geocode Variables	R44206R44308.	Geocode Variables

Table 3.3.1 NLSY79 1988 & 1993 Reference Number Assignment

Note: PAPI refers to paper and pencil interviews which were conducted with the NLSY79 during 1979–92. CAPI or computer-assisted personal interviews began for the full NLSY79 cohort in 1993.

¹ Beginning in 1993, variables from the employer supplement series are included within the raw questionnaire items.

² The childhood residence retrospective was unique to 1988 and not refielded.

Reference Numbers	Contents	
Y00001Y03836.	All Variables	
Y00003Y03420.	Questionnaire Items	
Y03425Y03448.	Children's Record Form	
Y03449Y03478.	Childcare Roster	
Y03479Y03556.	Household Record	
Y03566Y03836.	Self-Report Booklet data	

Table 3.3.2 NLSY79 Young Adult Reference Number Assignment (1994)

Table 3.3.3 NLSY79 Child Reference Number Assignment

Reference Numbers	Contents
C12000C13792.	1994 Child Supplement & Child Self-Administered unedited items
C14000C14439.	1994 Mother Supplement unedited items
C14981C15089.	1994 raw and normed assessment scores & child sampling weights
C16521C17605.	1996 Child Supplement & Child Self-Administered unedited items
C16017C16392.	1996 Mother Supplement unedited items
C15637C15658.	1996 raw and normed assessment scores & child sampling weights

The following figures give users an example of codebook pages before (Figure 3.3.1) and after (Figure 3.3.2) CAPI implementation.

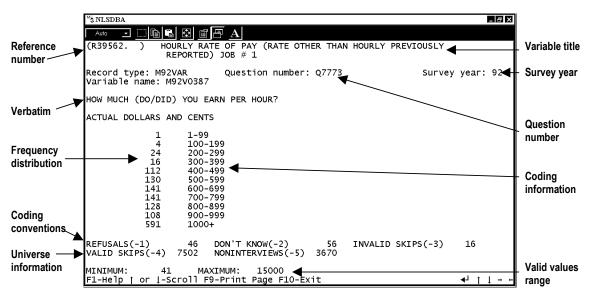
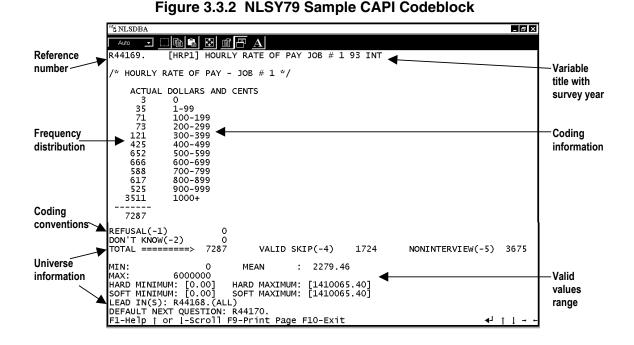


Figure 3.3.1 NLSY79 Sample PAPI Codeblock



Coding Information: Each codeblock entry presents the set of legitimate codes that a variable may assume along with a text entry describing the codes. Users should note that coding information for a given variable in the NLSY79 codeblock is (1) not necessarily consistent with the codes found within the questionnaire and (2) not necessarily consistent for the same variable across years. Use only the codebook coding information for analysis. The following types of code entries occur in NLSY79 codeblocks:

Dichotomous (or variables answered yes/no) are uniformly coded "Yes" = 1, "No" = 0. Other dichotomous variables have frequently been reformulated so this convention may be followed.

Discrete (Categorical), as in the case of the NLSY79 example, the variable 'Activity Most of Survey Week CPS Item'.

1	WORKING	5	GOING TO SCHOOL
2	WITH A JOB, NOT AT WORK	6	UNABLE TO WORK
3	LOOKING FOR WORK	7	OTHER
4	KEEPING HOUSE		

Continuous (Quantitative), as in the case of hourly rate of pay in the example above. These variables have continuous data but are presented in the codebook using a convenient frequency distribution. NLSY79 users will note that most valid data are positive numbers. Special cases are flagged by negative numbers in the NLSY79 including NLSY79 Children. See Appendix 13 in the *NLSY79 Codebook Supplement* for more detail on the handling of negative numbers in the data sets. The following conventions have been used throughout the data:

Noninterview	-5
Valid Skip	-4
Invalid Skip	-3
Don't Know	-2
Refusal	-1

Derivations: The decision rules employed in the creation of main file constructed variables have been included, whenever possible, in the codebook under the title "DERIVATIONS." This information enables researchers to determine whether available constructs are appropriate to their needs. In the case of the example NLSY79 variable in Figure 3.3.1, no derivation is shown because these variables are picked up directly from the interview schedule. Certain variables will contain a reference to an appendix for the decision rules that were used in creating the variable.

Frequency Distribution: In the case of discrete (categorical) variables, frequency counts are normally shown in the first column to the left of the code categories. In the case of continuous (quantitative) variables, a distribution of the variable is presented using a convenient class interval. The format of these distributions varies.

Questionnaire Item: "Questionnaire item" is a generic term identifying the printed source of data for a given variable. A questionnaire item may be a question, a check item, or an interviewer's reference item appearing within one of the survey instruments.

The questionnaire location for NLSY79 entries appears either in parentheses or brackets directly after the reference number, for example R04434. (SO6D1314). The five questionnaire item numbering conventions used in the codebook are described in the "Survey Instruments" section of this chapter (see especially Table 3.1.2).

Before the adoption of CAPI if an NLSY79 variable was not taken directly from one of the survey instruments, the questionnaire location contained an asterisk (*) in the codebook. The following categories of variables had no questionnaire numbers: (1) assigned identification numbers for the respondent, child, or family unit, etc.; (2) all derived or constructed variables; (3) variables from the following special surveys: Profiles (ASVAB), the School Survey, and the Transcript Survey; (4) variables found on constructed data files such as the Supplemental Fertility File (area of interest "Fertility and Relationship History/Created"); and (5) variables drawn from an external data source such as those found on the geocode files. In CAPI years, survey staff assign a question name that is not used in the questionnaire. This name remains the same in subsequent rounds, so similar created variables can be easily located.

Section, deck, and question numbers have been somewhat arbitrarily assigned by NORC to the information and questions found in special survey instruments such as the *Household Screener, Information Sheet, Children's Record Forms, Household Interview Forms*, and the *Employer Supplements*. The section and deck numbers for these special survey items were numbered sequentially after the main survey items and their specific order varies each year. The exception to this is the assignment of the deck numbers for the *Employer Supplements*. Question numbering is discussed earlier in the "Survey Instruments" section of this guide (see especially Table 3.1.3).

Variables created or modified for the child data set contain a mnemonic variable name in the source number location. NLSY79 Young Adult questions are numbered like the NLSY79 main questions (see Table 3.1.2); questions begin with Q and are followed by section number, question number, and loop. Question (source) numbering is discussed in more detail in section 3.1 of this guide.

Universe Information: Universe information was attached to select 1979–92 variables. Beginning with the 1993 CAPI interviews, the amount of universe information was expanded to include:

- 1. Universe Totals: Two totals are presented: (1) the sum of the frequency counts for each coding category is presented below the individual codes; and (2) the sum of the valid responses plus missing response counts of "refusals," "don't knows," and "invalid skips" can be found in the TOTAL======> field. The number of respondents who legitimately did not respond to a question, i.e., "valid skips (-4)" and "noninterviews (-5)," are also depicted.
- 2. Universe Skip Patterns: The following detailed universe information will enable researchers to easily trace the flow of respondents both backward and forward through various parts of the CAPI questionnaire items included in the codebook:

"Go to Reference # XXXXX.," appended to certain coding categories, indicates that respondents selecting that answer category were routed to the next question specified.

"Lead In(s) Reference # XXXXX." identifies the question or questions immediately preceding the codeblock question through which the universe of respondents was routed. Each lead-in reference number is followed by the relevant response value indicators, e.g., (Default), (ALL), [1:1], [1:6], etc. For example:

- R41000. (All) This means that all cases where R41000. is asked will branch to the current question. This does not imply all respondents are asked question R41000.
- R41000.This means that the default path of control from question(Default)R41000. is to branch to the current question, but there may
be conditions under which a different path would be taken.
- R41000. [1:6] This means that whenever the response category for question R41000. takes on the values one to six inclusive, the next question is the current question record.

"Default Next Question" specifies the next question that all respondents of the current codeblock will be asked unless some other skip condition indicates otherwise.

Valid Values Range: Depicted below the frequency distribution is information relating to the range of valid values for that particular distribution. "MINIMUM" indicates the smallest recorded value exclusive of "NA" and "DK." "MAXIMUM" indicates the largest recorded value. The computer-assisted interview contains internal range checks that limit responses to those between predesignated values, alert interviewers to verify non-normative values, and bolster the information provided by the traditional minimum and maximum fields (see, for example, Figure 3.3.2).

<u>Maximum and Minimum Fields</u>: The MIN and MAX fields define the range, i.e., the lower limit and the upper limit, of data values for a given question. A MAX of \$156,359 on an income question, for example, means that this value was the highest value recorded.

<u>Hardmax and Hardmin Fields</u>: Hard Maximum and Hard Minimum fields denote the highest and lowest values that were accepted by the CAPI program. A Hardmax of 500,000 and a Hardmin of 0 on an income question indicate that no values above \$500,000 or values lower than zero (no income) can be accepted. Dates, e.g., month/day/year of the respondent's last interview [lintdate] and current interview [curdate], are used as Hardmin and Hardmax values in order to restrict responses to certain questions to values within that range. Responses outside this range must be entered by the interviewer in the comment field.

<u>Softmax and Softmin Fields</u>: Softmax and Softmin fields cover ranges where an answer may exceed reasonable limits yet remain within the absolute limits and are acceptable after verification. A Softmax set to \$80,000 on an income question will cause the machine to "beep" and a warning to appear on the screen. Interviewers are thus alerted that the value is unusual and the respondent's answer should be verified.

<u>Restricted Income Values</u>: Confidentiality issues restrict release of all income and asset values. To insure respondent confidentiality, the values of income or asset variables exceeding particular limits are truncated and the upper limits converted to a set maximum value. From 1979 through 1984, the upper limit on income variables was \$75,000, and any amounts exceeding \$75,000 were converted to \$75,001. Beginning in 1985, the upper limit on income amounts was increased to \$100,000 due to inflation and the advancing age of the cohort, and amounts exceeding \$100,000 were converted to \$100,001. During that same survey year, specific questions on assets owned by NLSY79 respondents were added to the survey.

The asset amounts have different upper limits, and the types of variables and limits for those variables are as follows: (1) mortgage, market value, and debt on residential property and total market value of assets each worth more than \$500 and miscellaneous debt more than \$500—more than \$150,000 converted to

\$150,001; (2) market value and debt on a farm or business and savings—more than \$500,000 converted to \$500,001; (3) market value and debt on vehicles—more than \$30,000 converted to \$30,001. Beginning in 1989, the amounts exceeding the upper limits mentioned above were assigned the average value of all values exceeding the limits, in an effort to more accurately reflect the true range of income and asset values.

In the unique instance where one case has a value above the 1985 truncation limit, the value for that case is assigned the truncation limit. Finally, beginning in 1996, the top two percent of respondents with valid values were averaged and that average value replaced all values in the top range. Users should be aware of these changes in the income ceiling if they are carrying out longitudinal analyses with these data. Upward trends in mean income statistics may reflect this change in the ceiling value. More information about truncation is available in the "Income" and "Assets" sections of this guide.

Verbatim: Generally during the PAPI years, when a NLSY79 variable was taken directly from the questionnaire, the verbatim of the question appeared beneath the variable title. If a question is the source for more than one variable, the first variable contains the verbatim while subsequent variables prompt the user to refer back to the variable containing the verbatim. The following verbatims appear for reference numbers R03194. and R03195. and demonstrate this convention.

R03194. 'In Which Months of 1979 Did You (or Your Husband/Wife) Receive Supplemental Security Income? January 80 INT' R03195. 'See R (3194.) February'

Codebook Supplements

There are two NLSY79 codebook supplements. The first supplement contains variable creation procedures, supplementary coding categories, and derivations for selected variables on the main NLSY79 data files. Information provided within this document is **not** available in the hard copy NLSY79 codebooks, nor will it be found in the electronic documentation files on the NLSY79 CD-ROMs. The other supplement contains comparable information specific to the NLSY79 geocode data files.

Although there is no separate codebook supplement for the NLSY79 Child File, references will be found within the codeblock of select child variables to NLSY79 main file attachments and appendices. There is also a booklet containing several young adult attachments. A paper version of the 2000 young adult survey containing several attachments similar to the main cohort *Codebook Supplement* is also available. A brief description of the contents of the *NLSY79 Codebook Supplement* and the young adult attachments appears at the end of this section. Child users are encouraged to consult these documents.

Attachments & Appendices: NLSY79 Main File Codebook Supplement

Attachment 3: Industry and Occupation Codes is a compilation of (1) the 3-digit 1970 Census classifications used to code job and training information as well as occupational aspiration information and *Employer Supplements* (U.S. Census Bureau, "1970 Census of Population Alphabetical Index of Industries and Occupations," U.S. Government Printing Office, Washington, DC, 1971); (2) the 3-digit 1980 Census codes that have been used in addition to the 1970 codes, beginning with the 1982 survey, to classify the industry and occupation of respondents' most current or most recent job (CPS job) (U.S. Census Bureau, "1980 Census of Population Alphabetical Index of Industries and Occupations," U.S. Government Printing Office, Washington, DC, 1981); and (3) the 1977 military occupational specialty codes used to classify responses to the 1979–85 questions on military jobs and military occupations (U.S. Department of Defense, "Occupational Conversion Manual: Enlisted/Officer/Civilian," Defense Manpower Center, Arlington, Virginia, DOD 1312.1-M).

Attachment 4: Fields of Study in College provides the coding classifications for: (1) the 1979–83 major field of study at current or last college attended and (2) the 1984–2000 major field of study at most recent colleges attended.

Attachment 5: Index of Labor Unions and Employee Associations provides codes for the 1979 questions on name of union/employee association at jobs #1 – #5 (i.e., R00937.–R00941.).

Attachment 6: Other Kinds of Training lists the various categories of occupational training used to code the 1979 survey question on types of other training programs in which a respondent was enrolled for at least one month (R01348., R01353., R01358., R01363.).

Attachment 7: Other Certificate Codes defines codes for the various types of certifications (i.e., practical nurse, welding, insurance, chef, etc.) that a respondent had ever received as of the 1979 interview (R01376., R01377., R01378., R01379.).

Attachment 8: Health Codes provides a modified version of the International Classification of Diseases (ICD-9) codes [International Classification of Diseases, Volumes 1 & 2. Geneva, WHO, 1977–78], which were used to classify types of health problems limiting the amount or kind of work a respondent could do during survey years 1979–82 and the work-related injury data collected during the 1988–90 and 1992–2000 surveys. Also included is a list of numeric codes identifying the parts of the body affected by health problems.

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', 'South/Non-South Place of Birth', and 'South/Non-South Place of Residence at Age 14'.

Attachment 101: Country Codes provides the foreign country codes used to identify the respondent's country of residence, country of parents' birthplace, and country of citizenship at time of immigration.

Attachment 102: State 'Federal Information Processing Standards' or FIPS Codes lists the codes which were used for respondent's state of birth and state of residence.

Attachment 103: Religion Codes contains the various denomination categories used to code the 1979 religion of respondent questions (R00103.10 and R00104.10) and the 1982 religion questions (R06558., R06583., R06586., R06613., and R06616.).

Attachment 106: *Profiles of American Youth* provides general and technical information on the 1980 administration of the *ASVAB (Armed Services Vocational Aptitude Battery)* to NLSY79 respondents. Included in this attachment are technical notes on the *ASVAB* scale scores, an annotated bibliography of DOD publications, an example of the test score report, and various brochures disseminated to participating respondents. An *Addendum* provides information on the creation of two Armed Forces Qualifications Test scores, AFQT80 and AFQT89, which were added to the data set beginning with the 1979–90 release. Note: This attachment is **not** within the codebook supplements; it is a separate document.

Appendix 1: Employment Status Recode (ESR) Variable Creation 1979–1998 contains the adapted version of the FORTRAN program and subsequent SPSS program used to create this measure of main labor force activity during the survey week. This variable was not created in 2000.

Appendix 2: Total Net Family Income Variable Creation 1979–2000 provides the code used to create this *KEY* income variable, as well as the poverty level and poverty status variables for each survey year.

Appendix 3: Job Satisfaction Measures 1979–1982 provides background information and yearly reference numbers for both the scale items and global satisfaction measures of the modified Quality of Employment Survey scale administered in the 1979–82 surveys. Additional references and a methodology for constructing the full scale are also presented.

Appendix 4: Job Characteristic Index 1979 & 1982 provides background information, reference numbers, questionnaire locations, and additional references for the job complexity questions asked in these two survey years.

Appendix 5: Supplemental Fertility File Variables 2000 provides (1) a brief overview of the contents of the 1979–2000 "Fertility and Relationship History/Created" area of interest on the main NLSY79 data, (2) background information on the 1982 data quality check, (3) background on the 1994 data reconciliation, and (4) the availability of additional reports assessing NLSY79 fertility data.

Appendix 6: SMSA Urban-Rural Creation contains the decision rules used to create (1) the four codes (not in SMSA, SMSA not central city, SMSA central city not known, and SMSA central city) for the 'Current Residence in SMSA' variables and (2) the urban and rural codes for the 'Is R's Current Residence Urban/Rural?' variable series.

Appendix 7: Unemployment Rate provides an explanation of how the variable 'Unemployment Rate of Labor Market of Current Residence' was created.

Appendix 8: Highest Grade Completed and Enrollment Status Variable Creation: 1990–2000 contains the codes used to create the *KEY* 1990–2000 variables 'Highest Grade Completed as of May 1 Survey Year' and 'Enrollment Status as of May 1 Survey Year.'

Appendix 9: Linking Jobs through Survey Years identifies the procedures and variables necessary for linking employers reported across contiguous survey years.

Appendix 11: NLSY79 Round 12 (1990) Survey Administration Methods describes the 1990 experiment with PAPI versus CAPI methods of interviewing.

Appendix 12: Most Important Job Learning Activities - 1993–1994 provides variable reference numbers, titles, and value labels for the four 1993 and 1994 items which identify method(s) used by respondents in learning to perform job duties associated with their current or most recent job.

Appendix 13: Introduction to 1993 through 2000 CAPI Questionnaire and Codebook discusses the changes caused by moving from paper and pencil interviewing (PAPI) to computer assisted personal interviewing (CAPI). The appendix discusses changes and new documentation items, new terms, coding convention changes, data and codebook reordering, and changes in data collection procedures.

Appendix 14: 1993–2000 Instrument Rosters describes the selected rosters, or matrices of data, that are constructed during a CAPI interview. Rosters are created so that interviewers have a complete table of information to either update or to show to a respondent so he/she may choose an answer. Examples of rosters are CHILD, EMPLOYER, and HOUSEHOLD. The CHILD data matrix provides interviewers with information such as ID, gender, and birth date. The EMPLOYER matrix provides name, start and stop work dates, and whether the respondent is still working for the employer. The HOUSEHOLD

roster lists the gender, age, highest grade completed, and relationship to the youth of all members in the household.

Appendix 15: Recipiency Event Histories describes how data are collected for NLSY79 respondents who receive government assistance such as AFDC, Food Stamps, Unemployment Compensation, and other programs. Recipiency data are described for both PAPI and CAPI interviews.

Appendix 16: 1994 Recall Experiment describes a special test run during the 1994 NLSY79 survey. To measure the effects of switching from an annual survey to a biennial survey, a recall experiment was implemented. Approximately 10 percent of NLSY79 respondents were asked to recall data over a two year period. Respondent answers to questions covering a two-year period rather than a typical one-year period were then compared to the answers given during the 1993 survey to understand the biases that would result from skipping a year of interviewing.

Appendix 17: Interviewer Characteristics Data describes the data available regarding the characteristics of NLSY79 interviewers; this information is based on NORC's interviewer personnel files. This new data, starting with the 1996 survey, permit researchers to link interviewers with the respondents they interviewed.

Appendix 18: Work History Data explains the programs used to create the work history arrays. Also provided is a list of items used as inputs to the work history programs and information on the coding of selected variables.

Appendix 19: SF-12 Health Scale Scoring discusses the source of the SF-12 scale, part of the over-40 health module described in the "Health" section of this guide, and overviews the creation of scale scores for NLSY79 respondents.

NLSY High School Transcript Surveys: Overview and Documentation contains background information on the sample design, field work, and types of variables collected during the three rounds of this special survey. Included is a transcript survey codebook, instructions for coding courses, course codes, and copies of the transcript coding form and school questionnaire, as well as additional references to other technical reports prepared by the sponsoring agency, the National Center for Research in Vocational Education. Note: This document is separate from the codebook supplements. Attachments & Appendices: NLSY79 Geocode Data File Codebook Supplement

Appendix 10: Geocode Documentation provides year by year descriptions of how the geocode files were constructed, important information on changes in SMSA designations, and detailed explanations of the missing values for the geocode variables.

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 101: Country Codes provides the foreign country codes used to code respondents' country of residence and country of parents' birthplace.

Attachment 102: State 'Federal Information Processing Standards' or FIPS Codes (U.S. Department of Commerce, National Bureau of Standards) lists the codes used for respondents' state of birth and state of residence.

Attachment 104: SMSA Codes contains the coding information used to classify SMSA, MSA, CMSA, and 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 Directory-Colleges and Universities* (1981–82 and 1982–83 Supplement) published by the National Center for Education Statistics. It also contains detailed information on the revised FICE code series (FICE codes and FICE types).

Appendix 7: Unemployment Rate provides an explanation of how the continuous and collapsed versions of the variable 'Unemployment Rate for Labor Market of Current Residence' were created.

Attachments & Appendices: NLSY79 Young Adult Attachments

Beginning in 2000, these documents are part of the printed questionnaires.

Attachment 3: 1970 Census Industry/Occupation Codes lists the 3-digit 1970 Census classifications used to code job and training information and *Employer Supplements* (U.S. Census Bureau, "1970 Census of Population Alphabetical Index of Industries and Occupations," U.S. Government Printing Office, Washington, DC, 1971).

Attachment 4: 1990 Census Industry/Occupation Codes lists the 3-digit 1990 Census classifications used for double coding of occupation and industry for the CPS job (U.S. Census Bureau, "1990 Census of

Population Alphabetical Index of Industries and Occupations," U.S. Government Printing Office, Washington, DC, 1991).

Attachment 5: Q by Q Young Adult Specifications reproduces the instructions provided to interviewers for the administration of specific questions throughout the questionnaire. This attachment is intended to permit researchers to determine what types of help and information were available to interviewers during the survey and is comparable to the interviewer reference manuals for the main NLSY79.

Error Updates

Prior to working with an NLSY79 data file, users should make every effort to acquire information on current data and/or documentation errors. A variety of methods are used to notify users of errors in the data files and/or documentation and to provide those persons who acquired a NLSY79 data set from the Center for Human Resource Research with corrected information. Errors discovered after the release of a data file are distributed in hard copy form to current data purchasers along with the data set. Errata can be accessed online from the NLS web site at http://www.bls.gov/nls by following links for the cohort of interest. Error notices and information on how to acquire the corrected data and/or documentation also appear in *NLS News*, the quarterly NLS newsletter, which is available online at http://www.bls.gov/nls/.

3.4 CD-ROM Search Functions

NLSY79 variables can be accessed via areas of interest or through a search of variable titles for any word. Both search functions provide users with bridging information to the codebook and survey instruments.

Areas of interest. NLSY79 data files are organized so that variables sharing a common factor are stored in unique groupings called "areas of interest." Users can browse through a given area and examine the variables associated with that topic. NLSY79 areas of interest are listed in Appendix C of this guide.

Any word search. All words, numbers, and symbols found in any variable title form an index on the CD-ROM. The "Any Word in Context" search function in the CD software allows the user to search this index and select NLSY79 variables whose titles contain any single word or combination of words. Every word, number and symbol found in each variable title has been used to form a dictionary or index and can be used to conduct a search. This function broadens the ability of the user to access variables on a given topic but is still dependent on the wording of each variable title, which in turn is questionnaire-dependent.

User Notes: Any word in context searches for NLSY79 variables are limited by the choice of variable titles. Flexibility in variable title assignment for raw data items is restricted by the wording of the question as it appears in the survey instrument and the maximum allowable length for variable titles.

Accessing Variables by Area of Interest

NLSY79 data files are organized in such a way that variables sharing a common factor such as longitudinality, topic, research use, or source are assigned an "area of interest." This section (1) discusses the decision rules used to assign a variable to a given area of interest and (2) describes the hard copy presentations and electronic search functions available to help users access NLSY79 variables by area of interest. Originally, the primary function of the NLSY79 area of interest file structure was to provide magnetic tape users with the physical location of a variable for extracting purposes. Today it is used to assist CD-ROM users in locating variables on a given topic.

Record Types: The 1979–93 NLSY79 data releases were structured on the basis of three types of records. These record types also denoted the file structure of the data files found on the magnetic tapes. The decision rules for assigning variables to these records were as follows:

- Longitudinal or Repeating: Questions that were asked or variables that were created in an identical manner in multiple survey years were placed within longitudinal or repeating records. Examples of these record types were: KEYVARS, CPS, JOBS, JOBINFO, PERIODNW, SCHOOL, INCOME, ASSETS, CRFBIO, HHRECORD, BTWNJOBS, GOVJOBS, MILITARY, INTRMK.
- 2. Topical or Non-Repeating: Variables that shared some common research topic were grouped together into subject-related record types. These included MARRIAGE, DGRECERT, HEALTH, CHILDCAR, ALCOHOL, DRUGS, PROFILES, GEOXX (Geocode CD only), BIRTHRXX, FAMBKGN, LASTINFO, CHILDREN, SCHLSURV, TRANSURV, TRAINING, ILLEGAL, ATTINFLN, ATTITUDE, FERTILE, and TIMEUSE. These records contained topically related questions, regardless of their recurring status. Inclusion in such a record type did not exclude the possibility that a given topical area of interest contained any longitudinal data, or that longitudinal data on a given topic was available elsewhere within the data set as a whole.
- 3. *Miscellaneous:* All other non-longitudinal variables, i.e., those questions that had been asked or variables that had been created only in select survey years, were placed within year-specific MXXVAR or miscellaneous records. These generally represented groupings of unrelated sets of variables based on questions that had not been asked in a consistent manner over a significant number of years.

Beginning with the 1994 release, the data ceased to be released on magnetic tapes. The records described above no longer reflect the physical structure of the data file, but became a search tool by which to classify data items. With the 1998 release, the reference to "records" was abandoned in both documentation and software applications in favor of "areas of interest" to more accurately reflect the less restrictive topical nature these classifications now have. There has been a good deal of consistency in the assignment of data

items to specific areas of interest, many of which are named identically to the historical record types. However, some traditionally longitudinal areas of interest now contain some data items that are not necessarily repeating. And new areas of interest can be designated more easily, to reflect the variables from a particular source or of a specific topical interest. In addition, the names of some areas of interest were lengthened to be more understandable. Old and new names are listed in Appendix D.

Recurring variables can often be found by examining the list of variables in traditionally longitudinal areas of interest. Many of these are also found in areas of interest that are assigned largely on a sectional basis such as "Marriage," "Health," etc., where the sections are repeated in multiple surveys. Users should note that while the variables are grouped under topical names, every item relating to a particular subject area will not necessarily be found in the area of interest with the generic name. For example, while the majority of main youth child care variables can be found in the area of interest "Child Care," other areas of interest, such as "Child Record Form/Biological," "Government Jobs," "Government Training," "Time Use," and "Misc. xxxx," also contain variables which may be of interest to those focusing on child care issues.

User Notes: Once placed within an area of interest, variables are seldom moved. However, there are certain exceptions to this general rule. Beginning with the 1988 release, several sets of NLSY79 main file variables dealing with alcohol use, government training, and other training were deleted from the "Misc. xxxx" areas of interest and reassigned to the "Alcohol," "Government Training," or "Training" areas of interest. However, certain other variables from the "Government Training" and "Other Training" sections of the 1979 and 1982 surveys were not moved; R01368. through R01374. remain in "Misc. 1979"; R01375. through R01404. remain in "Degrees & Certificate"; and R07443., R08281., and R08282. remain in "Misc. 1982." Users should be aware that while variables placed in longitudinal or "repeating" areas of interest are generally present for all survey years, some variables will not be found there for some years due to discontinuation or a change in the form of the question or series of questions. Likewise, although variables placed in the miscellaneous areas of interest will not necessarily have been asked in a consistent manner in all years present, they may exist in similar form for more than just one or two years—possibly quite a few.

NLSY79 Child Data Areas of Interest

The NLSY79 1979–96 child data on compact disc have been grouped into areas of interest reflecting the topical and instrument-related organization of the data file itself (Table 3.4.1). The descriptions appearing after the area of interest name provide brief explanations of the types of variables present within that area of interest.

Area of Interest	Data
Assessment xxxx	13 sets of raw & normed child assessment scores; PPVT age; child sampling weight
Child Background	Child-mother identification codes and linkage variables; child demographic characteristics; constructed age variables; child's usual residence; father presence; interview status (1994-2000)
Childcare	Current childcare 1984, 1985, 1986, 1988; retrospective childcare in first 3 years of life
Child Self-Admin. Supplement 1988-2000	Child Self-Administered Supplement items for children age 10-14: family decision-making, attitudes, school, work, peers, religion, sexual activity, and substance use
Child Supplement 1986	1986 <i>Child Supplement</i> questionnaire items; child health; child enrollment and grade level; interviewer evaluation of testing conditions, HOME observations
Child Supplement 1988	1988 <i>Child Supplement</i> questionnaire items; child health; child enrollment/grade level; Head Start experience; interviewer evaluation of testing conditions; assessment items, HOME observations
Child Supplement 1990	1990 <i>Child Supplement</i> questionnaire items; child health; child enrollment/grade level; Head Start experience; interviewer evaluation of testing conditions; assessment items, HOME observations
Child Supplement 1992	1992 <i>Child Supplement</i> questionnaire items; child health; child enrollment/grade level; Head Start experience; interviewer evaluation of testing conditions; assessment items, HOME observations
Child Supplement 1994	1994 <i>Child Supplement</i> questionnaire items; child health; child enrollment/grade level; Head Start experience; interviewer evaluation of testing conditions; assessment items, HOME observations
Child Supplement 1996	1996 <i>Child Supplement</i> questionnaire items; child health; child enrollment/grade level; Head Start experience; interviewer evaluation of testing conditions; assessment items, HOME observations
Child Supplement 1998	1998 <i>Child Supplement</i> questionnaire items; child health; child enrollment/grade level; Head Start experience, school and classroom activities, interviewer evaluation of testing conditions, assessment items, HOME observations
Child Supplement 2000	2000 <i>Child Supplement</i> questionnaire items; child health; child enrollment/grade level; Head Start experience, school and classroom activities, interviewer evaluation of testing conditions, assessment items, HOME observations
Family Background	Maternal age at interview date; maternal intelligence; maternal education background
Mother's Household Composition	Household composition; age, education, and work status of household members
Mother Supplement 1986	1986 Mother Supplement questionnaire items, assessment items
Mother Supplement 1988	1988 <i>Mother Supplement</i> questionnaire items, assessment items, mother report of school and family background
Mother Supplement 1990	1990 <i>Mother Supplement</i> questionnaire items, assessment items, mother report of school and family background
Mother Supplement 1992	1992 <i>Mother Supplement</i> questionnaire items, assessment items, mother report of school and family background
Mother Supplement 1994	1994 <i>Mother Supplement</i> questionnaire items, assessment items, mother report of school and family background
Mother Supplement 1996	1996 <i>Mother Supplement</i> questionnaire items, assessment items, mother report of school and family background
Mother Supplement 1998	1998 <i>Mother Supplement</i> questionnaire items, assessment items, mother report of school and family background
Mother Supplement 2000	2000 <i>Mother Supplement</i> questionnaire items; HOME items and mother-report child assessments (in Child CAPI for children under 4); school and family background
Mom Wellness	Height & weight of mother; onset of maternal menses; onset of maternal sexual activity
Natal	Prenatal care; postnatal care of child; infant health in first year of life
Work History	Mother's quarterly employment history linked to child date of birth

Chapter 4: Topical Guide to the NLSY79

4.1 Age

The following section discusses the age and date of birth variables associated with NLSY79 and NLSY79 Child respondents. In addition to the respondent-specific variables discussed in this section, information is also available on the age and/or date of birth for other household members; see the "Household Composition" section for details.

NLSY79

Date of birth information was collected from each NLSY79 respondent during the 1979 and 1981 interviews. The variable 'Age of R,' gathered during the 1979–83 surveys, is the self-reported age of the respondent as of the interview date. The NLSY79 main data files also contain a yearly created variable, 'Age of R at Interview Date.' These created variables are constructed using the 1981 date of birth information coupled with the 1979 birthdate for the 491 respondents not interviewed in 1981. Users should note that age of respondent variables from the Supplemental Fertility File (area of interest "Fertility and Relationship History/Created"), including 'Age of R at 1st Birth' and 'Age of R at Start of 1st Pregnancy,' have been constructed using the 1979 date of birth information. Table 4.1.1 presents the reference numbers and areas of interest in which the more commonly used age variables can be found.

Variable	Date of Birth of R	Date of Birth of R	Age of R	Age of R at Int. Date
Area of interest	Family Background	Common	Family Background	Key Variables
1979	R00003., R00005.		R00006.	R02165.
1980			R02202.	R04965.10
1981		R04101., R04103.	R04105.	R06190.10
1982			R06501.	R08983.10
1983			R09001.	R11451.10
1984				R15203.10
1985				R18910.10
1986				R22581.10
1987				R24455.10
1988				R28713.
1989				R30750.
1990				R34017.
1991				R36571.
1992				R40076.
1993				R44187.
1994				R50817.
1996				R51670.
1998				R64798.

Table 4.1.1 Age & Date of Birth Variables for Respondents: NLSY79 (1979–1998)¹

¹ Reference numbers for 2000 have not been assigned at the printing of this guide. These numbers will be updated in the next edition.

Tables 4.1.2 and 4.1.3 depict age distributions of the NLSY79 for the 1979–2000 survey years. The first table uses the created variable 'Age of R at Interview Date.'

Year	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	96	98	00
									Fielding	Period (months)							
Age	1-8	2-5	2-5	2-5	2-5	2-5	2-5	2-5	5-10	6-12	6-12	6-12	6-12	5-11	5-11	6-12	4-10	3-10	5-12
Not Int		545	491	563	465	617	1792	2031	2201	2221	2081	2250	3668	3670	3675	37971	4050	4287	4653
14	948																		
15	1566	977									-								
16	1564	1532	986																
17	1505	1510	1528	975															
18	1634	1462	1505	1504	1002														
19	1677	1551	1485	1515	1515	989													
20	1667	1603	1585	1484	1505	1488	971												
21	1682	1583	1620	1561	1510	1498	1492	869											
22	433	1576	1592	1617	1566	1487	1492	1417	593										
23		347	1600	1578	1657	1550	1443	1468	1420	280									
24			294	1596	1582	1626	1429	1409	1459	1391	395								
25				293	1621	1583	1351	1426	1378	1448	1425	285							
26					263	1578	1245	1330	1418	1397	1461	1382	339						
27						270	1248	1222	1338	1405	1410	1405	1200	318					
28							223	1208	1188	1355	1394	1420	1306	1207	383				
29								306	1199	1194	1374	1358	1265	1310	1204	276			
30									492	1215	1218	1385	1231	1247	1307	1198			
31										779	1235	1197	1165	1256	1258	1291	426		
32										1	693	1212	973	1137	1242	1222	1171		
33												792	1000	992	1153	1240	1235	450	
34													539	984	964	1155	1200	1141	
35														565	1002	951	1183	1204	160
36								_			_	_			498	982	1093	1167	969
37																574	909	1155	1111
38				_		_	_			_	_		_	_		_	973	1056	1130
39																	446	897	1093
40				_	_									_	_			930	1084
41																		399	895
42					_				_		_	_		_	_				883
43																			706
44																			2

Table 4.1.2 Age Distribution of Respondents on Day of Interview (Unweighted Data)

¹ Two respondents had missing values for date of interview; therefore, age at interview date cannot be calculated. These respondents are included in the noninterview category.

Table 4.1.3	Age Distribution of Respondents on June 30th of Interview Year
	(Unweighted Data)

Year	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	96	98	00
									Fieldina	Period (months))							
Age	1-8	2-5	2-5	2-5	2-5	2-5	2-5	2-5	5-10	6-12	6-12	6-12	6-12	5-11	5-11	6-12	4-10	3-10	5-12
Not Int		545	491	563	465	617	1792	2031	2201	2221	2081	2250	3668	3670	3675	3797	4050	4287	4653
14	532																		
15	1547	517																	
16	1584	1508	518																
17	1552	1532	1515	515															
18	1607	1505	1537	1508	516														
19	1708	1533	1506	1525	1511	510													
20	1662	1615	1550	1492	1536	1494	513												
21	1683	1562	1633	1537	1504	1521	1481	498											
22	811	1596	1571	1626	1549	1486	1508	1445	497										
23		773	1599	1565	1641	1536	1464	1474	1423	492									
24			766	1587	1583	1610	1446	1420	1461	1408	501								
25				768	1605	1565	1382	1419	1393	1452	1433	499							
26					776	1581	1229	1367	1394	1401	1465	1411	418						
27						766	1268	1209	1346	1382	1423	1421	1235	421					
28							603	1241	1181	1347	1394	1402	1286	1234	426				
29								582	1227	1186	1355	1379	1273	1287	1239	424			
30									563	1224	1207	1337	1227	1269	1283	1230			
31										573	1242	1174	1150	1232	1258	1261	405		
32											585	1232	969	1146	1242	1251	1197		
33												581	998	963	1142	1222	1230	397	
34													462	1003	962	1123	1204	1161	
35														461	1003	946	1185	1186	376
36															456	984	1090	1176	1100
37																450	910	1139	1149
38																	972	1074	1119
39																	443	895	1097
40																		940	1023
41																		431	852
42																			898
43																			419

Survey Instruments & Documentation: Questions regarding age of the respondent are located in Section 1 of the 1979 through 1983 questionnaires. Date of birth questions are printed in the first section of the 1979 and 1981 instruments. Age-related questions for family members are located in the 1978 Household Screener and, for subsequent years, on the Household Interview Forms.

Data Files: The 1979 and 1981 birth date variables have been placed, respectively, in the "Family Background" and "Common" areas of interest on the NLSY79 main data set. The 1979–83 age variables are located in "Family Background." The series of created age variables can be found in "Key Variables."

The Supplemental Fertility File age variables can be found in the "Fertility and Relationship History/Created" area of interest. Persons using the NLSY79 Work History Data File will find both the 1979 and 1981 date of birth variables present. Age information for NLSY79 household members can be found in the "Household Record" area of interest.

User Notes: Refielding of the birth date questions in the 1981 survey was prompted by several factors. First, a number of discrepancies between birth dates found on the military file and the NLSY79 files were discovered. Secondly, a number of inconsistencies between age as recorded on the "Household Enumeration" and the main questionnaire were apparent. Differences between 1979 and 1981 birth dates remained for approximately 200–250 respondents after the 1981 fielding; editing on a case-by-case basis was performed by CHRR staff on only the 1981 variable.

Inconsistencies in age and/or birth date information may appear for a number of reasons: (1) Age and birth date information has been collected at multiple survey points, giving rise to respondent-reported inconsistencies; (2) respondents' ages for sample selection were based on date of birth information reported at the time of the 1978 household screening by individuals who may not have been the respondent; and (3) responses to interviewer check items, i.e., the age reported to the interviewer that determines when age-specific questions should be asked, may not be the same age as that calculated from previously reported age or birth date information. For example, a respondent whose age was 16 as calculated from the birth date reported in 1981 may have answered questions which were specific to a 17 year old. When analyzing age-related questions, the user may wish to review the birth dates as reported in 1979 as well as in 1981 if inconsistencies arise. It should be noted that eligibility for inclusion in this cohort was based on the 1979 age reports, as are weights.

Age Restrictions on Early Work Experience Data: In the early survey years, some restrictions were imposed on data collected on work experience, specific employers, and military service. These restrictions applied, for the most part, to those respondents under the age of 16 at the time of the 1979 survey, although some extend beyond that age. The following is a summary of age restrictions that can be found in the work and job experience sections of the 1979 questionnaire:

"Section 6–On Knowledge of and Experiences with the World of Work": Respondents who were 14–15 years old were skipped out after questions asking them their thoughts on certain kinds of jobs that people actually do, i.e., skipped out at Q.2. These questions are found in the "Attitude" area of interest.

"Section 7-Military": Those respondents 16 years and under at the 1979 and subsequent interviews were skipped past all military service questions. This age group was only asked three questions concerning

attitudes on service in the military and the possibility of enlistment in the future (Q.72–Q.74). Variables from this section are found in the "Misc. 1979" area of interest, and for subsequent years, in both the "Misc. xxxx" and "Military" areas of interest.

"Section 8–On Current Labor Force Status (CPS Questions)": Those CPS questions concerning activity most of the survey week and CPS job (Q.1–Q.36) were asked of all respondents. However, those respondents ages 15 or younger were not asked the questions dealing with looking for work. Questions in this section are found in the "CPS" and "Misc. xxxx" areas of interest.

"Section 9–On Jobs": Information on school-related jobs is collected for 14- and 15-year-olds. Schoolrelated job information is also collected for other respondents who were not employed since 1978 and who were enrolled in regular school at some time since January 1, 1978. For those 16 years and older, information on all jobs since January 1, 1978, was collected. For all respondents, information was gathered on enrollment in various types of government-sponsored programs that provided jobs. These variables can be found in the "Jobs" and "Misc. 1979" areas of interest.

"Section 10–Jobs" (*Employer Supplements*, in subsequent survey years): Each job could be coded with one or more of the following:

- "If this job was part of R's school program, circle code "2" here"
- "If this job was part of a college work-study program, circle code "3" here"
- "If this job was a part-time job provided by the government, circle code "4" here"
- "If this job was a government-sponsored summer job, circle code "5" here"
- "If this job was part of a government-sponsored program for people not attending regular school, circle code "6" here"
- "If this job was part of any other kind of government-sponsored program, circle code "7" here"

If codes 4–7 above were circled, the job was identified as some type of government-sponsored job or government program providing a job. Respondents were asked the same questions about government jobs that they were asked about non-government jobs. However, an additional series of questions was asked about jobs identified as government-sponsored by one of the above codes. Jobs that were school-related/work-study programs can also be identified by the first two codes listed above.

For the first job listed (which should be the CPS job), 14–15 year olds were routed through the entire series of questions, whether or not the job was a government-sponsored job. For each additional job that was not government-sponsored, 14 and 15 year olds were asked only a basic set of questions about start/stop dates, reasons for leaving (if applicable), and hours worked per week. For each additional job

that *was* government-sponsored, all applicable information was gathered, regardless of the age of the respondent.

These variables can be found in the "Job Information," "Government Jobs," and "Misc. 1979" areas of interest. Users should keep in mind that some of the information contained in the "Job Information" variables will refer to government-sponsored jobs (and possibly school-related/work-study jobs), as general information was collected on these jobs as well.

"Section 11–On Last Job Lasting 2 Weeks or More": Information is regularly collected on the last job held. There is no age restriction. These questions can be found in the "Jobs before 1978" area of interest.

"Section 12–On Work Experience Prior to January 1, 1978": If the respondent was 19 years or younger at the time of the 1979 interview, s/he would have been under 18 before 1978, so the retrospective information for the time period prior to 1978 was not collected. However, respondents not enrolled in regular school at any time between January 1978 and the interview date, regardless of age, were asked about the first job they held for two or more months at which they worked 20 hours a week or more after they stopped attending school. Variables from this section are found in the "Jobs after School" area of interest.

"Section 13–On Government Training": All respondents enrolled in grades 1–12 are skipped over this entire section.

NLSY79 Children

The NLSY79 Child Data File contains a variety of age-related variables specific to (1) a child's birth date, e.g., 'Date of Birth of Child,' 'Child's Date of Birth'; (2) a child's age at various developmental/interview-related points, e.g., 'Age of Child at Interview Date of Mother,' 'Age of Child at Child Assessment Date,' 'PPVT Age of Child at Child Assessment Date'; and (3) a mother's age in relationship to her child, e.g., 'Age of Mother at Birth of Child,' 'Age of Mother at Birth of 1st Child.' Table 4.1.4 presents reference numbers and areas of interest for some of the more commonly used child and mother age variables present on the 1996 data release. Table 4.1.5 depicts the distribution of the age of the child by the age of the mother at the birth of the child.

Variable	Date of Birth of Child	Age of Child at Interview Date of Mother	Age of Child at Assessment Date, Child Supp.	Age of Child at Child Assessment Date, Mother Supp.	Age of Mother at Birth of Child
Area of interest	Child Background	Child Background	Child Background	Child Background	Child Background
1979–85		C00038C00044.			
1986		C00045.	C00065.	C00066.	
1987		C00046.			
1988		C00047.	C00068.	C00069.	
1989		C00047.10			
1990		C00047.20	C00070.10	C00070.20	
1991		C00047.30			
1992		C00047.40	C00070.30	C00070.40	
1994		C00047.42	C00070.41	C00070.42	
1996		C00047.43	C00070.43	C00070.44	
1998	C00055., C00057.	C00047.44	C00070.45	C00070.46	C00070.

Table 4.1.4 Age & Date of Birth Variables: NLSY79 Child Data 1998¹

¹ Reference numbers for 2000 have not been created at the printing of this guide. These numbers will be updated in the next edition.

Table 4.1.5	Distribution of Child's Age in 1998 by Mother's Age	ķ
at Birth o	Child: All NLSY79 Children Interviewed in 1998 ¹	

1998 Age									Age	of M	other	at Bir	th of C	Child									
of Child	≤17	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37+	Total
<1																	11	26	27	34	35	47	180
1																2	36	35	37	33	24	23	190
2															3	40	38	33	28	19	10	30	201
3														6	47	28	53	37	31	17	24	11	254
4													11	43	48	50	44	31	29	18	13	1	288
5												4	47	43	51	53	43	21	26	26	2		316
6											7	47	50	51	48	49	31	19	17	2			321
7										5	52	62	70	56	44	46	31	25	4				395
8									4	42	67	57	54	43	42	31	4						410
9								4	48	57	63	61	70	38	41	33	8						423
10							4	46	56	68	71	57	45	45	24	6							422
11						5	36	80	62	52	56	53	50	41	5								440
12					5	53	77	57	48	44	57	54	39	8									442
13				6	41	65	53	66	63	54	61	41	10										460
14 (child)				13	26	22	24	26	20	21	25	5											182
14 (YA)			2	29	33	32	29	26	28	29	20												228
15		8	36	61	58	59	55	48	63	48	5												441
16	2	22	41	53	56	60	63	52	48	8													405
17	15	45	42	56	58	39	38	47	2														342
18	32	35	49	53	63	49	41	3															325
19	31	19	37	29	38	46	7																207
20+	36	44	31	50	33	1																	195
Total	116	173	238	350	411	431	427	455	442	428	484	450	449	385	354	349	326	231	199	149	108	112	7067

¹ Data for 2000 have been collected but processing was not complete at the printing of this guide. These numbers will be updated in the next edition.

User Notes: The creation procedures for age of mother variables present on the NLSY79 Child File are based on the 1979 NLSY79 date of birth information. Persons using age variables in conjunction with the child assessment data should read the cautionary notes in the *NLSY79 Child Handbook* (Baker et al. 1993). Users may note that other unedited child date of birth and age variables may appear in the "Child Supplement xxxx" and "Mother Supplement xxxx" areas of interest. These items, not available for all children, appear exactly as recorded in the field. Users are discouraged from using these variables in analysis and instead are urged to use the "Child Background" variables.

Survey Instruments: Many 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 and the mother, the age variable specific to the supplement that collected the data should be used. Prior to 1994, information on a child's date of birth from the *Children's Record Form* (*CRF*), an instrument used with the main NLSY79, 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* interviewers could anticipate which assessments would be administered.

Data Files: Area of interest locations for some common age and date of birth variables are listed in Table 4.1.4. Area of interest locations for additional variables are as follows: the yearly and biennial "Assessment xxxx" files (child's PPVT age variables); "Natal" (child age in weeks feeding data); and "Family Background" ('Age of Mother at Birth of First Child' and 'Age of Mother of Child'). 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. (See Appendix 5, *NLSY79 Supplemental Fertility File* documentation, for a discussion of cases in which child information has been edited.)

Reference

Baker, Paula C.; Mott, Frank L.; Keck, Canada K.; and Quinlan, Stephen V. NLSY79 Child Handbook: A Guide to the 1986–1990 NLSY79 Child Data. Columbus, OH: CHRR, The Ohio State University, 1993.

4.2 Alcohol Use

NLSY79

A series of questions, asked during the 1982–85, 1988–89, 1992, and 1994 surveys, elicited information on the development of drinking patterns, quantity of various alcoholic beverages consumed, frequency of use, impact of consumption on schoolwork and/or job performance, and types of physiological and behavioral dependency symptoms experienced by NLSY79 respondents. Information on familial history of alcohol abuse or dependency was collected during the 1988 survey and included a series of questions on whether relatives of the respondent had been alcoholics or problem drinkers, the relationship of the respondent to up to seven such alcoholic relatives, and the length of time, if any, that the respondent resided with each such relative. Table 4.2.1 summarizes the alcohol use variables collected for the NLSY79 and the survey years during which each type of variable was collected. As noted in this section, there is considerable variation in both the quantity and type of questions asked. Many of the NLSY79 alcohol use questions have been adapted from those asked in the National Health Interview Surveys conducted by the U.S. Census Bureau.

Two additional sets of alcohol use variables not included in Table 4.2.1 have been collected for select NLSY79 respondents: (1) alcohol use during pregnancy information was gathered for female respondents during the 1983–86, 1988, 1990, 1992, and 1994–2000 surveys and (2) the 1980 illegal activities supplement asked underaged respondents a question on the number of times they had consumed alcoholic beverages without their parents' permission.

Survey Instruments: Alcohol use questions can be found within the following sections of the youth questionnaires: Section 12 (1982); Section 13 (1983–85 and 1988); Section 11 (1989); 1992 Self-Administered Drug Use Supplement; and Section 12 (1994). The alcohol use during pregnancy questions can be found in the "Fertility" section of the questionnaire.

Data Files: Alcohol use variables for all years except 1992 can be found within the "Alcohol" area of interest on the main NLSY79 data set; the 1992 variables are located in "Drugs." The alcohol use during pregnancy items are located in the various "Birth Record" and "Birth Record xxxx" areas of interest.

User Notes: As Table 4.2.1 indicates, there has been considerable variation over the years not only in the types but the wording of alcohol use questions. The 1989 questionnaire, for example, combined the typically asked 'drinking ever interfered with schoolwork or job' questions into a single 'kept drinking even though caused problems with work/home/school' question but expanded the number of questions dealing with the impact of alcohol use on other aspects of the respondent's life (e.g., personal relationships, health, participation in outside interests and activities).

Item				Survey	Years	;		
Quantity-Frequency	82	83	84	85	88	89	92	94
Ever had a drink	*	*	*	*	*	*		*
Age when started drinking	*	*						
Age when started drinking at least once a month		*						
Had any alcoholic beverages in last month	*	*	*	*	*	*		*
Frequency of 6+ drinks one occasion in last month	*	*	*	*	*	*		*
# days drank in last week	*	*	*	*			*	
# bottles/glasses/drinks of beer/wine/liquor in last week	*	*	*	*				
# days drank in last month		*	*	*	*	*		*
# days had 1/2/3/4/5/6+ drinks in last month		*	*	*				
# days had hangover in last month		*	*	*				
Total # days had drink in last month		*	*	*				
Frequency of going to bars last month	*	*	*					
# drinks per day/# R usually has on days R drinks					*	*	*	*
Abuse-Dependency Symptoms								
Physiological/Behavioral Symptoms								
Felt aggressive/cross while drinking			*	*	*			
Got into heated argument			*	*	*			
Got into a fight			*	*	*			*
Did things while drinking that caused others to be hurt						*		*
Can't remember activity while drunk			*	*	*			
Tried to cut down or quit but failed			*	*	*			*
Afraid might be/become alcoholic			*	*	*			
Spent a lot of time drinking/getting over drinking						*		*
Sick/vomited after drinking						*		*
Difficult to stop once started						*		*
Sweat/shake after drinking						*		*
Needed drink so badly couldn't think of anything else						*		
Drank more than intended to						*		*
Got drunk instead of doing things supposed to						*		
So hung over that it interfered with things supposed to do						*		*
Heard/saw things not there						*		*
Difficult to stop until completely intoxicated			*	*	*			
Often take a drink first thing in the morning			*	*	*			
Hands shake in the morning			*	*	*			
Got drunk while drinking alone			*	*	*		1	
Kept drinking after promised self not to			*	*	*		l	
Had strong desire/urge to drink		ĺ			1	*	1	
Found same amount of alcohol had less effect					l	*	l	*
Found you had to drink more than once did to get same effect				1	1	*	1	*
Continued drinking even though threat to health				1	1	*	1	*
Continued drinking even though caused emotional problems						*		*

 Table 4.2.1 Alcohol Variables by Survey Year: NLSY79

Item	Survey Years							
Lifestyle Symptoms (Impact on School, Work, Relationships)	82	83	84	85	88	89	92	94
Drinking ever interfered with schoolwork	*	*	*	*				
Drinking ever interfered with job	*	*	*	*				
Kept drinking even though caused problems with work, home, school						*		*
Stayed away from work because of hangover			*	*	*			*
Got drunk on the job			*	*	*			
Lost/nearly lost job because of drinking			*	*	*			
Drinking led to quitting job			*	*	*			*
Drinking hurt chances for promotion			*	*	*			*
Significant other left/threatened to leave						*		*
Arrested/trouble with police after drinking								*
Drink to keep from shaking after drinking/morning after drinking						*		*
Lost ties with/drifted apart from family members						*		*
Gave up/cut down activities/interests						*		*
Drove a car after drinking too much						*		*
Familial History of Alcohol Abuse/Dependency								
Any relatives been alcoholics/problem drinkers at any time					*			
Relationship to 1st/2nd/3rd/4th/5th/6th alcoholic relative					*			
# years lived with 1st/2nd/3rd/4th/5th/6th alcoholic relative					*			

 Table 4.2.1 Alcohol Variables by Survey Year: NLSY79 (continued)

References

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NLSY79 Children

The 1988–2000 surveys included several questions for children ages 10 and older that collected information on 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 young adult had gotten drunk. Beginning in 1994, the NLSY79 children 10 and older were divided into two groups: those ages 10 to 14 and those ages 15 and older (the young adults). A more extensive sequence about alcohol use and abuse that more closely resembled the main NLSY79 alcohol use questions was incorporated into the 1994, 1996, 1998, and 2000 supplements for the young adults. Table 4.2.2 details the evolution of the alcohol use questions asked of the NLSY79 Children.

Survey Instruments: Alcohol use questions can be found within the Child 10 & Over Self-Administered Supplement for 1988–2000. Additionally, in 1994, 1996, and 1998, alcohol questions can be found in the Young Adult Self-Report Booklet and in the self report section of the Young Adult CAPI Questionnaire in 2000.

Data Files: Alcohol use variables for NLSY79 Children are found within the "Child Supplement xxxx" and "YA Self" areas of interest for the respective survey years.

Reference

Mott, Frank L. and Quinlan, Stephen V. "The Ten-and-Over Years: Self-Reports from Children of the NLSY79." Columbus, OH: CHRR, The Ohio State University, 1993.

ltem		Survey Years (Age of children asked)									
Quantity-Frequency	88	90	92	94 (10-14)	94 (15+)	96 (10-14)	96 (15+)	98 (10-14)	98 (15+)	2000 (10-14)	2000 (15+)
Ever had a drink	*	*	*	*		*				*	*
Had any alcoholic beverages in past three months	*	*	*								
Age when had first drink	*	*	*	*		*	*	*	*	*	*
Age when started drinking at least once a month					*		*		*		*
Most recent time drank				*	*	*	*	*	*	*	
How often drank in past month				*		*	*	*	*	*	*
# days drank in past month				*	*		*		*		
Average # drinks per day on days drank in past month					*		*	*	*	*	*
# days had 5+ drinks per day on days drank in past month					*		*		*		
Most drinks in one day in past month					*		*		*		
# days had this many drinks (from question above)					*		*		*		
How often had drink in past year					*		*		*		*
How many times gotten very high or drunk in past year					*		*				*
Peer/Environmental Influence											
Where had first drink					*						
With whom had first drink					*						
Ever feel pressure from friends to drink				*		*		*		*	
Where usually drink					*		*		*		
With whom usually drink					*		*		*		
How many people R's age drink at least sometimes					*		*		*		*
Abuse-Dependency Symptoms											
Physiological/Behavioral Symptoms											
Gotten into argument or fight					*		*		*		*
Ended up drinking more than intended					*		*		*		
Found it hard to stop drinking once started					*		*		*		
Done things that could have hurt R or someone else					*		*		*		
Gotten drunk instead of doing things supposed to do					*		*		*		
Lifestyle Symptoms (Impact on School, Work, Relationships)											
Missed school/work/other obligation					*		*		*		*
Had problems with teacher or principal					*		*		*		
Had problems with friends/family/neighbors					*		*		*		*
Had problems with police					*		*		*		*
Stayed home/gone late to school because drunk or hung over					*		*		*		*
Had grades in school suffer due to drinking					*		*		*		
Driven a car after drinking too much					*		*		*		
Stayed home/gone late to work because drunk or hung over					*		*		*		*
Had chances for raise or better job hurt due to drinking					*		*		*		

 Table 4.2.2 Alcohol Variables by Survey Year: NLSY79 Children

4.3 Aptitude, Achievement & Intelligence Scores

NLSY79

This section discusses the types of aptitude, intelligence, and achievement test data available for the NLSY79. The following three surveys, conducted independently of the regular NLSY79 interviews, collected aptitude and intelligence score information: (1) The *Armed Services Vocational Aptitude Battery (ASVAB)*, a special survey administered in 1980 to the 1979 sample of NLSY79 respondents; (2) the 1980 survey of high schools, which used school records to collect scores from various aptitude/intelligence tests and college entrance examinations administered during the youth's high school career; and (3) the 1980–83 collection of high school transcript information, which included the gathering of math and verbal scores from such tests as the *Preliminary Scholastic Aptitude Test (PSAT)*, the *Scholastic Aptitude Test (SAT)*, and the *American College Test (ACT)*. Table 4.3.1 provides an alphabetical listing of the tests and the number of respondents for whom scores are available.

Intelligence Test	Reference Number	Area of interest	Number of Respondents with Scores
American College Test (ACT)	R06201.	Misc. 1981	1,127
	R06202.	Misc. 1981	1,124
	R00173.86=9	School Survey	72
	R00173.92=9	School Survey	17
ASVAB (Profiles)	R06150R06159.	Profiles	11,914
	R00173.86=6	School Survey	16
	R00173.92=6	School Survey	3
California Achievement Test	R00173.86=14	School Survey	71
	R00173.92=14	School Survey	17
California SFTAA	R00173.86=1	School Survey	203
	R00173.92=1	School Survey	14
California Test of Mental Maturity	R00173.11	School Survey	599
California Test of Basic Skills	R00173.86=11	School Survey	172
	R00173.92=11	School Survey	27
Cognitive Abilities Test	R00173.86=5	School Survey	59
	R00173.92=5	School Survey	28
Coop School & College Ability Test	R00173.41	School Survey	164
Differential Aptitude Test	R00173.36	School Survey	569
General Aptitude Test Battery	R00173.86=16	School Survey	27
	R00173.92=16	School Survey	1
Henmon-Nelson Test of Mental Maturity	R00173.26	School Survey	201
Iowa Test of Basic Skills	R00173.86=12	School Survey	75
	R00173.92=12	School Survey	7

 Table 4.3.1 Aptitude & Intelligence Tests: NLSY79 School Survey, Transcript Survey & Profiles Testing

Aptitude/Intelligence Test	Reference Number	Area of interest	Number of Respondents with Scores
lowa Test of Educational Development	R00173.86=13	School Survey	53
	R00173.92=13	School Survey	9
Kuhlman-Anderson Intelligence Test	R00173.31	School Survey	176
Lorge-Thorndike Intelligence Test	R00173.21	School Survey	691
National Educational Development	R00173.86=10	School Survey	22
	R00173.92=10	School Survey	1
Otis-Lennon Mental Ability Test	R00173.16	School Survey	1,191
Preliminary Scholastic Aptitude Battery	R06197.	Misc. 1981	1,386
(PSAT)	R06198.	Misc. 1981	1,386
	R00173.86=3	School Survey	77
	R00173.92=3	School Survey	41
Scholastic Aptitude Test (SAT)	R06199.	Misc. 1981	951
	R06200.	Misc. 1981	948
	R00173.86=2	School Survey	41
	R00173.92=2	School Survey	16
SRA Assessment Survey	R00173.86=20	School Survey	32
	R00173.92=20	School Survey	2
SRA - Primary Mental Abilities	R00173.86=4	School Survey	40
	R00173.92=4	School Survey	2
Stanford Achievement Test	R00173.86=17	School Survey	40
	R00173.92=17	School Survey	2
Stanford-Binet Intelligence Scale	R00173.46	School Survey	101
Sequential Tests of Educational Progress	R00173.86=18	School Survey	0
(STEP)	R00173.92=18	School Survey	0
STS High School Placement Test	R00173.86=15	School Survey	64
	R00173.92=15	School Survey	3
Terman-McNemar Tests	R00173.86=8	School Survey	1
	R00173.92=8	School Survey	0
Tests of Academic Promise	R00173.86=7	School Survey	13
	R00173.92=7	School Survey	1
Wechsler Intelligence Test for Children	R00173.51	School Survey	120

Table 4.3.1 Aptitude & Intelligence Tests: NLSY79 School Survey, Transcript Survey & Profiles Testing (continued)

ASVAB Administration: During the summer and fall of 1980, NLSY79 respondents participated in an effort of the U.S. Departments of Defense and Military Services to update the norms of the Armed Services Vocational Aptitude Battery (ASVAB). The Department of Defense and Congress, after questioning the appropriateness of using the World War II reference population as the primary basis for interpreting the enlistment test scores of contemporary recruits, decided in 1979 to conduct this new study. NLSY79 respondents were selected since they comprised a pre-existing nationally representative sample of young people born during the period 1957 through 1964. This testing, which came to be referred to as the "Profile of American Youth," was conducted by NORC representatives according to standard ASVAB

procedure guidelines; respondents were paid \$50 for their participation. Groups of five to ten persons were tested at more than 400 test sites, including hotels, community centers, and libraries throughout the United States and abroad. A total of 11,914 civilian and military NLSY79 respondents (or 94 percent of the 1979 sample) completed this test: 5,766 or 94.4 percent of the cross-sectional sample, 4,990 or 94.2 percent of the supplemental sample, and 1,158 or 90.5 percent of the military sample.

The *ASVAB* consists of a battery of 10 tests that measure knowledge and skill in the following areas: (1) general science; (2) arithmetic reasoning; (3) word knowledge; (4) paragraph comprehension; (5) numerical operations; (6) coding speed; (7) auto and shop information; (8) mathematics knowledge; (9) mechanical comprehension; and (10) electronics information. The following variables are available for each youth tested: raw scores, scale scores, standard errors, sampling weight, high school graduation status, and whether the test was completed under normal or altered testing conditions.

A composite score derived from select sections of the battery can be used to construct an approximate and unofficial Armed Forces Qualifications Test score (AFQT) for each youth. The AFQT is a general measure of trainability and a primary criterion of enlistment eligibility for the Armed Forces. Two methods of calculating AFQT scores, developed by the U.S. Department of Defense, have been used by CHRR to create two percentile scores, an AFQT80 and an AFQT89, for each Profiles respondent. To construct AFQT80, the raw scores from the following four sections of the *ASVAB* are summed: Section 2 (arithmetic reasoning), Section 3 (word knowledge), Section 4 (paragraph comprehension), and one half of the score from Section 5 (numerical operations). Beginning in January 1989, the Department of Defense began using a new calculation procedure. Creation of this revised percentile score, called AFQT89, involves (1) computing a verbal composite score by summing word knowledge and paragraph comprehension raw scores; (2) converting subtest raw scores for verbal, math knowledge, and arithmetic reasoning; and (5) converting the summed standard score to a percentile.

User Notes: The norms for the AFQT are based on persons who are at least 17 years old; those NLSY79 respondents born in 1963 and 1964 were not used in constructing the norms. While scores have been constructed for these younger respondents, users should be aware that because scores are not adjusted in any way to reflect the younger ages, percentile scores for these respondents may not be correct in a psychometric sense. However, relative rankings of ability as measured by the AFQT should be correct among respondents with the same birth year, even for those born in 1963 or 1964.

The 1990 and subsequent releases of NLSY79 data include 13 new "Profiles" variables that reflect Defense Manpower Data Center (DMDC) practices as of February 1992 (see R06180.10–R06183.). Users should note that the full sample of 1979 NLSY79 respondents—not just those interviewed during the 1980 main youth surveys—was eligible for *ASVAB* testing. Bock and Moore (1986) provide an excellent discussion of the *ASVAB* and present tabular results from this special test administration. *ASVAB* scores collected from school records during the high school survey, described below, are available for a limited number of respondents.

High School Survey: During April through October 1980, a separate survey was conducted of non-foreign high schools attended by civilian NLSY79 respondents. This school survey obtained information about the characteristics of each school. It also gathered respondent-specific information that included scores from various intelligence and aptitude tests administered during the respondents' schooling. Data are available for tests such as the *California Test of Mental Maturity*, the *Differential Aptitude Test*, the *Stanford-Binet Intelligence Scale*, the *Wechsler Intelligence Scale for Children*, and a variety of other tests including college entrance examinations such as the *Preliminary Scholastic Aptitude Test (PSAT)*, the *Scholastic Aptitude Test* (SAT), and the *American College Test (ACT)*. The following types of information are available for each test taken: IQ score, national percentile score, date (month/year) the test was administered, and student's grade level at the time of testing. A modest number (1,058 or 9.1 percent) of civilian NLSY79 respondents has one or more such scores available from the high school survey; additional scores may be available from the transcript survey.

Transcript Surveys: High school transcript information was collected during 1980, 1981, and 1983 for those civilian respondents who were expected to complete high school in the United States. While the focus of these surveys was course and grade information, math and verbal scores from the *PSAT*, the *SAT*, and the *ACT* were also collected. One or more (sub)scores for at least one test are available for 2,434 (21.3 percent) of civilian NLSY79 respondents. Additional information, including references to technical reports on these surveys, can be found in the "School & Transcript Surveys" section of this guide.

Knowledge of the World of Work: One assessment, an abbreviated version of the "Knowledge of the World of Work" scale, was directly administered to the young men and women of the NLSY79 in 1979. This set of questions (R00260.–R00268.) asks respondents to pick one of three statements that best describes the duties of each of 10 commonly held jobs. A total score can be calculated by awarding one point for each correct answer (Kohen and Breinich, 1975; Parnes and Kohen, 1975; Parnes, et al., 1970). A similar set of items was administered to the NLS of Young Men in 1966 and the NLS of Young Women in 1969. A similar set of items is also being asked of the children on the NLSY79 mothers at the first survey point they enter the Young Adult survey.

Survey Instruments: Test questions from the Armed Services Vocational Aptitude Battery are not available to the public. Copies of the high school and transcript survey instruments can be found within NLSY High School Transcript Survey: Overview and Documentation, described in the following paragraph.

Data Files & Documentation: ASVAB variables collected during the 1980 Profiles testing are located on the NLSY79 main data set within the "Profiles" area of interest (R06150.–R06183.). The NLSY79 documentation item *Attachment 106:* Profile of American Youth provides general and technical information on the Profiles testing and an annotated bibliography of related publications. An addendum discusses the creation of AFQT80 and AFQT89. Variables collected during the High School Survey are located on the main NLSY79 data set within the "School Survey" area of interest (R00173.11–R00173.97). Test scores from the Transcript Surveys are located on the main NLSY79 data set within the "Misc. 1981" area of interest (R06197.–R06202.). A documentation item, NLSY High School Transcript Survey: Overview and Documentation, contains background information on the sample design and field work of these special surveys, a summary of the types of variables collected, and coding information.

User Notes: Users are encouraged to use the scaled and percentile scores since they provide a method of ranking individuals not available when raw scores are used. It should also be noted that the NLSY79 includes some respondents who, although not institutionalized in 1979, may have significantly diminished mental abilities. These individuals may be identified by examining the "Interviewer Remarks" section of the questionnaires (see, for example, R50578. in 1994). Researchers may wish to restrict their universes for certain analyses as these respondents sometimes provide responses that are more error-prone.

NLSY79 Children

Although not discussed here, extensive information on the cognitive development of children born to female respondents of the NLSY79 is also available. These child data include scores from assessments such as the *Peabody Picture Vocabulary Test (PPVT-R)*, the *McCarthy Scale of Children's Abilities: Verbal Memory Subscale*, the *Wechsler Intelligence Scale for Children: Digit Span Subscale*, and the *Peabody Individual Achievement Test (PIAT): Math, Reading Recognition, and Reading Comprehension.* Users interested in these child data are encouraged to acquire a copy of the *NLSY79 Child Handbook* (Baker et al., 1993). Additionally, a Child School Survey was carried out for children who were in grades 1 through 12 in 1994 or 1995. Information was collected on school characteristics and individual student performance including transcripts, grades, program participation, and attendance. The Child School Survey data and documentation are available in a separate file on diskette. For more information on the NLSY79 Child School Survey and the school transcript data collection, see the section in this guide on "School and Transcript Surveys."

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4.4 Assets

This section describes the asset and debt questions asked of NLSY79 respondents since the cohort's inception in 1979. The asset and debt questions asked in the Children of the NLSY79 Young Adult survey are also briefly discussed.

While many researchers use income as the primary measure of economic resources available to a respondent, examining both income and wealth provides a more complete picture of economic well-being for the NLSY79. Wealth, which is equal to a respondent's assets minus their debts, shows another dimension of the resources available to the respondent. The NLSY79 cohort is a unique source of wealth information. Because the original NLSY79 panel contains a supplemental sample of 5,295 blacks, Hispanics, and economically disadvantaged non-black/non-Hispanics, researchers are able to precisely measure wealth for low-income and minority households. For more information, see Zagorsky (1997).

NLSY79

Data Summary: From the first survey year, NLSY79 respondents have been asked about their savings, home, and vehicle ownership. Over the course of the survey, these questions, shown in Table 4.4.1, provide information on when saving begins, how savings habits are formed, and how persistent savings habits are.

Question	79	80	81	82	83	84
Own Home/Apartment	*	*	*	*	*	*
Own Car/Truck	*	*	*	*		
Have Savings	*	*	*	*		

Table 4.4.1 NLSY79 Asset Questions 1979 to 1984

Each of the first four surveys (1979, 1980, 1981, and 1982) contain identical sets of questions asking if the respondent or their spouse had any money set aside for savings, owned a vehicle, or owned their own home. Unfortunately, the respondent was never asked how much savings were held, the value or number of vehicles, or the value of, and mortgage on, their home. Additionally, between 1979 and 1982, NLSY79 respondents were only asked questions on assets if they met one of following five criteria:

- (1) 18 years old or greater,
- (2) had a child,
- (3) enrolled in college,
- (4) married, or
- (5) living outside their parents' home.

This selection process eliminated many respondents from these questions. Early NLSY79 data show that few individuals answered the questions until they turned 18 years old. For example, in 1979 only five percent of those interviewed under age 18 answered the asset questions. Except for the question on home ownership, asset questions were dropped during 1983 and 1984. Beginning in 1985, when all respondents had turned 18, NLSY79 respondents were administered a much larger wealth section. As Table 4.4.2 shows, respondents were given the opportunity to answer approximately 20 questions about a variety of asset and debt holdings. In most years respondents estimated how much their home, cash savings, stock and bond portfolio, estate, business, and automobile were worth. Additionally, respondents estimated how much mortgage debt, property debt, and other debt they had accumulated. Together these variables provide a rough overview of the net worth of each respondent. As the cohort has aged, the wealth section has grown in length and detail.

The only major change in the wealth series occurred in 1991. Budgetary restrictions in the survey's thirteenth round resulted in the elimination of wealth questions for this round of questioning.

Question	85	86	87	88	89	90	92	93	94	96	98	00
Own Home/Apartment; Market Value	*	*	*	*	*	*	*	*	*	*	*	*
Amount Owed on Property	*	*	*	*	*	*	*	*	*	*	*	*
Amount Other Home Debt	*	*	*	*	*	*	*	*	*	*	*	*
Have Money Assets; Amount	*	*	*	*	*	*	*	*	*	*	*	*
Did Savings Change; Amount				*								
Have Common Stock, Bonds; Value				*	*	*	*	*	*	*	*	*
Hold Money in IRA/Keogh; Amount									*	*	*	*
Hold Money in 401k/403b; Amount									*	*	*	*
Hold Money in CDs; Amount									*	*	*	*
Rights to Estate/Trust; Value				*	*	*	*	*	*	*	*	*
Own Farm/Bus/Real Estate; Market Value	*	*	*	*	*	*	*	*	*	*	*	*
Amount Debts Farm/Bus/Real Estate	*	*	*	*	*	*	*	*	*	*	*	*
Own Vehicles for Own Use; Market Value	*	*	*	*	*	*	*	*	*	*	*	*
Owe Any Money on Vehicles; Amount	*	*	*	*	*	*	*	*	*	*	*	*
Make/Model/Year of Car	*											
Own Items over \$500; Value	*	*	*	*	*	*	*	*	*	*	*	*
Owe over \$500; Amount owed	*	*	*	*	*	*	*	*	*	*	*	*
Amount R would have left if paid off debts						*	*	*	*	*	*	*

Table 4.4.2 NLSY79 Asset Questions 1985 to 2000

Note: No asset questions were included in 1991.

Nonresponse: One major concern when asking individuals about their wealth holdings is nonresponse bias. While it is outside the scope of this chapter to fully investigate nonresponse bias of the NLSY79 cohort, this section briefly describes nonresponse in 1992 as an example of the issues raised. There are two primary types of questions on wealth: general questions asking whether the respondent has a particular asset or debt, and specific questions asking about the value of holdings. Factors that are likely to contribute to nonresponse are suspicion, uncertainty about an asset's current value, shared responsibility for family finances, and complex financial arrangements.

Table 4.4.3 provides information on response rates to questions on wealth in the 1992 NLSY79 survey. The NLSY79 has very high response rates on the ownership questions—generally exceeding 99 percent. The responses in the amount column are based only on individuals who stated they owned the particular asset or had the particular debt. This column shows that response rates are relatively low for items where the current values may be uncertain or variable, notably stock holdings and business interests.

For more information on item nonresponse, refer to Chapter 5 in this User's Guide.

	Ownership	Amount
Assets		
Money assets	99.6	95.0
Securities	99.6	85.6
Trusts	99.5	65.9
Primary residence	99.9	97.9
Vehicles	99.9	95.9
Other investments	99.8	88.7
Liabilities		
Mortgage	_	97.7
Vehicle debt	99.0	97.6

Table 4.4.3 Response Rates to Questions on Wealth: 1992

Top Coding: Because the NLSY79 is a public use data set that is distributed widely throughout the research and public policy communities, the survey takes extensive measures to protect the confidentiality of respondents. One method of ensuring confidentiality is to "top code" unusually high values.

The NLSY79 has used three top coding algorithms for assets. From 1979 to 1988, every NLSY79 asset question that elicited a response above a specified cutoff value, such as \$100,000 for some variables, was recoded to the truncation value plus one dollar, such as \$100,001. Unfortunately this algorithm results in a sharp downward bias in the mean value of NLSY79 asset holdings since the entire right hand tail is

truncated. To address this problem, beginning in 1989, a new algorithm was implemented. The new top code algorithm replaces all values above the cutoff with the average of all outlying values.

Beginning in 1996, the top two percent of respondents with valid values were identified. Values within that top range were averaged and that averaged value replaced all values in the top range.

The extent of top coding for NLSY79 asset questions varies greatly. For example, in 1993 there were only two individuals whose money assets exceeded the cut-off value of \$500,000, while 581 individuals gave a market value for their residence above the cut-off value of \$150,001. While top-coding presents problems in analysis of individual observations and alters some statistical properties, the new algorithm does not affect the estimates of mean and median holdings. Table 4.4.4 shows the number of people shielded by top codes in both 1985 and 1993.

	1985 Percentage	1985 Number	1993 Percentage	1993 Number	Cut-off Value
Market Value of Property	0.3	18	8.5	581	\$150,000
Property Mortgage	0.1	7	2.3	159	\$150,000
Other Property Debts	0.0	0	0.0	1	\$150,000
Money Assets	0.0	3	0.0	2	\$500,000
Value Farm/Bus/Other Property	0.2	12	0.5	34	\$500,000
Debts Farm/Bus/Other Property	0.0	1	0.1	9	\$500,000
Vehicle Debt	0.0	0	0.4	23	\$30,000
Vehicle Value	0.0	0	2.3	156	\$30,000
Assets Over \$500	0.1	10	0.2	10	\$150,000
Debts Over \$500	0.0	1	0.0	2	\$150,000

Table 4.4.4 Number and Percentage of Respondents Whose AssetsWere Top Coded in 1985 and 1993

A second out-of-range issue with NLSY79 data concerns individuals living outside the United States. Residing outside the United States does not preclude a respondent from being interviewed. For example, in 1992, 125 respondents lived abroad. Between 1989 and 1992, for people who hold assets denominated in foreign currency, little effort was made to transform these assets into dollar figures. Instead, such values are classified as "invalid skips" in the data. Beginning in 1993, an effort was made to convert these currencies whenever the unit of the response could be determined. While readers are warned that this occurs, relatively few respondents live outside the United States. Moreover, only a small number of individuals in this group cannot report their wealth in U.S. dollars.

Created Values and Summary Statistics: The CHRR staff has not created any summary wealth values for this cohort as it has for other cohorts. Moreover, due to the low response rates for a number of questions, a CHRR summary variable would contain a number of missing observations. Users seeking to create their own summary statistics should not be surprised to find that a significant fraction of the sample reports no wealth holdings in any given survey. Additionally, users creating their own summary variable will find a significant number of individuals with negative net wealth holdings.

Survey Instruments: Questions pertaining to assets are found in the "Income and Assets" section of the NLSY79 questionnaire beginning with 1985. Specifically, Section 11 (1993), Section 12 (1987, 1989, 1990, 1992), Section 13 (1986, 1994, 1996, 1998, and 2000), Section 14 (1985), and Section 15 (1988) contain these questions.

Data Files: Data are found primarily within the ASSET area of interest on the NLSY79 CD-ROM.

NLSY79 Children

While there is no information about assets for the NLSY79 children under age 15, asset information is gathered for the Young Adults. The Young Adult survey contains an asset section similar to the NLSY79 asset section fielded in 1985. Young Adults are asked if they own a home, vehicles, and possessions worth more than \$500 and if they have outstanding debts. If the young adult responds affirmatively to any of these categories, additional questions probe for the value of and debt outstanding on these items.

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4.5 Attitudes & Expectations

This section examines the data that are available on attitudes and expectations for the NLSY79 cohort and the Children of the NLSY79. Attitude questions within the NLSY79 surveys measure an individual's outlook or demeanor in a given survey year. Expectations questions measure an individual's perceptions of the future. There have been only a small number of both attitude and expectations questions within the NLSY79 to date.

NLSY79

Attitudes: One of the major sets of attitude questions in the NLSY79 relates to respondents' assessments of women working. While a variety of surveys have examined women's roles over time, the NLSY79 is unique because it tracks how an individual's view of women's roles changes, enabling researchers to understand how attitudes toward women's activity in the labor force evolve over the life cycle.

The NLSY79 has asked a series of eight questions about women's roles in three surveys (1979, 1982, and 1987). Respondents were read a statement and asked if they strongly agreed, agreed, disagreed, or strongly disagreed with the statement. Table 4.5.1 illustrates the eight questions and shows the change in weighted responses from 1979 to 1987 for individuals who answered both series of questions. The last column, labeled "Change," shows that from 1979 to 1987 NLSY79 respondents developed more liberal attitudes toward women's roles.

Question	1979	1987	Change (87-79)
Woman's place is in the home, not the office or shop	22.1	10.5	-11.6%
A wife with a family has no time for outside employment	27.7	15.9	-11.8%
A working wife feels more useful than one who doesn't hold a job	66.4	59.2	-7.2%
Employment of wives leads to more juvenile delinquency	26.5	18.7	-7.8%
Employment of both parents is necessary to keep up with the high cost of living	66.0	80.5	14.4%
It is much better if the man is the achiever outside the home and the woman takes care of the home and family	41.8	25.0	-16.8%
Men should share the work around the house with women	81.4	93.7	12.3%
Women are much happier if they stay home and take care of children	29.2	24.2	-5.0%

Table 4.5.1 Percent of NLSY79 Respondents Who Either Agree or Strongly Agree with Statement (Weighted Data)

For researchers who are interested in tracking these issues across generations, the NLS has included similar attitudinal measures in surveys of other cohorts. Mature Women were asked about their attitudes toward working roles in 1972, 1977, 1982, and 1987, while Young Women were surveyed in 1972, 1978, 1983, and 1988. This set of additional questions enables researchers to not only track changes over time within

a cohort but also to understand how attitudes toward work change between cohorts for individuals in a similar age range.

Another set of attitude questions, fielded in 1979, examines how in-school respondents feel about their education. These questions (R00159.–R00168.) ask students to state their attitudes on issues such as how satisfied they are with their school and how safe they feel in school. Overall, the unweighted data show that most students expressed a positive attitude toward their school and schooling.

Lastly, each year the NORC interviewer notes the respondent's attitude during the interview. Respondents are coded as (1) friendly, interested; (2) cooperative, not interested; (3) impatient, restless; or (4) hostile. While the vast majority of respondents are coded as friendly and interested, a small but significant number (around 30 respondents each year) are labeled as hostile.

Self-Perceptions: In selected survey years, the NLSY79 has collected information from respondents on their perceived self-esteem, their feelings of control over their own lives, their sociability, and their perceptions of influential people in their lives.

Rotter Locus of Control Scale

The Rotter Internal-External Locus of Control Scale (R01530.–R01537.), collected as part of the 1979 NLSY79 survey, is a four-item abbreviated version of a 23-item forced choice questionnaire adapted from the 60-item Rotter Adult I-E scale developed by Rotter (1966). The scale was designed to measure the extent to which individuals believe they have control over their lives through self-motivation or self-determination (internal control) as opposed to the extent that the environment (i.e., chance, fate, luck) controls their lives (external control). The scale is scored in the external direction—the higher the score, the more external the individual. In order to score the Rotter scale in the NLSY79, one has to generate a four-point scale for each of the paired items and then sum the scores. For example, the first pair has the following two statements:

- 1. What happens to me is my own doing. (internal control item)
- 2. Sometimes I feel that I don't have enough control over the direction my life is taking. (external control item)

Respondents were asked to select one of each of the paired statements and decide if the selected statement was much closer or slightly closer to their opinion of themselves. The following shows how the scale is constructed:

Internal C	ontrol Item	External Control Item			
Much closer	Slightly closer	Slightly closer	Much closer		
1	2	3	4		

Each of the four paired items is constructed in the same manner as the above example. The values for each item are then summed. The maximum possible score is 16, indicating high external control, while the minimum possible score is four, indicating high internal control. The summed score on the NLSY79 abbreviated version correlates well with self-esteem, education, and social class, but the internal consistency of the scale is quite low for the whole cohort (alpha: .36). Separate estimates by race and sex do not yield significantly higher reliability estimates.

Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale was administered during the 1980 (R03035.–R03044.) and 1987 (R23491.–R23500.) interviews. This 10-item scale, designed for adolescents and adults, measures the self-evaluation that an individual makes and customarily maintains. It describes a degree of approval or disapproval toward oneself (Rosenberg, 1965). The scale is short, widely used, and has accumulated evidence of validity and reliability. It contains 10 statements of self-approval and disapproval with which respondents are asked to strongly agree, agree, disagree, or strongly disagree. Items A, B, D, F, and G need to be reversed prior to scoring in order for a higher score to designate higher self-esteem. Users should consult the relevant survey year questionnaire for specific wording. Typically, the raw items are summed or the standardized items are averaged to create a summary score. The scale has proven highly internally consistent, with reliability coefficients that range from .87 (Menaghan, 1990) to .94 (Stroccia-Rivera, 1988), depending on the nature of the NLSY79 sample selected.

Influence of Significant Others

The "On Significant Other" section of the 1979 NLSY79 questionnaire is the source of the discrete set of nine variables (R01491.–R01499.) dealing with the attitude of the most influential person in each respondent's life toward certain key career, occupational, residence, and childbearing decisions. These variables are available for respondents who were between the ages of 14 and 17 in 1979.

Sociability

In 1985, two questions were asked of the respondent about the degree to which he or she was shy or outgoing. The first question (R17743.) inquired about the respondent's perception of how shy or outgoing they were at age 6 and the second question (R17744.) asked them to consider how shy or outgoing they are as an adult.

Pearlin Mastery Scale

The *Pearlin Mastery Scale* is a measure of self-concept and references the extent to which individuals perceive themselves in control of forces that significantly impact their lives. It consists of a 7-item scale developed by Pearlin, et al. (1981). Each item (R38942.–R38948.) is a statement regarding the respondent's perception of self, and respondents are asked how strongly they agree or disagree with each

statement. Four response categories are allowed: (1) strongly disagree; (2) disagree; (3) agree; and (4) strongly agree. The scale is constructed by adding together the responses from each item; thus, a range of 4 to 16 is possible. To obtain a positively oriented scale (i.e., a higher score represents the perception of greater mastery over one's environment), negatively phrased questions (R38942., R38943., R38944., R38946., R38948.) should have their response sets reverse coded.

Health Related Attitudes-Aids Knowledge: In 1988, a series of questions was administered to ascertain respondents' familiarity with Acquired Immune Deficiency Syndrome (AIDS). This information allows researchers to examine the impact of such information on subsequent health-related behaviors.

The series begins with a question to determine if the respondent has ever heard of AIDS (R27094.). If the answer is "yes," he or she is then read a set of nine statements (R27095.–R27103.) about AIDS. For each of these statements, the respondent is asked "...to tell if you think it is very likely, somewhat likely, somewhat unlikely, very unlikely, definitely not possible, or if you don't know how likely it is that a person will get AIDS or the AIDS virus infection that way. How likely do you think it is that a person will get AIDS or the AIDS virus infection from..."

- a. eating in a restaurant where the cook has AIDS?
- b. sharing plates, forks, or glasses with someone who has AIDS?
- c. using public toilets?
- d. sharing needles for drug use with someone who has AIDS?
- e. kissing on the cheek a person who has AIDS?
- f. being coughed or sneezed on by someone who has AIDS?
- g. attending school with a child who has AIDS?
- h. mosquitoes or other insects?
- i. having sex with a person who has AIDS?

The series concludes with questions on whether an employer ever provided any information about AIDS to the respondent (R27104.) and, for individuals with school-age children, questions on whether the respondent has ever discussed AIDS with any of his or her children (R27106.) and whether the (oldest) child has had instruction at school about AIDS (R27107.).

Expectations: Although the NLSY79 contains a great deal of information about respondents over time, it has only collected a small amount of information on respondents' perceptions or expectations about the future. These expectations are important to measure since they provide valuable insight into respondents' future plans. Questions were asked in the early years about respondents' expectations for their educational, occupational, and marital futures. Military expectation questions were asked each year from 1979–85. Finally, fertility expectation questions have been asked in most survey years. Expectation questions that have been included are outlined in Table 4.5.2.

			Торіс		
Year	Education	Occupation	Fertility ¹	Military	Marital
1979	R01718. In school in 5 years? R00235. Highest grade expected	R01700. – R01708. Age 35 occupational plans R01719. – R01721. Work expectations in 5 years	Number of children expected Timing of next child	R00431. Intent to enlist R00407. Length of service expected (Rs in military)	R01716. Married in 5 years? R01717. Age expect to marry
1980		R03289. – R03290. Age 35 occupational plans R02651. Time will stay in current job		R02357. Intent to enlist R02472. Length of service	
1981	R04197. Highest grade expected	R05303. – R05304. Age 35 occupational plans R04471. Time will stay in current job		R04238. Intent to enlist R04353. Length of service	R06562. Married in 1 year? (unmarried Rs)
1982	R06668. Highest grade expected	R08082. – R08090. Age 35 occupational plans R07029. Time will stay in current job	Number of children Timing of next child	R06711. Intent to enlist R06853. Length of service	
1983		R10448., R10449. Age 35 occupational plans	Number of children Timing of next child	R09128. Intent to enlist R09271. Length of service	
1984		R14271., R14272. Age 35 occupational plans	Number of children Timing of next child	R11215. Intent to enlist R12370. Length of service	
1985			Number of children Timing of next child	R16163. Intent to enlist R16322. Length of service	
1986– 2000			Number of children Timing of next child		

Table 4.5.2 NLSY79 Expectations Questions

¹ Reference numbers are not provided because multiple questions were asked of different universes in the same survey year. For example, see R37881. in 1992 for total number of children expected and R00155. in 1979 for expected timing of next child.

Related Information: For measures of job satisfaction, users should consult the topical subsection "Job Satisfaction" in this guide. Additional information related to health can be found in the "Health" section. Items capturing the quality of marital relationships can be found in the "Marital Status, Transitions & Attitudes" section.

Survey Instruments: Interested readers should examine Section 20 in the 1979 questionnaire on "Family Attitudes" and Section 22 on "Aspirations and Expectations" for the majority of attitude and expectations questions collected in that survey year.

The women's role items were also collected in the 1982 questionnaire (Section 15) and the 1987 questionnaire (Section 20). Job aspirations can be found in questionnaire sections 18 (1980), 20 (1981), 17 (1982), 15 (1983), and 16 (1984). The Rosenberg Self-Esteem Scale items can be found in Section 14

of the 1980 questionnaire and Section 15 of the 1987 questionnaire. The health sections of the 1985 (Section 12) and 1992 (Section 11) questionnaires collect the sociability and Pearlin Mastery Scale items, respectively.

Data Files: Most of the variables described in this section can be found in the "Attitude" area of interest. Fertility expectations are located in the "Children," "Birth Record," and "Birth Record xxxx" areas of interest, and military expectations can be found in the "Military" area of interest. Users can find the sociability measure in the "Health" area of interest.

NLSY79 Children

Attitudes: NLSY79 Children have been asked a number of attitude questions over time. These questions can be found in each year's self-report series booklet, completed only by children 10 years of age and older. Questions include whether girls should be treated differently than boys and the child's attitude toward risky behaviors and planning for the future.

An entire section of the first round NLSY79 Young Adult survey (1994 & 1996) focused on attitudes. Questions covered a variety of topics, such as their view toward how much schooling is needed for and the pay received by various occupations. In addition, the same set of eight questions asked of NLSY79 main respondents on attitudes toward women working is asked of the Young Adult respondents. These questions (Q16-7a to Q16-7h) enable researchers to link mother's responses directly with their children on this issue. In 1998 and 2000, these questions were asked only of young adults who had not answered them in a previous survey.

Expectations: NLSY79 Children and Young Adults have been asked in a number of surveys when they expect to marry and when they expect to have children. Young Adults have also been asked if they expect to be working at age 35. Married young adults are asked about the likelihood that they will separate from or divorce their spouse.

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4.6 Child Care

NLSY79

Data on child care have been collected within various topical sections of the NLSY79 questionnaires. The main data collection on types of child care arrangements, discussed in detail below, occurred during the 1982–86, 1988, 1992, and 1994–2000 surveys. A limited number of child care questions, fielded within the 1987, 1989, and 1990 fertility series, obtained information from select universes on whether respondents made use of a regular child care arrangement, on whether respondents encountered child care problems that affected their employment, or on the extent of responsibility for child care assumed by female respondents during recent pregnancies. Out-of-the-labor-force respondents could specify within various sections of the yearly questionnaires, e.g., the 1980–98 "CPS or Current Labor Force Status" or "Periods not Working" sections, that lack of available child care or family responsibilities was a reason they were not looking for work or did not want a job now.

In addition, information on whether or not child care services were provided as a supportive service through federally funded government employment and training programs was gathered during the 1979–87 surveys. For those respondents residing in households with children under age 14, the special 1981 "Household Chore and Child Care" time use survey provides information on the amount of responsibility for providing child care at home and actual time spent on a given day in specific child care tasks. The "Fringe Benefits" section of this guide details the collection of information on child care as a fringe benefit made available by employers of NLSY79 respondents. Finally, a special experimental *Child Care Supplement*, administered to 347 NLSY79 mothers who were interviewed during the first month of the 1989 fielding, collected a wide range of information, including data on every child care arrangement used for at least 10 hours per week since the date of last interview. A report evaluating the quality of various child care data items is available from CHRR (Mott and Baker 1992).

The discussion that follows reviews data collected during administration of the "Child Care" and "Fertility" sections of the questionnaire. Users should refer to the "Survey Instruments" and "Data Files" sections below for information on other child care questions.

Types and Locations of Child Care Arrangements: Data on types and locations of child care arrangements are available for the 1982–86, 1988, 1992, and 1994–2000 survey years. In addition, supplementary information has been collected during certain survey years on the number of hours that child care services were required/provided, the nature of the payments (cash or noncash), total cost per child/per provider, and the effect of available child care services on such activities as employment, job search, training, etc.

There are marked differences in the universes of respondents, reference children, kinds of questions asked, and reference periods across survey years (see Table 4.6.1). Universes of respondents vary widely both within and across survey years, from respondents—both male and female—engaged in some educational or labor market pursuit, to all women with a child in the household, to not-employed respondents with an employed spouse. The focus during the initial survey years was on collecting information on child care arrangements used over the past month for only the youngest child(ren) in the household. In 1986 and 1988, the past-four-weeks child care data collection was continued but extended to all children in the household. In addition, retrospective data were gathered during these same two interview years and in 1992, and 1994–2000 for up to three child care arrangements used by NLSY79 mothers during each of the first three years of the child's life.

Typical categories of child care arrangements include self-care; care by relatives (the child's other parent, a step-parent, siblings, or grandparents); care by nonrelatives; and care provided by institutions such as day care centers, nurseries, or preschools. Information on care provided by individuals usually differentiates between that occurring in the child's home and that occurring in another private home. Information was gathered during select survey years (1983–86 and 1988) on both primary and secondary child care arrangements.

Survey Instruments: Child care questions are located in the "Child Care" sections of the questionnaires: Section 16 (1982), Section 14 (1983), Section 11 (1984–87), and Section 10 (1988, 1992, 1994, 1996, 1998, and 2000). The limited set of child care questions asked during 1987 and 1989 can be found within the Section 9 "Fertility" series. The "Time Use - Household Chores & Child Care" questions are located in Section 19 of the 1981 questionnaire. Users interested in child care services provided within government training programs should reference the "Government Training & Jobs Programs" section of this guide.

Data Files: The 1982–2000 child care questions can be found within the "Child Care" area of interest. The 1980–98 "CPS" series have been placed in the "Misc. xxxx" areas of interest; "Periods Not Working within Job Tenure" includes the variables relating to child care as a reason for not working for an employer. Variables relating to child care services provided to respondents holding government jobs or participating in government training programs are located within the "Government Jobs" and "Government Training" areas of interest. The special set of 1981 time use questions relating to child care can be found in "Time Use." Researchers interested in the 1989 special child care supplement data should contact NLS User Services.

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Table 4.6.1 Child Care Questions: 1982–2000 NLSY79 Surveys Including the Special 1989 Child Care Supplement

Year	Universe	Nature of Questions	Time Reference	Reference Children
1982	(1) All respondents in school, in training, employed, or on active duty with children in the household	(1) Type and location of care; total weekly expenditures; days/hours in child care	(1) Usually	(1) Youngest and next youngest child
	(2) Unemployed respondents (in school or training) with children in the household	(2) Hypothetical type and location of child care if employed	(2) Future	(2) Youngest and next youngest child
	(3) Same as (1)	(3) Would availability of child care affect hours spent/ attendance at schooling, training, employment or job search	(3) Future	(3) —
1983	(1) All respondents in school, in training, employed or on active duty with children in the household	(1) Types and location of primary and secondary care; hours; nature of payments	(1) Last 4 weeks	(1) Youngest child
	(2) Women in school, training, employed or on active duty with children in the household	(2) Would availability of child care affect hours spent/ attendance at schooling, training, employment or job search	(2) Future	(2) —

Year	Universe	Nature of Questions	Time Reference	Reference Children
1984	(1) All respondents in school, in training, employed or on active duty with children in the household	(1) Type, location, and hours of primary & secondary care; nature of payments; use of grandmother	(1) Last 4 weeks	(1) Youngest child in household
	(2) Not employed respondents with employed spouse	(2) Type and location of primary care	(2) Last 4 weeks	(2) Youngest child in household
(3) Women with a child in the household		(3) Would availability of child care affect hours spent/attendance at school, training, employment or job search	(3) Future	(3) —
1985	(1) All respondents in school, in training, employed, or on active duty with children in the household	(1) Type, location, and hours of primary & secondary care; nature of payments; total expenditures; retrospective on current arrangement; detail on primary group care	(1) Last 4 weeks	(1) Child in household who was youngest active in household in 1984
	(2) Respondents employed or in active forces with children in the household	(2) Hypothetical additional cost of primary care arrangement for respondents wanting to work more hours	(2) Future	(2) Youngest and next youngest child
	(3) Same as (1)	(3) Same as (1)	(3) Last 4 weeks	(3) Youngest child in household - no care data collected in 1984
1985	(4) Same as (1)	(4) Type and location of primary & secondary care	(4) Last 4 weeks	(4) Youngest child in household
	(5) Respondents not in school, in training, or unemployed with employed spouse	(5) Type and location of primary care and shift worked by spouse	(5) Last 4 weeks	(5) Youngest child in household
1986	(1) All women with children in the household	(1) Type, location and hours of primary & secondary care; detail on primary group care; nature of payment; expenditures for all care	(1) Last 4 weeks	(1) All children in the household
	(2) All mothers	(2) Type and location of up to 5 arrangements at each age	(2) First 3 years of life	(2) All biological children at least one year old who resided with mother during most of 1st, 2nd, and/or 3rd years of life
1987	(1) All respondents with children in the household	(1) Use of a regular child care arrangement	(1) Last 4 weeks	(1) Any (not individually) children in the household
1988	(1) All women with a biological child in the household	(1) Location, type, and hours of primary & secondary care; detail on primary group care; nature of payment; expenditures for all care	(1) Last 4 weeks	(1) Any (not individually) children in the household
	(2) All mothers	(2) Location and type of up to 3 arrangements at each age and extent of usage	(2) First 3 years of life	(2) All biological children at least one year old who resided with mother during most of 1st, 2nd, and/or 3rd years of life
	(3) Female respondents	(3) Extent of responsibility for child care during recent pregnancies	(3) During pregnancy	(3) Any existing already during the pregnancy

Table 4.6.1	NLSY79	Child	Care	Questions	(continued)
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Year	Universe	Nature of Questions	Time Reference	Reference Children
1989	(1) Respondents who were employed or on active duty in past four weeks with children under age 14 in the household	(1) Problems with regular child care arrangements that affected respondent's work	(1) Last 4 weeks	(1) All children under age 14 in household
1989 Supple- ment	Supple- under age 14 in the household care arrangements lasting at		(1) Last week	(1) Any child
	(2) Women with more than one child under age 14 in the household	(2) Care giver used; hours; costs	(2) Last week	(2) Youngest and next youngest child
	(3) Same as (1) unemployed only	(3) Main reason not working; if child care available, would work; caretaker usually use when go out	(3) —	(3) —
	(4) Same as (1) employed only	(4) Impact of sick child on work hours; type of child care for sick child; impact of problems with regular child care on job, training, school; types of child care problems; proximity of relatives	(4) Last month/last 12 months	(4) —
	(5) Same as (1) except with children aged 5 and older	(5) Usual child care arrangements for children after school	(5) Regular school year	(5) Youngest and next youngest child
	(6) Same as (1)	(6) Characteristics of up to 5 types of child care arrangements used for at least 10 hours in any week; dates and reason started/stopped; costs	(6) Date of last interview	(6) —
1990	(1) Female respondents	(1) Extent of responsibility for child care during recent pregnancies	(1) During pregnancy	(1) Any existing already during the pregnancy
1992, 1994- 2000	(1) All mothers	(1) Location and type of up to 3 arrangements at each age and extent of usage	(1) First 3 years of life	(1) All biological children at least 1 year old who lived with mother during most of first three years of life

Table 4.6.1 NLSY79 Child Care Questions (continued)

NLSY79 Children

Selected data from the 1984–88 main NLSY79 surveys on type and location of child care arrangements and retrospective childcare in the first three years have been reconstructed with the child as the unit of observation and placed on the NLSY79 Child Data File. Users should refer to Table 4.6.1 above for important variations, both across and within survey years, in the universes and the kinds of questions asked. Additionally, in 1994–1998, the young adults aged 15 and older, were asked about their usual current child care arrangements for all biological and step/adopted or partner's children. In 2000, the childcare section focused on the youngest child in the household and included questions on parenting, attitudes, and behaviors.

Survey Instruments: Child care questions are located in the "Child Care" sections of *NLSY79 Young Adult Questionnaires*. See also the NLSY79 discussion above.

Data Files & Documentation: Descriptions of those child care variables present on the child data set can be found in the "Childcare and Childcare Related" section of the *NLSY79 Child Handbook*. These items, converted to child-based variables, are located in the "Childcare" area of interest on the compact disc. The young adult variables are located in the "YA Child Care" area of interest.

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4.7 Cigarette Use

NLSY79

Three sets of cigarette use data for NLSY79 respondents are available. (1) Data were collected, during the 1984 survey, on age at first use, most recent use, and number of cigarettes smoked in the past 30 days. (2) The 1992 and 1994 surveys gathered information from those respondents who had smoked at least 100 cigarettes in their life on the age that they started smoking daily or the number of months/years since they had last smoked daily. (3) The 1983–86, 1988, 1990, 1992, and 1994–2000 surveys gathered, for female NLSY79 respondents, information on whether they smoked in the twelve months before pregnancy and on the number of cigarettes smoked during pregnancy.

Survey Instruments: Questions on cigarette use can be found in Section 14 of the 1984 questionnaire, in the 1992, 1994, and 1998 *Self-Administered Drug Use Supplement*, and in the "Fertility" section of the 1983–86, 1988, 1990, 1992, and 1994–2000 questionnaires.

Data Files: Variables from the 1984, 1992, 1994, and 1998 surveys can be found in the "Drugs" area of interest; the yearly "Birth Record xxxx" area of interest contains the cigarette use during pregnancy variables.

NLSY79 Children

Data were collected during the 1988–2000 surveys for children 10 years of age and older on age at first use and extent of use of cigarettes. A more extensive set of questions was addressed to the Young Adults in 1994, 1996, 1998, and 2000. For more information on these data, see the "Crime, Delinquency, & Arrest Records" section of this guide.

4.8 Class of Worker

NLSY79

Class of worker data have been collected during each interview. These variables indicate whether a respondent (1) works for a private company or individual for wages, salary, or commission; (2) is a government employee; (3) is self-employed in his/her own business, professional practice, or farm; or (4) is working without pay in a family business or farm. This information is available for an employed respondent's current/most recent job, as well as for each job held since the last interview in which s/he worked for more than 10/20 hours a week and for more than nine weeks. (Prior to 1988, information was collected for jobs worked more than 20 hours a week. After 1988, the number of hours was reduced to 10.) Respondents indicating that they are government employees are asked a follow-up question on whether they work at the federal, state, or local level; self-employed respondents are asked in the *Current Population Surveys*.

User Notes: The coding system used for class of worker was changed beginning with the 1994 survey. Census definitions of these classes are provided in Figure 4.8.1 at the end of this section.

- 1979–93
- 1: private company
- 2: government
- 3: self-employed
- 4: without pay

1994 and beyond
 1: government
 2: private for profit company
 3: non-profit organization
 4: self-employed
 5: working in family business

Survey Instruments: Questions relating to current/most recent job and corporation status for businesses can be found in the "Current Labor Force Status or CPS" section of each year's questionnaire: Section 8 (1979), Section 7 (1980), Section 6 (1981 and 1993), and Section 5 (1982–92 and 1994–98). Information on characteristics of up to five jobs held by the respondent between survey dates is drawn, for the 1979 survey year only, from the main questionnaire (Section 10 "Jobs") and from the *Employer Supplements* for the 1980–2000 surveys. Since 1993, the *Employer Supplement* has been physically a part of the questionnaires.

Data Files: Until 1994, class of worker and type of government worker variables for current/most recent job are located in the "CPS" area of interest on the main NLSY79 data set. Comparable variables for additional jobs held between interview dates are found in the "Job Information" area of interest. Beginning in 1994, the CPS job variables are found in "Job Information" as well. They were all moved to the *Employer Supplement*. Class of worker information for all CPS jobs and up to four additional full-

time, long-term jobs held since the last interview is also available on the NLSY79 Work History Data File. Corporation status of self-employed respondents' businesses has been placed in the various yearly "Misc. xxxx" areas of interest.

User Notes: The "CPS job" is the respondent's current job at the interview date. If more than one job is held at that time, the CPS job/employer is the one at which the respondent works at the most hours. If the respondent is not working, the CPS job is the job most recently held since the date of the last interview. In the *Current Population Surveys*, the CPS job is simply the current employer for whom the respondent works the most hours.

Only information on the first five employers encountered between interviews is released in the NLSY79 public files. However, data collected from any additional jobs are used in creating *KEY* variables on hours and weeks worked. In any survey year, the number of respondents who report more than five jobs is less than one percent of those interviewed.

NLSY79 Children

The Young Adult Questionnaire, for children 15 and older, has contained the same class of worker questions as the main NLSY79 in each survey year. Class of worker variables for each child's mother's CPS job are also provided, with the child as the unit of observation, on the NLSY79 Child Data File. Government worker and corporation status variables for NLSY79 mothers can be found on the main NLSY79 data set.

Survey Instruments: Questions pertaining to the current/most recent job and corporation status of a business can be found within the *Employer Supplements* sections of the NLSY79 Young Adult Questionnaires. See also the NLSY79 discussion above.

Data Files & Documentation: Descriptions of these variables can be found within the "Family General Employment History" section of the *NLSY79 Child Handbook* and are located within the "Employment Income" area of interest on the compact disc. The young adult variables are located in the "YA Job Information" area of interest.

Figure 4.8.1 Definitions of CPS Class of Worker Entries

Private Employees are those who work for wages, salary, commission, tips, piece-rates, or pay in kind. This applies regardless of the occupation at which the employee worked, whether general manager, file clerk, or porter. The definition includes persons working for pay for settlement houses, churches, unions, and other private nonprofit organizations until 1994 when these were independently coded.

Federal Government Employees are those who work for any branch of the Federal Government. This includes persons who were elected to paid Federal offices, civilian employees of the Armed Forces, and some members of the National Guard. It also includes employees of international organizations (e.g., United Nations) and employees of foreign governments, such as persons employed by the French Embassy or the British Joint Services Mission.

State Government Employees are those who work for State governments including paid State officials (e.g., statewide JTPA administrators), State police, and employees of State universities and colleges.

Local Government Employees are those who work for cities, towns, counties, and other local areas. Included are those working for city-owned bus lines, electric power companies, water and sewer service, local JTPA offices, etc. This group also includes employees of public elementary and secondary schools.

Self-Employed Worker refers to a person working for profit or fees in their own business, shop, office, or farm.

Without Pay refers to a person working without pay on a farm or in a business operated by a related member of the household. Room and board and a cash allowance are not counted as pay for these family workers.

Never Worked refers to a person looking for work who never before held a full-time job lasting two or more consecutive weeks.

Source: Interviewer's Manual: Current Population Survey. Washington, DC: Department of Commerce, Census Bureau, July 1985.

4.9 Crime, Delinquency & Arrest Records

NLSY79

The 1980 NLSY79 survey included a special self-report detailing respondents' participation in and income from delinquent or criminal activities such as skipping school, alcohol/marijuana use, vandalism, shoplifting, drug dealing, robbery, assault, or gambling during the previous twelve month period. Adapted from previously used self-report delinquency scales, this instrument was modified for the NLS to accommodate the confidentiality issues raised by in-home administration. In addition, it used an expanded response scale to differentiate very highly delinquent youth from occasional participants. A second set of questions measured involvement with the criminal justice system by assessing the extent of police contacts, resulting criminal convictions, and sentences (probation, incarceration) received.

Related variables collected during this and other survey years include (1) questions on school discipline problems, e.g., whether each NLSY79 respondent had ever been suspended or expelled from school and when/if the youth had returned to school (see the "School Discipline" section of this guide); (2) the childhood residence section of the 1988 survey, which collected information on whether NLSY79 respondents had resided in a detention center/jail/prison during any of their first eighteen years of life (see the "Family Background" area of interest); and (3) a yearly created 'Type of Residence' variable that identifies those NLSY79 respondents who resided in jail at each interview date. Responses of "in jail" to questions within post-1988 *Employer Supplements* and the "Gaps Not Working" sections of the main questionnaires for the reason not looking for work when not employed can also be used to identify incarcerated respondents. (see the "Between Jobs Gaps" and "Misc. xxxx" areas of interest).

Survey Instruments: Section 15 (of the 1980 questionnaire) on "Delinquency and Drugs," Section 16 on "Reported Police Contacts," and the accompanying confidential *Form J* contain the delinquency and police contact questions.

Data Files & Documentation: The 71 variables collected during 1980 are found in the "Illegal" area of interest in the main NLSY79 data set. Background information on the development of the index, the specific procedures used to administer the confidential form, issues intrinsic to measurement of delinquent behavior and criminal activity, and an analysis of the consistency of responses to the various delinquency and police contact measures can be found in two reports authored by Crowley (1981, 1982).

Survey Year	Respondents in Prison/Jail	Survey Year	Respondents in Prison/Jail
1979	26	1989	139
1980	63	1990	134
1981	68	1991	121
1982	91	1992	138
1983	104	1993	146
1984	103	1994	153
1985	105	1996	150
1986	115	1998	137
1987	128	2000	121
1988	128		

Table 4.9.1 Number of NLSY79 Respondents in Jail or Prison at Survey Date

User Notes: Spells of incarceration can be detected by carefully examining the household interview variables from each interview. If a respondent is in jail or in prison at the time of interview, that information is recorded (see the 'Type of Residence' variables discussion in the "Household Composition" section of this guide). Users may wish to take into account the perspective an imprisoned NLSY79 respondent brings to answering survey questions.

Crowley (1982) examined nonresponse in the special 1980 data collection and found it to be fairly low. About 2.5 percent of the sample refused to answer any questions; refusal rates on individual questions ranged from 2.6 to 3.4 percent. Adults were more likely to refuse to answer than minors, and drug-related offenses had the highest nonresponse rates. Refusal rates were higher for males, minorities, the economically disadvantaged, and high school dropouts—those expected to have higher rates of illegal activities. Crowley therefore concludes that a small amount of underreporting probably did take place.

While these illegal activities data are based on self-reports, experts on criminal behavior believe, despite the potential problems with self-reports, that this mode of data collection may be as good as or better than others. Users should consult the work of experts on these issues.

Table 4.9.2 Number of Respondents Reporting Participation within the Past Year in Illegal Activities by Gender & Race/Ethnicity: 1980 NLSY79 (Unweighted)

Activity	Total	Male	Female	Hispanic	Black	Non-Black Non-Hispanic		
Respondents Aged 17 & Under ¹								
Runaway	374	180	194	69	71	234		
Truant	1845	980	865	395	368	1082		
Drinking	2353	1273	1080	373	451	1529		
		A	II Responder	nts				
Vandalism	2131	1588	543	313	468	1350		
Fighting	3315	2390	925	531	1020	1764		
Shoplifting	3040	1716	1324	514	721	1805		
Petty Theft	2237	1498	739	297	444	1496		
Grand Theft	658	541	117	103	178	377		
Robbery	602	466	136	57	222	323		
Assault	4395	2812	1583	556	1152	2687		
Aggravated Assault	1245	880	365	155	389	701		
Marijuana Use	5493	2946	2547	745	1184	3564		
Hard Drug Use	2276	1251	1025	272	303	1701		
Sold Marijuana	1266	880	386	154	236	876		
Sold Hard Drugs	294	208	86	34	57	203		
Fraud	2581	1499	1082	335	792	1454		
Auto Theft	922	623	299	152	210	560		
Breaking/Entering	706	609	97	96	127	483		
Fencing	1343	1031	312	221	293	829		
Gambling	281	233	48	48	85	148		

¹ Age calculated as of date of interview.

		Gender		Race/Ethnicity			Poverty Status in 1979		
Type of Contact	Total	Male	Female	Hispanic	Black	Non-Black Non-Hispanic	Status NA ¹	Not in Poverty	In Poverty
Stopped by Police	2248	1734	514	365	517	1366	145	1610	493
Booked or Charged	1325	1056	269	207	269	849	93	913	319
As an Adult	981	812	169	136	202	643	87	686	208
Convicted	753	612	141	111	134	508	57	505	191
Assault	90	77	13	11	25	54	7	62	21
Robbery	49	46	3	8	21	20	5	26	18
Theft	237	180	57	38	42	157	20	147	70
Fraud/Forgery	17	11	6	1	3	13	1	11	5
Fencing	17	15	2	1	6	10	3	8	6
Property Destruction	62	56	6	5	8	49	7	45	10
Other Property Offense	90	83	7	7	15	68	6	51	33
Gambling	1	1	0	0	0	1	0	1	0
Vice	2	0	2	0	1	1	1	1	0
Drug Offense	106	90	16	7	12	87	9	82	15
Major Traffic Offense	118	104	14	24	8	86	6	91	21
Alcohol Consumption (Minor)	54	41	13	9	2	43	2	41	11
Sentenced Correctional Institution	313	257	56	47	73	193	35	167	111
Youth Correctional	183	139	44	27	41	115	22	83	78
Adult Correctional	157	144	13	24	46	87	17	98	42

Table 4.9.3 Number of Respondents Reporting Contact with the Police and/orCriminal Justice System by Gender, Race/Ethnicity & 1979 Family Poverty Status:1980 NLSY79 (Unweighted)

¹ This refers to individuals for whom the income variable is missing.

References

- Crowley, Joan E. "Crime and Delinquency: Descriptions and Distributions." In *Pathways to the Future: A Longitudinal Study of Young Americans. Preliminary Report on the 1980 Survey.* Michael E. Borus, ed., Columbus, OH: CHRR, The Ohio State University, 1981.
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NLSY79 Children

The 1988–2000 surveys included two sets of 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 (2) the extent of use and age of first use of cigarettes, alcohol, marijuana, and drugs. Mott and Quinlan (1993) provide a discussion of these data from the 1990 fielding.

Starting in 1994 young adult children age 15 and older were asked many of the same questions that those aged 10 to 14 were asked, as well as a series of questions closely resembling those in the 1980 main NLSY79.

Survey Instruments: The 1988–2000 *Child Self-Administered Supplements* contain the questions on crime and delinquency for the NLSY79 Children. The 1994–1998 *Young Adult Self-Report Booklets* contain the questions asked of young adults. In 2000 these self report items were incorporated into the Young Adult CAPI questionnaire.

Data Files: Variables for NLSY79 children can be found within the "Child Supplement xxxx" area of interest of the NLSY79 Child Data File for 1988–2000. Items for young adults are located in the "YA Self" area of interest.

Activity	1988	1990	1992
Stayed out later than parents said	444	598	950
Hurt someone badly enough to need doctor	152	235	380
Lied to parents about something important	398	579	955
Took something from store without paying	100	152	275
Damaged school property intentionally	70	104	183
Got drunk	56	96	189
Parents had to go to school	215	326	497
Skipped a day of school	90	115	248
Stayed out late without permission	131	184	300
Ever used marijuana	20	32	65
Ever used other drugs	9	13	18

Table 4.9.4 Number of Respondents Reporting Engaging in Selected Behavior:1988–92 NLSY79 Children (Unweighted)

Reference

Mott, Frank L. and Quinlan, Stephen V. "The Ten-and-Over Years: Self-Reports from the Children of the NLSY79." Columbus, OH: CHRR, The Ohio State University, 1993.

4.10 Discrimination

NLSY79

Two sets of employment-related discrimination questions have been asked of NLSY79 respondents during select survey years. The first set, included in the 1979 and 1982 surveys, questioned working-age (i.e., age 16 and over) respondents on whether they believed that specific types of discrimination (race, nationality, sex, and age) had caused them problems in getting a good job. The second set of discrimination questions asked those NLSY79 respondents who had served or were serving in the military at the 1980–85 interview dates whether race, sex, or rank discrimination was one of the reasons the respondent had left the military or would choose not to reenlist. Small numbers of respondents reported these types of discrimination as a reason for leaving or not reenlisting in the military. Of related interest are (1) a question asked in the 1990 survey year that allows "discrimination" as a possible reason that a respondent feels no (further) promotions are possible with a given employer; (2) a series of questions fielded in 1980 that asked respondents about the demographic composition of coworkers; and (3) questions in 1996 and 1998 about the gender of employees/coworkers supervised. In 1996, 1998, and 2000, the NLSY79's "Training" section asked respondents if they received any equal opportunity or diversity sensitivity training.

Survey Instruments: Discrimination questions are found in Section 6, "Knowledge of the World of Work" (1979), and Section 17, "On Aspirations and Expectations" (1982). Discrimination in the military is covered in the "Military" sections of the 1980 (Section 6), 1981 (Section 5), 1982–85 (Section 4) questionnaires. The *Employer Supplements* for 1990 contain the promotion discrimination questions, while Section 7 of the 1980 questionnaire includes coworkers' characteristics. The 1996 variables are found in Section 8 and the *Employer Supplements*. The 2000 variable is found in Section 8.

Data Files: The 1979 and 1982 employment-related variables can be found within the "Attitude" area of interest on the main NLSY79 data set; the military-related discrimination variables can be found in the "Military" and "Misc. 1980"–"Misc. 1985" areas of interest. The promotion variables from 1990 can be found in "Misc. 1990," while the coworker demographic characteristics are located in "Misc. 1980." The 1996, 1998, and 2000 training variables are located in the "Training" area of interest and the gender-related job hierarchy questions are contained in the "Job Information" area of interest.

References

Borus, Michael E. Tomorrow's Workers. Lexington, MA: Lexington Books, 1983.

Shapiro, David. "Perceptions of Discrimination and Other Barriers to Employment." In Pathways to the Future: A Report on the National Longitudinal Survey of Youth Labor Market Experience in 1979." Michael E. Borus et al. Columbus, OH: CHRR, The Ohio State University, 1981.

4.11 Drug Use

NLSY79

An extensive set of questions on substance use was included in the 1984 survey, with a more limited follow-up during the 1988 survey on respondents' use of marijuana/hashish and cocaine. The 1984 survey collected information on respondents' use of marijuana as well as illicit and non-prescribed use of amphetamines, barbiturates, tranquilizers, psychedelics, cocaine, heroin, and other narcotics. For each of these substances, information was collected on lifetime use, age at first use, most recent use, and frequency of use during the past 30 days. In addition, retrospective data on respondents' monthly use of marijuana from January 1979 through the 1984 survey date were gathered. The extent of respondents' prescribed use of three types of drugs (amphetamines, barbiturates, and tranquilizers) was also collected. Respondents who were working or in the military were asked whether, since the date of last interview or since their job/military duty began, they had used or "felt high" from one or more of these substances and how frequently they had used each on the job.

A special *Drug Use Supplement* was administered during the 1988, 1992, 1994, and 1998 surveys to collect information on age at first use of marijuana/hashish, crack, cocaine, and other drugs; lifetime use; most recent use; and use in the past 30 days. The 1992, 1994, and 1998 questionnaires also asked about respondents' use of prescribed and nonprescribed sedatives, tranquilizers, stimulants, and pain killers. Beginning in 1994, respondents were asked to directly enter their answers into a laptop computer.

Other drug use questions are found in (1) the 1988, 1990, 1992, and 1994–2000 fertility series, which included questions on use of marijuana or cocaine in the twelve month period before first/second pregnancies (see the "Birth Record xxxx" areas of interest) and (2) the "Delinquency and Drugs" section of the 1980 survey, which gathered information on the frequency with which respondents were engaged during the past year in smoking/selling marijuana or other drugs (see the "Crime, Delinquency, & Arrest Records" section of this guide).

Survey Instruments: The main set of drug use questions can be found in Section 14 of the 1984 and 1988 questionnaires and the 1988, 1992, 1994, and 1998 *Drug Use Supplements*. Section 9 of the 1988, 1990, 1992, and 1994–2000 questionnaires includes the drug use during pregnancy questions. Sections 15 and 16 of the 1980 survey instrument and *Form J* contain the illegal activities series.

Data Files: The "Drugs" area of interest on the main NLSY79 data set contains the drug use variables.

References

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NLSY79 Children

During the 1988–2000 surveys, children who were ten years of age and older answered a series of questions on whether they had ever used marijuana and/or other drugs such as LSD, cocaine, etc. If so, they reported whether such use had occurred in the past three months and how old they were at first use. Mott and Quinlan (1993) describe the substance use data collected during the 1990 fielding. In 1994–2000, a detailed series of substance use questions were also asked of children aged 15 and older.

Survey Instruments: The 1988–2000 Child Self-Administered Supplements and the 1994–1998 Young Adult Self-Report Booklets contain the drug use questions.

Data Files: Drug use variables for the NLSY79 children are described in the "Child Supplement" sections of the *NLSY79 Child Codebook* and are located in the 1988–2000 "Child Supplement xxxx" area of interest for the corresponding years on the compact disc. Items for young adults are located in the "YA Self" area of interest.

Reference

Mott, Frank L. and Quinlan, Stephen V. "The Ten-and-Over Years: Self-Reports from the Children of the NLSY79." Columbus, OH: CHRR, The Ohio State University, 1993.

4.12 Educational Attainment & School Enrollment

NLSY79

Information on NLSY79 respondents' educational experiences has been collected during each survey year. In addition, three special data collections conducted during 1980–83 gathered the following for select universes: (1) supplementary information on degrees and certifications received as of the 1980 survey; (2) detailed information on the amount of time spent at school on each of the past seven days and the amount of time spent in various school-related activities, e.g., attending classes, studying, participating in other activities; and (3) high school course information gathered (directly from school records) during the 1980– 83 transcript surveys. This section will review the primary types of enrollment and attainment data collected during the main NLSY79 surveys. More information on the special school/transcript surveys can be found in the "School & Transcript Surveys" section of this guide. Descriptions of the various standardized test scores available for NLSY79 respondents can be found in the "Aptitude, Achievement & Intelligence Scores" section.

Data have been collected during each NLSY79 survey on respondents' current school enrollment status, highest grade attended, and highest grade completed. Additionally, each survey recorded the month and year in which respondents obtained their high school diploma or General Equivalency Diploma (GED). During select survey years, information was also gathered on type of high school curriculum, whether the respondent was enrolled full- or part-time in college, the types of diplomas or college degrees received, and major field of study in college. Data on the timing of a college degree are available for the early survey years, while summary variables, e.g., 'Month/Year Received Highest Degree' for the highest degree ever received (including high school diploma) and 'Type of Highest Degree Completed Since Last Int,' are available for post-1987 interviews. Beginning with the 1981 survey, information was gathered on the specific months and years in which those respondents who had attended school since the last interview were enrolled. During the 1979–85 surveys, respondents who had served in the Armed Forces since the last interview or were serving at the current interview date were asked a series of questions on high school or college courses taken and years of school completed while in the Armed Forces.

Two sets of variables have been created that summarize each respondent's school enrollment status and highest grade completed as of May 1 of each survey year. Codes for the names and locations of recent colleges attended, i.e., Federal Interagency Committee on Education (FICE) codes, are available for some years on the restricted-release geocode files. Finally, data on highest grade completed are available for household members (available all years), all siblings (1993), mother/father (1979), and current/most recent spouse (1979–82). Table 4.12.1 summarizes the major types of NLSY79 educational status and attainment variables and identifies the survey years during which such data were collected.

Variable	Survey Years
Current School Enrollment Status Currently attending or enrolled in school Grade attending Specific months R was attending regular school since last interview Month/year last enrolled in school (not enrolled) Reason left school (not enrolled) Any high school/college courses taken while in Armed Forces Enrollment status as of May 1 survey year	1979–2000 1979–2000 1981–2000 1979–2000 1979–2000 1979–85 1979–2000
Highest Grade Attended or Completed Highest grade attended since last interview Highest grade completed since last interview Years of school completed while in the Armed Forces since last interview Highest grade completed as of May 1 survey year	1979–2000 1979–2000 1979–85 1979–2000
Type of High School Curriculum Type of current/last school curriculum in grades 9–12 1 st –8 th high school subject during most recent enrollment; grades 9–12 High school courses from the Transcript Surveys Nature of high school program	1979–85 1979 1980–83 1980
Major Field of Study in College Major field of study current/last college attended Major field of study most recent and 2 nd /3 rd most recent college attended	1979–83 1984–86, 1988–90 & 1992–2000
College Status Full time/part time status (in college last enrolled since 9/1 past year) Full time/part time status most recent and 2nd/3rd most recent college	1979–83 1984–86, 1988–90 & 1992–2000
Attainment of a High School Diploma and Other Degrees Ever received degree/diploma Have high school diploma or equivalent Have diploma or GED Month/year received diploma or GED Received degree since last interview Received more than one college degree since last interview Diploma/degree received during or since recent Armed Forces enlistment Highest degree ever received (including high school diploma) Month/year received degree/highest degree Types of diplomas/college degrees received during or since recent enlistment	1979 1979–2000 1979–2000 1979–2000 1980–84, 1989–2000 1981–84 1979–85 1988–2000 1979–80, 1988–2000 1979–84 1979–85
Name and Geographic Location State location of current/last college attended Location of most recent college(s) attended FICE code of most recent and 2 nd /3 rd most recent college attended	1980–82 1984–86, 1988–90 & 1992–2000 1984–86, 1988–90 & 1992–2000

Table 4.12.1 Educational Attainment & School Enrollment Variables: 1979–2000

Table 4.12.1 Educational Attainment & School Enrollment Variables:			
1979–2000 (continued)			

Variable	Survey Years
College Loans Educational loan received for this year's college expenses Educational loan received to cover most recent and 2 nd /3 rd most recent college attended Total amount of educational loans: most recent and 2 nd /3 rd most recent college attended	1979–83 1984–86, 1988–90 & 1992–2000 1984–86, 1988–90 & 1992–2000
Household/Family Members Highest grade completed for each household member Highest grade completed for R's mother, father, oldest sibling Highest grade completed for R's current or most recent spouse Highest grade completed for all siblings	1979–2000 1979 1979–82 1993

Survey Instruments & Documentation: Core education questions are found in the yearly questionnaires in the "Regular Schooling" sections (see Section 3 or 4) and the "Military" sections (Section 7 [1979], Section 6 [1980], Section 5 [1981], and Section 4 [1982–85]). "Regular school" provides credit toward an academic degree or diploma (for a further definition, see Appendix D in this guide). Sections 14 and 12 of, respectively, the 1979 and 1980 questionnaires collected supplementary information on the types of degrees and other certifications that the respondent had obtained.

"Attachment 7: Other Certificate Codes" found within the *NLSY79 Codebook Supplement*, provides the 1979 codes, e.g., associate degree, bachelor's degree, or master's degree, as well as the various types of certifications, e.g., practical nurse, welding, insurance, etc., that respondents reported ever having received. "Attachment 4: Fields of Study in College" provides the coding classifications for the major field of study variables. Copies of the transcript coding form and course codes can be found in the separate *NLSY High School Transcript Survey: Overview and Documentation*. Creation procedures for the 1990–2000 enrollment status and highest grade completed as of May 1 variables are provided in "Appendix 8: Highest Grade Completed and Enrollment Status." "Attachment 102: FIPS Codes" and "Attachment 105: Addendum to FICE Codes," both contained within the *NLSY79 Geocode Codebook Supplement*, provide state coding information for the locations of colleges attended and assignment of codes.

Data Files: Most variables related to schooling are located in the "School," "Degrees & Certificate," "Military," or "Misc. xxxx" areas of interest. The yearly created variables on enrollment status and highest grade completed are found in the "Key Variables" area of interest. The special high school course information has been placed in "Transcript Survey," while the 1981 time use data (which tracked hours and minutes spent at various major activities, including school) is located in "Time Use." Family and household member educational attainment variables are found, respectively, in the "Family Background"

and "Household Record" areas of interest. The "Geocode xxxx" areas of interest on the Geocode CD contain data on the specific colleges attended (FICE codes).

Related Topics: Additional information on schooling as it relates to other areas of the respondent's life, such as employment, income, and child care, has been collected in many survey years, as has information about investments in other types of schooling or training. These schooling-related responses and, in most cases, the specific question subjects to which they pertain, are depicted in Table 4.12.2 by questionnaire section and area of interest.

Questionnaire Section	Area of Interest	Schooling Information
"Current Labor Force Status"	CPS	"school interfered" - reason for absence from work last week
	(there was no CPS	"attends school" - reason worked less than 35 hours last week
	section in 2000)	"going to school" - activity most of survey week
		"left school" - reason began looking for work
		"school employment service" - method of job search
		"going to school" - reason could not accept job survey week
"Current Labor Force Status"	Misc. xxxx (there was no CPS	"lacks (schooling) necessary skills" - reason not currently seeking employment
	section in 2000)	"in school/training" - reason not currently seeking employment
		"training or education opportunities including tuition reimbursement" - fringe benefits at current/most recent job (1988–93) emp. supp. 1994–2000
Employer Supplement	Job Information	"interfered with school" - reason for leaving job (1979)
	Periods Not Working	"going to school" - reason out of the labor force for gap within job
	within Job Tenure	"going to school" - reason for gap within job
"Periods Not Working or in Military"	Between Jobs Gaps	"in school" - reason not working during up to six periods each year (1980–2000)
"Training"	Training	types of schools and training programs enrolled in including business school, vocational/technical institute, apprenticeship, correspondence school, company/military training, etc.
"Income and Assets"	Income	educational benefits from G.I. Bill or VEAP/scholarships, fellowships, grants
"Child Care"	Child Care	"going to school or college" in last four weeks - reason for needing child care
		if satisfactory child care were found, would R go to school more hours/would R go to school (1982–84)

Table 4.12.2 Other Schooling-Related Variables

User Notes: The longitudinal collection of schooling experiences generates the possibility of respondent-reported inconsistencies. Mauldon (1990) reports on the discrepancies in NLSY79 retrospective versus panel data for one subset of NLSY79 variables, those containing information on school absences. A review of NLSY79 schooling data (Chuang 1990) indicated the following types of inconsistent observations: (1) respondents currently attending school whose "grade currently attending" is the same as the highest grade completed; (2) highest grade attended or grade currently attending decreases over time; (3) highest grade completed decreases over time; (4) highest grade attended or grade currently attending is the same as the highest grade reported for a previous year; (5) highest grade completed was less than 12 but greater than zero as of the year in which the respondent said he or she received a high school diploma; and (6) highest grade attended or grade currently attending is less than the highest grade completed at the same year. Some of these inconsistencies reflect complications from interrupted careers in college, transfers between colleges, and changes in major field of study. Dilemmas inherent in measuring educational attainment in another national survey, the *Current Population Survey*, some of which have relevance for the NLSY79, are discussed in Kominski and Siegel (1993) and Frazis, Ports, and Stewart (1995).

Due to some problematic coding practices, cross-wave matches of original supplemental FICE codes cannot be assumed. Persons for whom matches of these supplemental codes are an important consideration should use the revised set of FICE codes in the Geocode data file and the "FICETYPE" variables describing the type of code assigned.

On the 1994 release of the data, a clean-up was conducted on the coded and created schooling variables. Although this clean-up removed most of the inconsistencies described above, users should be aware that some problems continue to exist. For a discussion of the source of error in and adjustments made to these standard variables, see Appendix 8 in the *NLSY79 Codebook Supplement 1979–2000*. Creation procedures for recent 'Highest Grade Completed' variables are provided within the NLSY79 documentation. This computer code factors the following information into the attainment status of each NLSY79 respondent: (1) school attendance since last interview; (2) grade or year of school attending; (3) highest grade of regular school ever attended; (4) highest grade or year of school completed and for which grade credit was received; (5) receipt of a high school diploma or GED since last interview; (6) receipt of diploma or GED; (7) month/year last enrolled; and (8) current enrollment status. Users needing creation procedures for earlier survey years should contact CHRR. In addition, revised 'Highest Grade Completed' and 'Enrollment Status' variables, which seek to clean up some of the inconsistencies noted above, have been added to the data set. See Appendix 8 in the *Codebook Supplement* for a description of these revisions.

References

- Chuang, Hwei-Lin. "Descriptions for the School Array and Highest Grade Completed Array." Draft Notes, CHRR, The Ohio State University, 1990.
- Frazis, Harley; Ports, Michelle Harrison; and Stewart, Jay. "Comparing Measures of Educational Attainment in the CPS." *Monthly Labor Review* 118,9 (September 1995): 40–44.
- Kominski, Robert and Siegel, Paul M. "Measuring Education in the *Current Population Survey.*" Monthly Labor Review 116,9 (September 1993): 34–38.
- Mauldon, Jane. "How Well Do Retrospective Recalls Match Panel Reports." Working Paper, University of California Berkeley, 1990.

NLSY79 Children

Schooling information is available within the NLSY79 Child Data File on (1) children assessed during each child survey year; (2) NLSY79 mothers; (3) members of the mother's household such as spouse, partner, or other adult household members; (4) young adult respondents; and (5) partner or spouse of the NLSY79 children aged 15 and older, the young adults.

Child's Schooling: Current school enrollment and grade information has been collected during the child assessment surveys for each child four years of age or older. Grade information is gathered for both those children currently attending and those who have ever attended regular school. Post-1986 child surveys included a set of questions for children three years of age or older (under age 9 in 1990) on whether they were attending nursery school or a preschool program or had ever been enrolled in a preschool program, 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. Mothers of children aged ten or older (1986-94) or five and older (1996-2000) were asked during post-1986 child assessment interviews for additional information on their child's schooling experiences. For those children attending school, two sets of questions were fielded on the type of school attended. The first differentiates between "public," "private," or "religious," while the second identifies the school as a "school for gifted children," a "school for handicapped children," or a "regular public or private school." Information was also collected for those children attending school on (1) whether the child was attending special classes for remedial or advanced work and (2) whether the child had ever repeated a grade and, if so, the reason(s), e.g., the child had failed academically, was too young or immature, had moved to a more difficult school, was truant, frequently absent, etc. Reasons why children were not attending school were identified by each mother; coding categories include expulsion/suspension, physical/emotional/mental condition, the school was closed, and the child's father would not let the child attend.

During the child interviews, children ages ten and older (including young adults) supplied information on (1) the grade they currently (or had last) attended; (2) characteristics of their school; and (3) satisfaction

with their school. Satisfaction items addressed to the children are identical to those asked of their mothers in 1979. Mott and Quinlan (1993) discuss these child data. Finally, the 1996 schooling section of the survey was augmented for both the children aged 10 to 14 and the young adults. This expansion asked the children about the extent of involvement by their parents in homework and the school community. It also solicited information on the frequency of certain activities in the classroom, such as using a textbook or workbook or having student presentations. The Young Adult survey also includes questions relating to high school and college attendance, including types of schools and degree attainment.

As was done with their NLSY79 mothers, a survey was done of the schools NLSY79 children attended. This school survey collected information for the 1994–95 school year during 1995 and 1996 for children over the age of five. The school survey was comprised of three parts. The first part was a questionnaire completed by the principal of the school. Data from this questionnaire include information about the characteristics of the school, school policies and practices, and school-community interfaces. The second part of the survey was a questionnaire filled in by the school's office personnel. This questionnaire asked questions about the child and included information on the child's grade, attendance record, and involvement in special programs. The third part of the survey was transcripts from the school for the child. Data from some or all of these parts are available for 4,441 children. Readers interested in more information should consult the *NLSY79 Child School Survey User's Guide*.

Mother's Educational Enrollment & Attainment: Two sets of variables on the schooling and educational attainment of each mother have been created for the child data set: 'Highest Grade Completed by Mother' as of each interview and whether or not 'Mother Currently is Attending or is Enrolled in Regular School.' Users of the Child CD-ROM must access the main youth data to obtain all educational status and attainment variables listed earlier in Table 4.12.1.

Spouse/Partner & Adult Household Members' Educational Attainment: Three sets of variables are available for each survey year on the educational attainment of other members of the mothers' household (HH): (1)'HGC (Highest Grade Completed) by Spouse of mother in HH'; (2) 'HGC by Partner of mother in HH'; and (3) '# of Adult HH Members with Highest Grade Completed,' which groups household members by years of schooling, e.g., "less than 12," "12–13," "14–15," "16 or more."

Survey Instruments & Documentation: The child's current school enrollment and grade information is collected within Section 1 "Background" of each assessment year's Child Supplement. In 1994–2000, this information was collected within the schooling section of the NLSY79 Young Adult Questionnaire for children aged 15 and older. The type of school — reason not attending child series were collected within the "School and Family Background" sections of the 1988, 1990, 1992, 1994, 1996, and 1998 Mother

Supplements. The child school description and satisfaction measures were gathered within the 1988–2000 Child Self-Administered Supplements and the 1994, 1996, and 1998 Young Adult Self-Report Booklets.

Data Files: The child's current school enrollment and grade variables and the child school description and satisfaction measures are located in the "Child Supplement xxxx" areas of interest for the corresponding year. The type of school and reason not attending variables have been placed within the "Mother Supplement xxxx" areas of interest for the relevant years. The two created variables on mothers' schooling can be found in the child area of interest "Family Background." Variables describing the educational level of household members have been placed within the "Mother's Household Composition" area of interest. The young adult variables are located in the "YA School" area of interest.

References

- Mott, Frank L. and Quinlan, Stephen V. "Participation in Project Head Start: Determinants and Possible Short-Term Consequences." Columbus, OH: CHRR, The Ohio State University, 1992.
- Mott, Frank L. and Quinlan, Stephen V. "The Ten-and-Over-Years: Self-Reports from the Children of the NLSY." Columbus, OH: CHRR, The Ohio State University, 1993.
- "NLSY79 Child School Survey of 1994–1995 User's Guide," CHRR, The Ohio State University, December 1997.

4.13 Family Background

NLSY79

Family background is a key element of the NLS because parent and sibling attributes have a significant impact on a respondent's future life experiences. This section examines the data available on the NLSY79 respondents' parents and siblings as well as on the respondents' early characteristics.

Parent Information

The majority of parental information was collected in the 1979 survey (see R00061.–R00089.). Users are cautioned that a significant amount of data are legitimately missing in this section. For example, 28 respondents stated that they never knew their mother and 230 stated they never knew their father. These individuals were skipped over all parent questions in 1979. Data are also missing for 121 additional respondents who did not know in what state or country their mother was born and 269 who did not know their father's birthplace. Respondents able to answer questions about their parents were asked:

- (1) *Mother's and Father's Birthplace*. The raw data show 11,310 mothers and 11,161 fathers were born in the United States, while 1,328 mothers and 1,223 fathers were born in another country. The survey also requested information on the specific state or foreign country in which the parent was born.
- (2) *Highest Grade Completed*. Almost half of mothers (46 percent) and fathers (49 percent) either have less than a high school diploma or have "don't knows" or "invalid skips" reported.
- (3) *Mother and Father Living or Dead*. In 1979, only 324 respondents stated their mother had died but 1,006 respondents stated their father was no longer living.
- (4) *How Much of the 1978 Calendar Year Did Mother and Father Work for Pay*? Respondents reported that 59 percent of the mothers and 81 percent of the fathers worked for pay during all or part of 1978. An additional question asked if the parent worked more or less than 35 hours a week.
- (5) *Mother's and Father's 3-Digit Occupation.* The most often cited occupations for a mother were Clerical and Kindred worker (1,760) while for a father they were Craftsman, Foreman, and Kindred worker (2,310).
- (6) *Does Respondent Live With Parents?* There are two separate variables that asked with whom the respondent lived. The one-third of respondents who did not live with their mother and three-eighths not living with their father were asked the distance they lived from that parent.
- (7) *Do Parents Live Together*? If the respondent was not living with either parent, the interviewer asked if their mother and father lived in the same household.

Parental Age: Many researchers are interested in knowing how old a parent is when a child is born. This subsection explains how to calculate the age of a respondent's parent at the respondent's birth by subtracting the respondent's age in 1979 from their parent's age in 1979.

Much of the age information comes from questions asked in 1987 and 1988 that determined when most parents were born. In 1987, respondents were asked for the day, month, and year that their natural

parents were born. If they did not know, respondents were asked for that parent's age in years. In 1988, the questions were repeated, but only respondents who did not answer the 1987 series were asked to provide this information. The program in Table 4.13.1, which calculates the father's age in 1979, provides three separate models for creating a variable to calculate parents' ages. The computer code is listed in the second column, with an explanation in the third column. This program, and the similar one for mothers, results in an age for almost 77 percent of fathers and almost 87 percent of mothers.

Other Parent Information: Researchers can find additional information about parents in the household record if the parents lived with the respondent during any of the survey years. Parents can be found in the household record by searching the relationship fields. The relationship code for fathers in the household is "4," while mothers are coded "5." The household record in each year contains information on the person's age, highest grade completed, sex, and work history in the past calendar year.

Α	if (R2303200 > 0) then dad_age = R2303200 - 8	1) If age in 1987 exists, set age to - 8. The subtraction results in the father's age in 1979 NOT 1987. End algorithm.
	if (R2505400 > 0) then dad_age = R2505400 - 9	2) If age in 1988 exists, set age to age -9. End algorithm.
В	if (R2303100 ^= 66) and (R2303100 > 0) then dad_age = 79 - R2303100	 Try birth year from the 1987 survey. Note 66 means the respondent never knew the parent.
	if (R2505300 ^= 66) and (R2505300 > 0) then dad_age = 79 - R2505300	 Try birth year from the 1988 questionnaire.
С	if $((R0175800 = 4)$ and $(R0175900 > 0))$ then Dad_age = R0175900; if $((R0176700 = 4)$ and $(R0176800 > 0))$ then Dad_age = R0176800; if $((R0177600 = 4)$ and $(R0177700 > 0))$ then Dad_age = R0177700; if $((R0178500 = 4)$ and $(R0178600 > 0))$ then Dad_age = R0178600; if $((R0179400 = 4)$ and $(R0179500 > 0))$ then Dad_age = R0179500; if $((R0180300 = 4)$ and $(R0180400 > 0))$ then Dad_age = R0180400; if $((R0181200 = 4)$ and $(R0181300 > 0))$ then Dad_age = R0181300; if $((R0182100 = 4)$ and $(R0183100 > 0))$ then Dad_age = R0182200; if $((R0183000 = 4)$ and $(R0183100 > 0))$ then Dad_age = R0183100; if $((R0183900 = 4)$ and $(R0184000 > 0))$ then Dad_age = R0184000; if $((R0184800 = 4)$ and $(R0184900 > 0))$ then Dad_age = R0184900;	Look at the household record to see if the father lived in the household in 1979. If the father lived in the household, his age should be listed. Fathers are coded as "4" on the household record.

Table 4.13.1 Computer Code to Create Father's Age in 1979

Siblings

The majority of sibling information was collected in two phases: One set of questions was asked in 1979, while the second set of questions was asked in 1993. Users are cautioned that some sibling data is missing. The first sibling question in 1979 (R00090.) asked if respondents were certain or uncertain about who their brothers and sisters are. This question shows that 1,814 out of the 12,686 respondents were uncertain of the identities of their siblings. Respondents who were unsure were instructed to "think of

whomever you consider as your brothers and sisters" as the valid set of siblings. Hence, half-brothers and sisters for some, but not all, respondents will be included in the 1979 set of questions. The 1979 questions (R00090.–R00095.) capture the following information:

- (1) *Number of Siblings*. The raw data show that the modal number of siblings is two. Respondents' answers to this question range from zero siblings to 29.
- (2) Number of Siblings Attending School. The raw data show that the modal number of siblings in regular school is one. Respondents' answers to this question range from no siblings in school to 16.
- (3) Number of Siblings Older Than R. Most respondents had 1 sibling older than themselves.
- (4) Age of Oldest Sibling. The age of a respondent's oldest sibling (older than the respondent) ranges from 14, just above the minimum age for inclusion in the survey, to 52 years old.
- (5) *Highest Grade Completed By Oldest Sibling.* As had the parents, the typical (modal) oldest sibling completed 12 years of schooling.

Understanding siblings is important because brothers and sisters often provide influential behavioral examples for younger siblings. Beyond the 1979 data, a special sibling supplement is available. This module was funded in 1993 by the Bureau of Labor Statistics in an effort to assess the general representativeness of the siblings contained in the multiple respondent records of the original NLSY79 sample. The module, which is located on the CD-ROM as reference numbers R41251. to R41345., contains information on up to 12 siblings for each respondent. For each sibling, the interview gathered:

- Number of years younger or older than respondent
- Sex
- Highest grade completed
- Number of children
- Age of sibling at birth of first child

For the 140 respondents who have more than 12 siblings, an additional set of questions gathered data on the characteristics of each respondent's youngest sibling. Researchers using this data set should read a special report on the supplement's data quality, available from NLS User Services. The report, entitled *The Collection of Sibling Attributes: Some Data Quality Issues*, shows that "response rates are highest for items which are easier to recall and which do not change in 'value' over time as siblings leave the parental household and reduce daily contact" (Haurin 1994). Additionally, the report finds that response levels drop substantially when a respondent has more than four brothers or sisters.

In 1994 a special 14-question module was added to the "Marital History" section of the questionnaire. This module confirmed information on respondents who, during the 1993 sibling supplement, stated that they were either a twin or triplet. Questions in this module also provide additional information on the respondent's twin (triplet) sibling(s). These items are contained in variables R45215.–R45228.

Respondent Background

The NLSY79 contains a variety of information on a respondent's background characteristics. Researchers interested in the race and ethnicity of a respondent are encouraged to read the topical section entitled "Race, Ethnicity & Nationality" in this guide. Researchers interested in a respondent's education should refer to the "Educational Attainment & School Enrollment" section. The current topic focuses on three sets of background information: religion, home life at age 14, and residence history.

Religion: Questions about religious affiliation were asked of NLSY79 respondents in 1979, 1982, and 2000. The 1979 questions asked the respondents in what religion they were raised and their present religion. In addition to religious affiliation questions, the survey also asked the frequency with which a respondent attended religious services. Respondents were asked if they never attend, attend several times a year, about once a month, three times a month, about once a week, or more than once a week.

Table 4.13.2 summarizes responses to the questions on religion for respondents who provided valid answers to all three. The table shows that while 96 percent of all respondents were raised in some type of religion, only 89 percent had a religious affiliation in 1979 and 1982. Users should note that many people who were classified as "other" religions in 1979 were reclassified in 1982 as "general Protestant."

Religion	Raised As	Percent	Affiliation in 1979	Percent	Affiliation in 1982	Percent
None	495	4.1	1361	11.3	1356	11.3
Protestant	571	4.8	615	5.1	1580	13.2
Baptist	3445	28.7	3082	25.7	3183	26.5
Episcopalian	194	1.6	164	1.4	163	1.4
Lutheran	645	5.4	580	4.8	599	5.0
Methodist	943	7.9	828	6.9	771	6.4
Presbyterian	319	2.7	270	2.3	290	2.4
Roman Catholic	4037	33.7	3697	30.8	3739	31.2
Jewish	104	0.9	99	0.8	96	0.8
Other	1242	10.4	1299	10.8	218	1.8
Total	11995	100	11995	100	11995	100

Table 4.13.2 Religious Affiliation and Upbringing of Respondents (Unweighted Data)¹

¹ Universe is restricted to respondents with valid responses to all three questions.

The sequence of questions on religion was also asked about the respondent's spouse in 1982 and 2000, providing researchers with religious affiliation for both partners in the same year. Additionally, in 1988, 1992, 1994, 1996, 1998, and 2000, respondents were asked how often they argue about religious matters with their spouse (see, for example, R27085., R38831., and R49587.).

Home Life at Age 14: The 1979 NLSY79 survey contained a section asking respondents to describe aspects of their life at age 14. The first questions determined whether the respondent lived in the United States or outside its borders at age 14. Respondents living in the United States were asked whether they lived in a rural or urban area. If they lived outside the United States, they were asked in what country.

After establishing the respondent's location, the survey then asked about the adults the respondent lived with during this time. These data provide information on the household structure during the respondent's teenage years. The survey additionally asks about the work characteristics and occupations of adults in the household.

Finally, the family background at age 14 section included three general literacy questions. The first question asked if the respondent or anyone else in his or her family regularly received magazines during the time period in question, while the second asked about the receipt of newspapers. Fifty-six percent of NLSY79 respondents stated they or a family member received magazines; more than 76 percent received newspapers. The third question asked about library cards. Seventy percent of all respondents reported that either they or someone in their household held a library card.

Residence History: Respondents' family backgrounds were also addressed in 1979 and 1988 through questions about childhood residence. The 1979 question asked, "With whom were you living when you were 14 years old?" In 1988, a much broader set of questions was funded by the U.S. Department of Health and Human Services to supplement the 1979 data. This supplement, the *Childhood Residence Calendar*, enlarged the 1979 question's focus by creating a retrospective year-by-year history of each respondent's childhood from birth to age 18. The supplement focused on long-term changes by asking respondents to report living arrangements that lasted at least four months.

The key 1988 residence question is R27379. This question asked each respondent if they lived with both biological parents from birth to age 18. Respondents who stated yes were skipped over the residence section while respondents stating no were asked to fill out the residence history. In 1988, every interviewed respondent completed this question; there are no missing responses.

Information was obtained on ages at which a respondent lived with either a biological, step, or adopted mother or father. For those individuals not residing with any parent-type adult at a given age, follow-up questions detailed other multiple forms of living arrangements such as residence with grandparents, other relatives, foster care, and group or institutional arrangements. Auxiliary questions documented the age at which the respondent stopped living with a parent, which parent-type this happened to be, the reason for the change, and the frequency of visitation with the absent parent within one year after the change. The 1988 responses also provide detailed information on the reason and length of time respondents spent in alternative living arrangements. This enables a researcher to identify how often a respondent changed residence due to divorce or parental death. Users should note that if a respondent lived with at least one parent, the survey prevented them from reporting that they also lived in an alternative arrangement. For example, if a respondent lived with both her mother and grandmother, she would be marked as living with one parent even though potentially up to three adults are present in the household.

A report providing a description and evaluating the quality of this data is available from CHRR (Haurin, 1991). Haurin (1991) compared the 1979 responses with the retrospective survey and found similar answers (see Table 4 in the Haurin study). The data show that, in 1988, about 1.6 percent more of the sample indicated they lived with two parents when they were 14 years old than had reported this arrangement in 1979. The difference was larger among minorities than non-black/non-Hispanics.

Survey Instruments: Interested users should see Section 1 of the 1979, 1982, or 2000 NLSY79 questionnaire for parental background information, home life at age 14, or religion questions. Section 2 of the 1987 questionnaire contains parental age information. Section 2 of the 1993 questionnaire contains the sibling module. Additional childhood information was collected in Section 16 of the 1988 questionnaire.

Data Files: Most of the variables described above may be found within the "Family Background" areas of interest.

References

- Haurin, R. Jean. *Childhood Residence Patterns: Evidence From The National Longitudinal Surveys of Work Experience of Youth.* Report to the U.S. Department of Health and Human Services. Columbus, OH: CHRR, The Ohio State University, 1991.
- Haurin, R. Jean. "The Collection of Sibling Attributes: Some Data Quality Issues." Columbus, OH: CHRR, The Ohio State University, 1994.

NLSY79 Children

Due to its design, the entire NLSY79 main survey provides family background information for the Children of the NLSY79. However, there are a few questions that supplement the data collected in the main survey. The young adults are asked about the occupation, educational attainment, and race/ethnicity of their biological father. They also provide information on the frequency of contact with their biological father if he does not reside in their household and/or with their mother if they no longer reside in her household.

Survey Instruments: Section 2 of the young adult questionnaires contains the questions about the respondent's biological father, as well as contact with absent parent(s) questions.

4.14 Fertility

NLSY79

Every NLSY79 survey has included a section on fertility. In each survey year, both men and women are asked if they have had children. NLSY79 surveys are designed so that it is possible to construct a detailed history of each respondent's fertility.

The first three NLSY79 surveys (1979, 1980, 1981) have very short fertility sections. In 1979, respondents were asked if they had ever had any children. For those individuals who answered "yes," the number of children as well as their birth dates were recorded. In addition, youths were asked about the total number of children they desired and expected to have. The 1980 and 1981 surveys updated information for respondents who had any children since the last survey.

In 1982 the fertility data collection was greatly expanded due to additional funding provided by the National Institute of Child Health and Human Development (NICHD). During this survey, full retrospective information about the respondent's fertility history was collected. Men and women were sent through separate sections. Men were asked not only the child's birth date but also the child's sex, where the child lived, and, if the child was deceased, the date of death. Women were asked the same information as the men in addition to detailed questions about each pregnancy, enabling researchers to track the wantedness, length, and outcome of each pregnancy. Information about the interval between each live-birth pregnancy was also recorded, such as whether or not the couple was using birth control prior to the pregnancy. Combining these data with questions about whether the pregnancy was wanted provides researchers with the ability to distinguish between planned and unplanned pregnancies. Male respondents were asked about the wantedness of the first child only. Finally, all respondents were questioned about current contraceptive practices and their expectations about future fertility.

Beginning in 1983, an even longer fertility section was fielded. In this larger section, additional questions were asked of all respondents regarding sexual activity and contraceptive use. Men provided details about children who resided outside the home, such as how far away they lived and how often the respondent visited with them. Women responded to additional questions about their health care during pregnancy, i.e., if they smoked or drank during pregnancy. Additionally, females were asked how often they visited a doctor for prenatal care. Detailed questions also recorded the time, number, and variety of prenatal procedures such as sonograms, ultrasounds, and amniocentesis that were performed. This expanded fertility section asked details about the birth, such as length of hospital stay, child's birth size, and each baby's immunization record. Lastly, in 1983, respondents who were noninterviews in 1982 were administered a fertility supplement that mimicked the retrospective fertility section collected at the 1982 interview.

In 1987 the fertility section began a new pattern. In odd years, such as 1987, 1989, 1991, and so forth, only a sub-section of the fertility questions was fielded. In even years, such as 1988, 1990, 1992, and so on, the full set of fertility questions similar to those asked in 1986 was fielded.

The odd year fertility sections verified information about previously reported children and asked about the current residence of each child. Additionally, respondents were asked if they had given birth to any more children since the last survey. If births had occurred, the name, sex, date of birth, and current living arrangements of the child were recorded.

Since 1986, even year "Fertility" sections have collected detailed information in conjunction with the child assessments and interviews. To provide users with a detailed understanding of the long fertility section, Table 4.14.1 presents a general outline of the major components of this section of the NLSY79 questionnaire. Because there are minor variations on content and universes over time, users are advised to review the questionnaires for the survey years of interest prior to undertaking analyses.

All Re	spondents		
Validate known biological children (name, birthdate, sex)	Validate known nonbiological children (name, birthdate, sex)		
Current residence information for each biological child	Number of additional children respondent expects		
For each biological child not residing in household ask:	Expected time to arrival or interval of next child		
How far does child live from respondent? How often do you see the child?	Birth control methods used by respondent		
Male R	espondents		
For each child in household ask: Does biological mother live in household?	Had any children since last interview?		
How often does child see biological mother? Wantedness of most recent child	Number of children		
Female	Respondents		
Have you been pregnant since last interview?	For each pregnancy ending in live birth: Prenatal doctor visits		
When did pregnancy begin, end?	Alcohol/cigarette/drug use during pregnancy		
Result of pregnancy (birth, miscarriage, etc.)	Other prenatal behaviors (vitamin intake, salt intake, etc.) Amniocentesis, ultrasound performed		
Did respondent want to become pregnant?	Was child born early or late?		
Confidential abortion card	Cesarean birth Weight gain during pregnancy		
For each child in household ask: Does biological father live in household? How often does child see biological father?	Child's birth size Length of hospital stay Well baby/sick baby health care in first year Was child breast fed?		

 Table 4.14.1 Questions Asked of Respondents in Long Fertility Section

 during Even Survey Years

In 1984, the NLSY79 began collecting information on abortions via a self-reported confidential card. This method of collecting sensitive information significantly improved the reporting of this type of pregnancy outcome. For an evaluation of the abortion information, users should consult Mott (1985).

User Notes: Researchers constructing pregnancy histories should understand a subtle change that began with the 1992 survey. Prior to 1992, the questionnaire asked female respondents to report about pregnancy episodes since the last fertility questions were asked (usually two years earlier). Beginning in 1992, the questionnaire asked respondents detailed questions about pregnancies which ended in a live birth only. While the total number of pregnancies can be determined, distinctions between miscarriages and stillbirths are not made. In addition, while dates of all abortions are collected via the confidential card, only the end date of the first non-live birth pregnancy is collected in the fertility section proper. The outcome of this first non-live birth pregnancy is not asked and thus could either be a stillbirth, miscarriage, or abortion.

Questions on nonbiological children were first asked in 1982, were repeated in 1984 and 1985, and have been regularly included in all even year surveys since 1986. With some variations between survey years, researchers can identify whether a child is step or adopted, whether they are deceased, the gender and birth date of each child, and the child's usual place of residence. A detailed written and statistical description of these data can be found in Center for Human Resource Research (1991).

Fertility History

Researchers can create fertility event histories in a number of ways. One method is to extract the variables from each year's survey data which record when each child was born. However, NLSY79 data show that this is not an accurate method for creating an event history. In each survey, respondents are asked to correct information in the fertility roster. (Prior to 1993, this was the *Children's Record Form* or *CRF*. Beginning in 1993, this is the BIO/NBIO Child Roster). Each year, numerous changes are made. For example, in the 1994 survey, parents changed some portion of the birth record for 548 children. While this number appears high, the vast majority of changes are to the spelling of children's names.

Because the raw recorded data on dates of birth, gender, and status (adopted, deceased) entered on the *Children's Record Form* (CRF) are subject to interviewer as well as respondent error, NLSY79 staff created a fertility event history beginning in 1982. This was done to aid users and, at the same time, evaluate the quality of the NLSY79 fertility data. This series, found in the "Fertility and Relationship History/Created" area of interest, lists a number of variables including the birth day, month, and year of every child born to NLSY79 respondents; numbers and outcomes of pregnancies; ages of respondents at the birth of selected children; dates of death for children who have died; and usual residence of children.

Users should understand that the "Fertility and Relationship History/Created" area of interest has been part of the NLSY79 data set for many years and consists of edited and constructed variables that incorporate the results of a significant cleaning and editing process begun in the early 1980s. This effort began as part of an evaluation of the retrospective fertility data collection in 1982/1983 in comparison to base year and updated collections that took place in 1979, 1980, and 1981. Additional evaluations have been conducted periodically since then. For further information on the quality of NLSY79 fertility data, users should see Mott et al. (1983) and Mott (1985, 1998). A complete description of the contents of the "Fertility and Relationship History/Created" area of interest is provided in Appendix 5 of the *NLSY79 Codebook Supplement* and also describes how the data were checked, lists research reports that investigate the quality of the data, and explains special coding and edit flags.

Age at First Birth

Beginning in 1982, every NLSY79 data release has included a created variable that tracks the age of respondents when they first give birth. The graph of age of first birth as of the 1996 survey is shown in Figure 4.14.1. Readers can also find created variables on the CD-ROM that track how old the respondent was when the second and third births occurred.

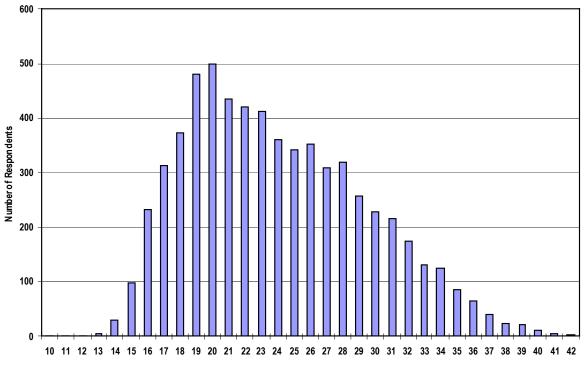


Figure 4.14.1 Age at First Birth for NLSY79 Respondents as of the 2000 Interview

Note: Graph created from 2000 variable R70144.

Fertility Expectations and Desires

The fertility section provides researchers with an opportunity to examine whether expectations about the future compare accurately with what actually happens in respondents' lives. In 1979 and 1982, respondents were asked how many children they desired.

In 1979, 1982, 1983, 1984, 1985, 1986, and every even year since 1986, respondents have also reported on the number of children they actually expect to have. Table 4.14.2 compares the number of children desired by the youth at the time the surveys began in 1979 with the number of children born to each respondent by 2000. The table suggests that typical respondents have had fewer children by 2000 than they desired when they were ages 14–21.

Number of Children		Number of Children Born (as of 2000)							
Desired (in 1979)	0	1	2	3	4	5	6	7	8 & up
0	195	120	156	71	28	13	2	0	0
1	103	119	174	83	36	9	6	4	3
2	701	665	1271	632	264	86	32	10	5
3	332	255	501	318	114	43	9	6	2
4	209	167	324	210	105	36	11	9	7
5	45	40	66	54	28	12	2	1	1
6	26	21	41	35	14	6	1	0	1
7	7	5	8	8	9	1	0	0	0
8 & up	20	15	28	18	9	4	1	0	1

Table 4.14.2 Number of Children Born to NLSY79 Respondents by 2000vs. Number of Children Desired in 1979

Note: Number of desired children is found in R00132., while the number of children ever born as of the 2000 interview is found in R70141.

The difference between actual number of children and the number desired is quantified in Table 4.14.3. This table shows that by 2000, 25.3 percent of the respondents had matched the number of children with their desired total. At the same time, 24.8 percent had more children than originally desired while 49.9 percent had fewer children than they would have liked.

Researchers should note that while NLSY79 respondents are past their peak fertility years, upcoming surveys will record the birth of additional children and thus will likely alter these comparisons somewhat.

Difference between Desired and Actual	# of Respondents	Percent
More C	children Than Desired	
+8	1	0.0%
+7	5	0.1%
+6	9	0.1%
+5	34	0.4%
+4	78	1.0%
+3	213	2.7%
+2	558	7.0%
+1	1078	13.5%
	Exact Match	
0	2021	25.3%
Fewer	Children Than Desired	
-1	1513	19.0%
-2	1350	16.9%
-3	613	7.7%
-4	302	3.8%
-5	83	1.0%
-6	51	0.6%
-7	17	0.2%
-8	48	0.6%

Table 4.14.3 Difference between Number of Children Bornto NLSY79 Respondents by 2000 vs. Number of Children Desired in 1979

Note: Derived by taking the difference of number of desired children (R00132.) and number of children ever born as of the 2000 interview (R70141.).

Fertility and Relationship History

The 2000 release of the NLSY79 data includes a new series of constructed variables for each survey year that provide information about the respondent's relationship status. All surveys were examined to match names of spouses and/or partners for the entire administration of the NLSY79 from 1979 to 2000. The first variable provides information about the respondent's total number of spouses and/or partners since 1979 and can range from 0 to 9. The percentage of respondents who have never reported having a spouse or partner can be found in Table 4.14.4.

Second, a unique code is assigned to each new spouse/partner at the interview date. If the same spouse or partner resides with the respondent during the next survey round, the spouse or partner code remains the same. If the respondent has a new spouse or partner, the next available number is given to that person. If in a later survey round the respondent is reunited with a previous spouse or partner, the number of spouse/partners is not increased, and the code for that year reflects that spouse/partner's original number .

Year	Percentage	Year	Percentage
1979	88.2	1989	26.0
1980	82.1	1990	23.2
1981	74.9	1991	22.3
1982	67.0	1992	20.2
1983	59.0	1993	18.9
1984	52.2	1994	17.6
1985	48.0	1996	15.9
1986	37.7	1998	14.9
1987	35.5	2000	13.3
1988	29.9		

 Table 4.14.4 Percentage of Respondents Who Have

 Never Reported Having a Spouse or Partner

The second created variable reveals whether the person living with the respondent is a spouse, coded 1, or a partner, coded 33. In some instances, the exact relationship is indeterminate in a given round; in these cases, a code of 36 is used. If no spouse or partner is present at a given survey point, but the respondent has reported a spouse/partner in the past, their relationship code will be zero. Respondents with no known spouses/partners receive a code of -999.

There is no guarantee that the same individual(s) were present between survey rounds or that all partners are accounted for, as a spouse or partner may have appeared between survey rounds but not have been present at any survey point. Early examination suggests that this applies to only a modest proportion of cases. In some instances, indentification of spouses who only were present between rounds may be possible by using the NLSY79 marriage history, as well as the marriage transition information available at each survey point.

Survey Instruments and Documentation: Information is found in the "Fertility" section of each questionnaire. For additional details on the edited and cleaned fertility data found in area of interest "Fertility and Relationship History/Created," see Appendix 5 in the *NLSY79 Codebook Supplement*.

Data Files: Raw unedited data on fertility, pregnancy, sexual activity, and contraception can be found in areas of interest "Children," "Child Record Form/Biological," "Birth Record," and "Birth Record xxxx." Area of interest "Fertility and Relationship History/Created" contains edited and created variables on fertility, pregnancy, and marriage.

Related Topics: See the "Sexual Activity & Contraception" and "Child Care" sections of this guide. For information on nonbiological children, see the "Household Composition" or "Gender" sections of this guide and areas of interest "Child Record Form/Nonbiological" and "Birth Record xxxx."

References

- Mott, Frank L., Paula Baker, R. Jean Haurin, and William Marsiglio, "Fertility Related Data in the 1982 National Longitudinal Survey of Work Experience of Youth: An Evaluation of Data Quality and Preliminary Analytical Results." Columbus, OH: CHRR, The Ohio State University, 1983.
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- Mott, Frank L. "Male Data Collection: Inferences from the National Longitudinal Surveys." Columbus, OH: CHRR, The Ohio State University, 1998.

NLSY79 Children

Maternal prenatal care information and health-related characteristics are also provided on the NLSY79 Child and Young Adult CD and are linked to individual children. On this data file, information derived directly from the mother in the fertility section of the main NLSY79 youth questionnaire is linked appropriately to individual biological children. This information includes dates of birth of children, postnatal care, infant health care, and childcare information.

For children age 15 and older, the young adults, a fertility section is administered as part of the CAPI questionnaire. The fertility section of the young adult questionnaire differs from the main youth questionnaire in that no information is collected about non-biological children. The 1994 interview was the first year of data collection for the young adult CAPI survey. At that time, a complete fertility record was collected for all young adult respondents. Since 1994, the fertility section included two paths for collecting information. Previously interviewed young adults were asked to verify and update their fertility information, as is done for main youth respondents. Respondents who were young adults for the first time in a given survey year had their complete fertility record collected. The respondent identifies each child born and answers questions regarding the child's residence and contact with each parent. Female respondents are asked about wantedness, prenatal behaviors, birth weight and length, medical visits during the first year due to sickness or injury, well baby care, health insurance, and feeding for either all pregnancies or pregnancies since the last interview. Male respondents are asked wantedness and health insurance questions for either all children or children born since the last interview. All respondents are asked about how many children they expect to have. In addition to these raw data items, the data file contains a constructed variable for the age of the young adult at the birth of the his/her first child.

Young adults give self-reports on sexual activity, pregnancy, and contraception. For additional information, users should consult the NLSY79 1996 Child & Young Adult Data Users Guide.

Survey Instruments: Prenatal, postnatal, and infant health care data are collected in the "Fertility" sections of main youth questionnaire. Information about the children of young adults is gathered in the "Fertility" section of the young adult questionnaires, while pregnancy, contraception, and abortion questions are contained in the *Young Adult Self-Report Booklet* in 1994, 1996, 1998, and in the CAPI questionnaire in 2000.

Data Files and Documentation: These variables are located in areas of interest "Natal," "Mom Wellness," and "Birth Record xxxx." More details are available in the NLSY79 1996 Child & Young Adult Data Users Guide.

References

Center for Human Resource Research. "Maternal-Child Health Data From the NLSY: 1988 Tabulations and Summary Discussion," Columbus, OH: CHRR, The Ohio State University, 1991.

Center for Human Resource Research. "NLSY/79 1996 Child & Young Adult Data Users Guide," Columbus, OH: CHRR, The Ohio State University, 1998.

4.15 Fringe Benefits

NLSY79

Data on the availability of fringe benefits provided by employers of NLSY79 respondents have been collected during each survey year except 1981. The fringe benefit series was administered, from 1980 to 1992, to those respondents who worked 20 hours or more a week at their current or last job and who were not self-employed in an unincorporated business or enlisted in the military. From 1993 to 2000, those working under 10 hours a week were asked if their employer made available any fringe benefits. Those respondents replying in the affirmative were then asked the detailed fringe benefit series. Fringe benefits questions were asked only about the CPS job from 1979–93; they have been asked about all jobs beginning in 1994. The types of benefits about which information has been gathered vary across the years. Table 4.15.1 summarizes, by survey year, the numbers of employed NLSY79 respondents reporting the availability of each type of benefit. This information is taken from the *Employer Supplement* questions; additional information is available in the CPS section. Further information on work-related benefits can be found in the "Pension Benefits & Pension Plans" section of this guide.

Survey Instruments: The "Current Labor Force Status (CPS)" section of the NLSY79 questionnaires: Section 8 (1979), Section 7 (1980), Section 5 (1982–92), Section 6 (1993), and Section 7 *Employer Supplement* (1994–2000) contain the employer-related fringe benefit series.

Data Files: Fringe benefit variables can be found in "Job Information" and the yearly "Misc. xxxx" areas of interest.

User Notes: These data do not reflect actual coverage by a specific fringe benefit, but rather a respondent's reported knowledge of whether his/her employer made such a fringe benefit available. The 1991–2000 questions on the availability of sick or vacation leave were designed to collect data on the number of days earned and appear within the survey following the regular fringe benefit series.

NLSY79 Children

Data have been collected during each young adult survey on the availability of fringe benefits provided by employers of NLSY79 children aged 15 and older. Through 1998, the fringe benefit series was administered to all respondents who reported working 20 or more hours a week at their current or last job. Respondents working less than 20 hours were asked whether they received any fringe benefits from their employers; if so, they were also asked the detailed fringe benefit series of questions. The types of fringe benefits about which information was gathered closely resemble those in the main NLSY79. Beginning in 2000, the fringe benefits series is asked only for the current or most recent primary employer.

Survey Instruments: The fringe benefit series can be found in the Employer Supplement sections of the NLSY79 Young Adult Questionnaires.

Type of Fringe Benefit	79	80	82	83	84	85	86	87	88	89	90	91	92	93	94	96	98	00
Reporting Availability ¹	5047	4132	7652	5869	6560	6492	6735	7014	8131	8126	8015	6214	6147	6592	7164	6990	6772	6132
Medical/Surgical/Hospital Insurance	1893	2305	4124	3757	4347	4380	4704	5141	5704	6052	6009	5181	5135	5056	5195	5286	5309	5278
Life Insurance	1230	1647	2979	2912	3391	3421	3800	4262	4719	5027	5067	4360	4331	4316	4423	4518	4511	4553
Paid Vacation	2190	2664	4494	4205	4740	4716	5040	5456	6023	6229	6312	5308	5227	5096	5264	5238	5207 ²	5160 [:]
Sick Days w/ Full Pay						3468	3815	4307	4634	4903	4906	3683	3989	3885	4106	4182	4125 ²	4106
Dental Benefits						2563	2913	3425	3833	4149	4222	3835	3816	3894	4022	4266	4426	4529
Maternity/Paternity Leave						3395	3695	4101	4284	4467	4413	3755	3719	4057	4106	4288	4294	4196
Disability Insurance									4748									
Retirement Plan (Not Social Security)									3933	4219	4345	3901	3949	4000	4143	4345	4493	4576
Stock Options									1848									
Profit Sharing									2029	2214	2208	1956	2019	1949	1912	1905	1822	1759
Training/Educational Opportunities									3208	3567	3775	3307	3306	3308	3281	3419	3469	3501
Company-Provided or Subsidized Child care									342	430	509	533	526	509	527	582	513	566
Company-Paid or Subsidized Meals									1016	1259	1301							
Company-Provided or Subsidized Transportation									932									
Company-Provided or Subsidized Housing									228									
Flexible Hours or Work Schedule										3846	3878	3249	3218	3264	3355	3568	3560	3535
Company-Provided or Subsidized Parking										4337	5003							
Employee Discounts										3631	3709							

Table 4.15.1 Number of Civilian Workers Reporting the Availability of Various Types of
Fringe Benefits at Their Current/Last Job: NLSY79 1979–2000

Note: Question formats for the fringe benefits series have changed over time, so numbers may not be strictly comparable from year to year. These data are from the *Employer Supplements*; other fringe benefit information is available in the CPS section.

¹ The eligible universe for the fringe benefit series during all surveys except 1979, 1993, 1994, 1996, 1998, and 2000 is those respondents who worked 20 or more hours a week at their current or last job. Excluded are self-employed respondents working in an unincorporated business and those enlisted in the military.

² These include those with combined sick/vacation days and with 995 responses to sick days questions (meaning combined sick/vacation days).

³ Includes paid vacation days and combined sick/vacation days.

4.16 Gender

NLSY79

Variables available within the main NLSY79 data set provide information on the sex of each respondent, their children, and members of their household. Information on the sex of the respondent can be found in (1) a single 1979 variable, 'Sex of R' (R02148.), and (2) a set of yearly interviewer remarks variables, 'Int Remarks - Sex of R.' The 1979 'Sex of R' variable (R02148.) is derived from R01736., 'Sample Identification Code,' a variable which defines each respondent's membership in one of the subsamples of the NLSY79 (e.g., "cross-sectional male, non-black/non-Hispanic poor," "supplemental female black," etc.). Subsample identification was based on information gathered during the 1978 household screening.

During screening, sex was determined by observation and asked directly of respondents only if it was "not obvious" to the interviewer. The respondent's sex, coded for R01736. and subsequently for R02148., has been changed for 45 cases; see the "User Notes" section below for a list of the identification numbers of these respondents and a short description of the changes. The variable series 'Int Remarks - Sex of R,' provides interviewers' observations of the sex of the respondent for the 1982 survey year and each following year except the 1987 telephone interview. These observations are subject to a small degree of error from erroneous interviewer observation and/or recoding and data entry error. Therefore, when using this series of variables, a small number of respondents may appear to "change" sex across surveys.

Information on the sex of the respondent's biological children is provided in both edited form (in area of interest "Fertility and Relationship History/Created") and unedited form (in areas of interest "Birth Record" and "Child Record Form/Biological"). Edited variables, e.g., 'Sex of 1st Child,' have been created annually since 1982. For these variables, raw data from various questions related to the child's sex are combined, cleaned, and checked for consistency during creation of the Supplemental Fertility File (see area of interest "Fertility and Relationship History/Created" and Appendix 5 of the *NLSY79 Codebook Supplement*). The raw data upon which these edited variables are based are also available. From 1982 to 1985, sex of children was collected separately for male and female respondents, e.g. 'Female - Sex of 1st Child.' In 1983 and 1984, sex of the children of all respondents was also collected on the *Information Sheet*. (See area of interest "Last Interview Information" for these survey years.) From 1985 to 1992, sex of children was collected separately for biological (e.g., 'Sex of Biological 1st Child') and non-biological children (e.g., 'Sex of Non-Biological 1st Child'), and listed on separate sections of the *Children's Record Form (CRF)*. Information on non-biological children, such as sex of the child, is only collected in even-numbered years after 1985, e.g., in 1986, 1988, etc., and can be found in area of interest "Child Record Form/Nonbiological."

Finally, for all survey years, the sex of all individuals in the household was collected in the yearly household interview (e.g., 'Household Record - Sex Member #1'). Sex of household members was also gathered in the 1978 *Household Screener* (e.g., 'Household Screener: Family Member #1 – Sex').

User Notes: Users should be aware that the observations of gender included in the interviewer's remarks tend to be subject to a small degree of error, as they are recorded and entered as new variables each year. Likewise, a small percentage of gender codes vary for NLSY79 children on the *CRF* from year to year. Error levels are higher for information collected from male respondents.

On March 1, 1986, 'Sex of R' was changed for 42 cases as a result of inconsistencies generated from interviewer checks for respondent's sex in the fertility section of the 1982 survey instrument; three additional cases were changed shortly thereafter. Each of these cases were verified by NORC for accuracy. 'Sex of R' (R02148.) for the following identification codes (R00001.) was changed:

From male to female: 712, 1306, 1933, 2212, 2286, 2287, 2433, 3960, 4157, 6102, 7571, 7645, 7890, 8542, 8690, 8826, 9150, 9713, 10511, and 12676.

From female to male: 1663, 3388, 3582, 3583, 3865, 4524, 4579, 4917, 5929, 6198, 6360, 6466, 6840, 7620, 7624, 8321, 8543, 8596, 9166, 9555, 10347, 11110, 11114, 12257, and 12387.

Survey Instruments & Documentation: A copy of the 1978 Household Screener used to collect information on sex of the respondent and other household members can be found in the Household Screener and Interviewer's Reference Manual (NORC 1978). Interviewer observations are recorded in the final section of each questionnaire, entitled "Interviewer's Remarks." Household members' sex is collected during the administration of the Household Interview Forms. A copy of the Information Sheet, containing sex of respondents' children, can be found near the beginning of the yearly Question by Question Specifications. The CRF is a separate child "inventory" referenced in the "Fertility" section of the questionnaire; sample copies can be found in the Question by Question Specifications. Finally, a general description of the derivation of the Supplemental Fertility File variables, such as sex of children, appears in Appendix 5 in the NLSY79 Codebook Supplement.

Data Files: All sex variables discussed above are located on the main NLSY79 data set. 'Sex of R' (R02148.) and the 'Sample Identification Code' (R01736.) can be found in the "Common" area of interest, while the interviewer remarks variables are located in "Interviewer Remarks." The Supplemental Fertility File variables have been placed in "Fertility and Relationship History/Created." Children's genders, listed separately for biological and non-biological children on the *CRF*, are in area of interest "Child Record Form/Biological" and "Child Record Form/Nonbiological," respectively. Variables collected during the household interview can be found in "Household Record," and variables from the

Household Screener are housed in "Misc. 1979." In addition, 'Sex of R' and 'Sample Identification Code' are available on the NLSY79 Work History Data Set.

NLSY79 Children

Sex of NLSY79 children is not directly assessed during the child interview but is available on the CD-ROM as discussed below. The created 'Sex of Child' variable includes a sex code for all biological children born to female members of the NLSY79, regardless of whether the child was assessed. Data are derived mainly from the NLSY79 fertility file and include a number of hand-edits based on information gathered during the child assessments. Year-specific gender variables based on the created 'Sex of Child' variable are available. A number of reports evaluating the quality of this information have been prepared. They are listed in the references part of this section.

Survey Instruments & Documentation: Appendix 5 within the NLSY79 Codebook Supplement discusses the NLSY79 Supplemental Fertility File.

Data Files: The child's sex variable is placed in the "Child Background" area of interest on the compact disc.

References

- NORC. 1978 Household Screener and Interviewer's Reference Manual. Chicago: NORC, University of Chicago, 1978.
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4.17 Geographic Residence & Environmental Characteristics

NLSY79

Geographic data for NLSY79 respondents fall into two categories: information on the main public CD and more detailed information released on a restricted-access geocode CD. Researchers interested in obtaining this geocode CD must submit a short geocode application to BLS and agree to meet certain security requirements. Researchers can request more information about this process by calling BLS at (202) 691-7410 or sending e-mail to NLS_Info@bls.gov. This section first describes the main file variables and then discusses the data available in the geocode file. Table 4.17.1 lists NLSY79 geographic variables along with their areas of interest; variables in the "Geocode xxxx" area are located on the restricted-use CD and all other variables are available on the main public CD.

Main file geographic variables

Variables created for each survey year include the following (see the geocode discussion below for more information on variable creation procedures):

- Region of residence at birth, age 14, and survey dates (Northeast, North Central, South, or West)
- Information on whether the current residence is in an urban or rural county
- Information on whether the current residence is in a Metropolitan Statistical Area (MSA), the central city of an MSA, or outside of an MSA
- Beginning in 1988, whether the current residence is in the United States
- Unemployment rate for the respondent's local labor market

Related NLSY79 main file variables discussed in the "Household Composition" and "Family Background" sections of this guide include (1) type of residence or dwelling unit at the time of interview (e.g., dorm, hospital, jail, orphanage, own home, etc.) and (2) childhood living arrangements of NLSY79 respondents from birth to age 18, including not only information on persons with whom the respondent lived (e.g., biological versus adoptive and step-parents) but also on institutions such as children's homes, group care homes, or detention centers/jails/prisons in which he or she may have resided.

User Notes: The "Misc. xxxx" areas of interest contain a set of variables titled 'Does R Live on a Farm or in a Rural Area?' The interviewer answers this question based on observation when at the respondent's permanent residence; if the interview takes place elsewhere, the interviewer asks the respondent about the place of residence. There are no consistent criteria for the definition of non-farm property as rural. These variables should **not** be considered a replacement for the created *KEY* variable, 'Current Residence Urban/Rural?' Using the *County & City Data Book* or geocode software, the *KEY* variable is based on proportions of urban and rural populations in the county of residence.

Variables	Survey Year(s)	Area of Interest	Documentation		
Residence at Birth					
Country - U.S. or Other Country	1979, 1983	Geocode 1979	—		
Country - Actual Other Country	1979	Geocode 1979	Attachment 101		
County	1979	Geocode 1979	Attachment 102		
State	1979	Geocode 1979	Attachment 102		
South/Non-South	1979	Family Background	Attachment 100		
Residence at Age 14					
Country - U.S. or Other Country	1979	Geocode 1979	—		
Country - Actual Other Country	1979	Geocode 1979	Attachment 101		
County	1979	Geocode 1979	Attachment 102		
State	1979	Geocode 1979	Attachment 102		
South/Non-South	1979	Family Background	Attachment 100		
Area of Residence - Urban/Rural	1979	Family Background	User's Guide & App. 6		
Present Residence					
Lived in Since Birth	1979	Family Background	_		
Year of Move to	1979	Family Background	_		
Most Recent Residence					
5th-1st Country/County/State Since Jan. 1978	1979	Geocode 1979	Attachments 101, 102		
Month/Year of Move(s)	1979	Family Background	_		
5th-1st Country/County/State Since Last Int.	1980	Geocode 1980	Attachments 101, 102		
Month/Year of Move(s)	1980	Family Background	Attachment 102		
9th-1st Country/County/State Since 1980 Int.	1982	Geocode 1982	Attachments 101, 102		
Month/Year of Move(s)	1982	Family Background	_		
Current Residence					
Region	1979–2000	Key Variables	Attachment 100		
Urban/Rural	1979–2000	Key Variables	Att. 6 & User's Guide		
SMSA/Central City	1979–2000	Key Variables	Att. 6 & User's Guide		
In U.S.	1988–2000	Misc. xxxx	NLSY79 User's Guide		
County	1979–2000	Geocode xxxx	Attachment 102		
State	1979–2000	Geocode xxxx	Attachment 102		
SMSA	1979–2000	Geocode xxxx	Attachment 104		
PMSA	1983–2000	Geocode xxxx	Attachment 104		
MSA	1983–2000	Geocode xxxx	Attachment 104		
CMSA	1983–2000	Geocode xxxx	Attachment 104		
MSA/CMSA/NECMA	1988–2000	Geocode xxxx	Appendix 10		

Table 4.17.1Select Residence Variables by Survey Year& Area of Interest:NLSY79 Main & Geocode Files

Geocode file variables

Based on address information reported by respondents at the time of the interview, survey staff identify the state, county, and metropolitan statistical area of residence for each respondent. This information is the basis for the geographic residence variables on the main and geocode CDs. Similar information is provided for the respondent's residence at birth and at age 14. Additionally, the current residence variables are merged with information from several other data files, namely the *City Reference File* (Census 1973, 1982, 1983, 1987, 1992) and the *County & City Data Book* (Census 1972, 1977, 1983, 1988, 1994), to provide detailed information on the environmental characteristics of the state, county, and metropolitan statistical areas in which each NLSY79 respondent resides.

Geographic Residence: Present within the NLSY79 geocode data file is information that specifies the actual country, state, county, and geographic region of each respondent's residence at the time of interview, location of birth and residence at the age of 14. In addition, detailed geographic mobility information was collected during the 1979–80, 1982, and 2000 surveys; data were gathered on the country/county/state and timing of up to five residential moves since January 1978 or since the last interview.

Variables created for each survey year include the following:

- Region of current residence (Northeast, North Central, South, or West)
- Information on whether the current residence is in an urban or rural county. Through 1996, this series was based on the respondent's state and county of residence and the "% urban population" data from the *County & City Data Book*. Since 1998, this item is based on proportion of urban population data contained in the geocoding data base currently used by CHRR. For further information, see the *Geocode Codebook Supplement*.
- Information on whether current residence is in an SMSA (Standard Metropolitan Statistical Area) or central city. Based upon zip code, state, and county matches with metropolitan statistical designations for place of residence, a determination is made (if possible) as to the location of the respondent within or outside of a metropolitan statistical area.
- The specific county and state (both edited) of residence at the time of interview, coded with Federal Information Processing Standards (*FIPS*) codes.
- The specific metropolitan area of residence at the time of interview. As applicable, information may be included for the following types of metropolitan areas:

Standard Metropolitan Statistical Area
Metropolitan Statistical Area
Consolidated Metropolitan Statistical Area
Primary Metropolitan Statistical Area
New England County Metropolitan Area

Available since 1988 is the set of variables titled 'Current Residence in U.S.?', based on county, state, and/or country/territory of residence. Finally, for select survey years geocode information is available on the location of respondents' jobs, the location of colleges attended, and the point of discharge from military service.

Environmental Characteristics: The types of information depicted in the table below, drawn from the *County & City Data Book* files (1972, 1977, 1983, 1988, 1994), have been added to the NLSY79 geocode areas of interest. Variables are available for both the county and SMSA of current residence for the 1979–82 survey years and for the county level only for later years. Users will note that some of these variables are available only for the 1979–82 survey; the 1983–2000 geocode files contain a reduced set of variables.

Population sizes	Median family and per capita income
Percent of population that is:	Recipients of and payments from:
• urban	• AFDC
• black	• SSI
• female	Social Security
• under 5 years old	Labor force statistics:
• 65+ years old	• total labor force
Birth/death/marriage/divorce rates	• civilian labor force
Physician and hospital bed rates	• number of females in the civilian labor force
Crime rates	 civilians unemployed versus employed
Poverty level data	 percent employed in various industries
Educational attainment levels	Unemployment rate for labor market of residence

 Table 4.17.2 Representative Types of County/SMSA Environmental

 Characteristic Data:
 NLSY79 Geocode CD-ROM

Two sets of variables provide information on the unemployment rate of each respondent's labor market of current residence: (1) a yearly 'Unemployment Rate for Labor Market of Current Residence' and (2) a yearly 'Continuous Unemployment Rate for Labor Market of Current Residence.' Information on these variables follows and can be also found in Appendix 7 in the *NLSY79 Codebook Supplement*.

The source of the 'Unemployment Rate' variables is the May issue of the Bureau of Labor Statistics' *Employment and Earnings* for the year following the survey year. Figures from March of each survey year are used. This table supplies unemployment rates for each state and for selected metropolitan statistical areas within each state. Respondents who are residing within one of these metropolitan statistical areas are assigned the appropriate unemployment rate. For those residing outside of these areas, a "balance of state" unemployment figure is computed (using state total figures for actual size of civilian work force and actual number employed and subtracting the population living in metropolitan areas [see Appendix 7 of the *NLSY79 Codebook Supplement*]) and assigned based upon state of residence.

The first created variable is 'Continuous Unemployment Rate for Labor Market of Current Residence,' which includes the actual unemployment rate for each specific labor market (noncollapsed). It is released only with the NLSY79 geocode data file. The second variable, 'Unemployment Rate for Labor Market of Current Residence,' collapses the first variable into six categories and is released with the main data set.

Other Geographic Variables: Additional geographic information, available only for use at the Center for Human Resource Research, includes the latitude and longitude of each respondent's residence. This information is used as input to computer mapping programs and its usage requires special clearance from the Bureau of Labor Statistics. Similarly, users may obtain special permission to use zip code and Census tract data available at the BLS offices in Washington, DC.

An additional set of geographic mobility measures is available on the Women's Support Network File for NLSY79 females interviewed during 1983–85. Three "across-wave" files present on this supplemental data set compare the extent of matching between female respondents' own addresses and telephone numbers across the following three survey periods: 1983 to 1984, 1983 to 1985, and 1984 to 1985. The following types of measures are available: (1) extent of zip code match (all 5-digit match, first 3-digit match, same state, same subregion, same region, different region); (2) extent of telephone number match (same phone number, same exchange, same area code, same state, same subregion, same region, different region); (3) extent of city/state match (same city, same state, same subregion, same region, different region); and (4) distance of move or separation (same 5-digit zip code, within 50 miles, 51–150 miles, 151–300 miles, 301–600 miles, 601–1000miles, 1001–1400 miles, 1401–1800 miles, more than 1800 miles). Those interested in this separate data set should contact User Services to get the special documentation available for these files, as well as ordering information.

Survey Instruments: Data on residence at birth and at age 14, as well as the 1979–82 present/most recent residence series, were collected using questions found within Section 1 ("Family Background" and "On Family") of the 1979, 1980, and 1982 questionnaires. All other variables are created from or determined by the geographic information provided by each NLSY79 respondent within the locator section of the questionnaire and/or from the interviewing *Face Sheet* or internal NORC locating files.

Data Files: Residence variables discussed above can be found within the "Family Background," "Key Variables," "Geocode xxxx," or "Misc. xxxx" areas of interest; Table 4.17.2 above specifies the particular areas of interest for each variable. The level of detail available determines, in general, whether a variable is placed within the restricted release "Geocode xxxx" files or is present within one of the areas of interest on the main data set. Thus, general country level information, e.g., whether the respondent resided at various points in time within or outside of the United States, is available to all users with no restriction, while the specific country or SMSA in which s/he resided at a specific interview point is present only within the

restricted release geocode data files. All environmental variables, including the continuous version of the 'Unemployment Rate for the Labor Market of Current Residence,' are present on the restricted release "Geocode xxxx" areas of interest on the geocode CD-ROM. The collapsed version of the labor market unemployment rate variable is located in the "Key Variables" area of interest on the main data file.

Documentation: Several attachments and appendices in the NLSY79 Codebook Supplement and/or the NLSY79 Geocode Codebook Supplement offer creation procedure information and coding systems for the geographic residence variables. These appendices and attachments are described in detail in section 3.3 of this guide. The following are relevant to the geocode variables:

- Appendix 6 [SMSA/central city urban/rural]
- Appendix 7 [Unemployment rates]
- Appendix 10 [Geocode creation procedures]
- Attachment 100 [Geographic regions]
- Attachment 101 [Foreign countries]
- Attachment 102 [States counties]
- Attachment 104 [Metropolitan areas]
- Attachment 105 [Addendum to FICE codes]

User Notes: The geocoding of respondents' geographic location before 1993 required extensive handediting and is not 100 percent accurate. The most common error is the potential assignment of a respondent to an adjacent county of residence. Data on addresses, zip codes, and phone numbers are used to clean the geocodes. CHRR believes that the post-1988 use of telephone number information improved data quality. A brief discussion below provides more information on both the hand-edits performed each year and the created variable that indicates the extent of hand-editing required for each case; see Appendix 10 in the *Geocode Codebook Supplement* for more details.

Additional important information on geographic variables is contained on the following pages.

Attaching Other Variables to Existing Geocode Records. The state and county codes used in constructing the geocode files are the Federal Information Processing Standards (FIPS) used in the *County* \mathscr{C} *City Data Book* publications and data files. Users may attach additional county and metropolitan statistical area-level data from a variety of sources by simply merging information from the desired source with the geocode data based upon the state, county, and metropolitan statistical area of residence codes in the geocode file.

Edited versus Unedited Versions of State/County of Residence. For some years (1979–82, 1988–89, 1991–92), two versions of the state and county of residence variables have been included in the "Geocode xxxx" files. The set occurring at the beginning of each file is the edited version, while the variables found near the end of the files for these years are unedited. If the variable has an actual source question number/name, it is the original from NORC. If the source question name says *created*, it is the

edited/created version. Note that the unedited variables are sometimes combined into a single variable, with the state and county code appended to each other. These raw variables are preceded by the word "GEOCODE" in the variable title. The edited residence variables contain the corrections made for erroneous address information and are the ones from which the geocode files themselves are constructed. Users should be aware that the edited version of these variables does not contain data for those respondents who are in the active military forces or who are living abroad or in a U.S. territory. Codes of "-4" appearing in the unedited versions of the state and/or county variables (because foreign country and U.S. territory codes are placed in one field or the other) should not appear in the edited versions of these residence variables.

New Geocode Procedures for Assigning Residence Codes and Hand-Editing Discrepant Cases. During the 1988 hand-editing process, it became evident that the telephone numbers were very accurate, even in cases for which the address information contained discrepancies. Beginning in 1989, the area code and phone exchange were used to assign state and county of residence codes. The state assigned by the area code was then compared to the state assigned on the basis of zip code alone and the state contained in the original NORC respondent file. A "quality of match" variable was computed on the basis of how well these states match. For a more detailed discussion of these new assignment and matching procedures, refer to "Appendix 10: Geocode Documentation" in the *Geocode Codebook Supplement*. This process was used through the 1994 release.

The hand-editing procedure has also been streamlined. In 1989, the first year in which the phone assignment procedure was used, the residence codes assigned on the basis of the area code and exchange were compared to the raw residence variables received from NORC. Those with nonmatching information were identified for individual examination. Ideally, the discrepancies requiring individual examination would be reduced to those cases which are "genuine movers" or which have zip codes covering multiple counties and would require some verification that the correct county was assigned based upon the phone information. The current process for identifying discrepancies and hand-editing is aimed more directly at achieving this objective.

Beginning in 1990, the residence codes assigned based on phone information were compared to the 1989 CHRR-edited residence information to identify cases for individual examination. Because the previous year's edited variables incorporate the corrections that were made in the hand-editing process from earlier years, repeated editing of the same cases across years decreased. Through this process, the discrepancies in residential geocode information were reduced. The number of cases requiring individual examination also decreased and was restricted more closely to the population of "genuine movers" and people with multiple-county zip codes and phone numbers that require verification of county of residence.

The hand-editing process in previous years included not only these genuine movers and multi-county zip code dwellers, but also other cases for which elements of the address are simply in error or incompatible with each other. Some of these cases could potentially require editing for the same errors in more than one year, even if the respondent stayed in one location. Hand-editing procedures were further streamlined, and in some cases automated, to produce the 1992 data.

Beginning in 1996, a new procedure for verifying and assigning correct final geocode information was instituted. This procedure is now performed using specialized address tracking geocode software. The processes are described in Appendix 10 of the *Geocode Codebook Supplement*. It is the belief of CHRR staff members not only that the current procedures are more efficient in identifying true discrepancies and streamlining the hand-editing process, but also that they result in more accurate and consistent assignment of state and county codes in general.

Missing Values, New England Cases, and Mobility. Missing values in location of residence variables and metropolitan statistical area codes are associated with respondents who are in the active military forces or who are living either abroad or in a U.S. territory. Users should be aware that, due to the fact that New England County Metropolitan Area (NECMA) codes are not comparable to metropolitan statistical areas from the remainder of the country, New England cases are eliminated from some of the procedures used to construct the geocode files.

The review and hand-editing process has been periodically revised to improve the accuracy of the data and the efficiency of data production. The potential implications for effects on mobility rates between some years due to these changes have been noted in "Appendix 10: Geocode Documentation" of the *NLSY79 Geocode Codebook Supplement*. Users should read Appendix 10 carefully to gain a better understanding of the issues outlined above and their implications for specific research endeavors.

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NLSY79 Children

Child's Residence: Geographic residence information for those NLSY79 children who resided with their mother can be inferred from the residence data of their mothers. Two sets of variables, 'Residence of Child' (1979–81 and 1983) and 'Usual Residence of Child' (1982, 1984–2000), can be used to determine whether the usual living arrangement of the child was "in the mother's household." Place of birth information (city, county, state) was gathered in 1990 and 1992 for the subset of children assessed in those years; these data are included in the 1979–92 NLSY79 geocode file releases. Place of birth information can also be inferred from the mother's residence information on the child's birth date.

The usual residence of the young adult (that is, in the mother's household, with father, etc.) can be determined either from the young adult survey or from the mother's fertility record. Beginning in 1996, region of residence is also available for the young adults. In summer 2002, a geocode data set will be released for the young adults. These variables will mirror the geocode variables available in the main NLSY79 data set, including state and county of residence, metropolitan statistical area of residence, environmental characteristics, and codes for colleges attended. As with the main geocode CD, researchers interested in using these data must contact BLS to obtain a geocode accessing agreement. To satisfactorily complete the application, users must describe the nature of their research and agree to meet certain security requirements. More information can be obtained from NLS program staff by sending e-mail to NLS_Info@bls.gov or calling (202) 691-7410.

Mother's Residence: Child compact disc users can access, for NLSY79 females, all unrestricted geographic information listed in Table 4.17.3. Researchers who satisfactorily complete the geocode accessing agreement process can also link to the more detailed variables on the NLSY79 geocode CD.

Survey Instruments: The place of child's birth question can be found within the "Child Health" section of the 1990 and 1992 *Child Supplement.* See the NLSY79 "Survey Instruments" & "Data Files" sections above for the sources of the mother residence variables.

Data Files & Documentation: Compact disc users can access the general geographic residential variables for each NLSY79 mother in the "Family Background," "Key Variables," and "Misc. xxxx" areas of interest. Detailed geographic information (county, state, SMSA of residence) for NLSY79 mothers and the child's place of birth are available only on the geocode CD-ROM. Documentation available for these geographic residence variables is discussed in the NLSY79 "Documentation" section above.

4.18 Government Training & Jobs Programs

NLSY79

Extensive information on participation in non-military, government-sponsored jobs and training programs was collected from 1979 through the mid-1980s for NLSY79 respondents. In general, information was gathered on enrollment patterns; program sponsorship; and types of training, supportive services, and job placement services provided. The primary thrust of NLS questions was on whether jobs held by the respondent had been obtained via a program funded by the government. The survey also explored whether training and supportive services had been provided.

Users interested in a full picture of government-sponsored jobs and training variables available for the NLSY79 should refer to the "On Jobs" section of the 1979–87 questionnaires; the accompanying *Employer Supplements*, which collected information on up to five jobs held by the respondent (including but not limited to government-sponsored jobs); and the 1979–86 "Government Training" sections, which asked those respondents not enrolled in school for information on *other* government training programs in which they had been enrolled and which were not already reported within the "On Jobs" section. Of related interest are the special series of questions administered during the 1981 survey on each respondent's use of time during the past seven days. This supplement included questions on time spent in government training programs, i.e., total hours in past week/per day, time spent studying and traveling to a government training program, and mode of transportation used.

The "On Jobs" section of the 1979–87 questionnaires, in conjunction with the yearly *Employer Supplement*, collected detailed information on up to five jobs reported by the respondent since January 1978 (for the 1979 survey) or since the last interview (for subsequent surveys). For each job identified as a government job, information was gathered from the respondent on the names of the government-operated job programs (see listing in Table 4.18.1), whether the program was part of a CETA/JTPA or WIN program, the reason the respondent entered this program, the kinds of services provided (job counseling, GED preparation, on-the-job training [OJT], classroom training for basic skills [reading-writing-arithmetic], or occupational skills training), whether the respondent had been placed in either subsidized or unsubsidized employment, the types of supportive services such as child care or health care provided, and the respondent's attitudes toward the program. The 1979 questionnaire contained a supplementary "On Jobs" section, which collected information on whether respondents age 16 and over had participated in a government-sponsored, in-school or summer jobs program prior to January 1978. Beginning in 1988, the collection of specific information on government jobs ceased.

Table 4.18.1 Federally Funded Agencies Providing Government Jobs: 1979–87

Apprenticeship Outreach Program (RTP)
Comprehensive Employment & Training Act (CETA)
• Job Corps
• Job Opportunities in the Business Sector (JOBS)
Manpower Development & Training Act (MDTA)
Neighborhood Youth Corps
Opportunities Industrialization Centers
Public Employment Program (PEP)
Public Service Employment (PSE)
• SER - Jobs for Progress
• Summer Program for Economically Disadvantaged Youth (SPEDY)
Summer Youth Work Experience Program
Urban Conservation Corps
• Urban League
Vocational Rehabilitation
Work Incentive Program
Young Adult Conservation Corps
Youth Community Conservation and Improvement Program (YCCIP)
• Youth Conservation Corps (YCC)
• Youth Employment and Training Program (YETP)
• Youth Incentive Entitlement Pilot Projects (YIEPP)
Other government-sponsored jobs and training programs

The 1979–86 "Government Training" sections collected two additional sets of information. First, retrospective information on up to five government-sponsored training programs in which respondents were enrolled prior to January 1, 1978, was collected during the 1979 survey. Included are the name of the government program (e.g., MDTA/CETA/JTPA, Job Corps, RTP Apprenticeship Program, Opportunities Industrialization Centers, Jobs for Progress, Urban League, Vocational Rehabilitation), the 3-digit Census occupational training category, whether the respondent completed the training program, and in what year the respondent left the program.

Second, information on up to two government-sponsored training programs in which a respondent was enrolled since 1978 or since the last interview was collected during the 1979–86 interviews. This series of questions was restricted during the 1979–83 interviews to respondents who were not enrolled in regular schooling (grades 1–12). Included is information on the name of the government program; the date participation ended; hours per week/per day of participation; current enrollment status; periods of nonparticipation lasting a week or more; whether the program was part of a CETA, JTPA, or WIN-affiliated program; reasons for entering/leaving each program; types of training services provided (job counseling, GED preparation, classroom training, English as a second language, skills training, etc.);

Census occupational and/or OJT training category; type of subsidized (OJT, work experience, or CETA/PSE) or unsubsidized job placement; types of supportive services received (child care, transportation, health care, college preparation, etc.); income/rate of pay received during participation; and attitudes toward specific aspects of the training program.

The total number of government-related training questions was reduced beginning with the 1987 survey: A single question in that year asked all respondents whether they had received training or assistance from any (nonspecified) government-sponsored program.

However, government sponsorship of a training program was incorporated within the regularly asked "Other Training" questions beginning in 1988. All respondents continued to be asked for information on multiple training programs in which they were enrolled since the last interview. Questions differentiated between *where* respondents received their training (e.g., through an apprenticeship program, a business school, a vocational institute or vocational rehabilitation center) and *who or what* organization paid for the training program (e.g., self, employer, JTPA, TAA, Job Corps, WIN, the Veteran's Administration, Vocational Rehabilitation, etc.). Information was collected for each training program on dates of participation, total weeks enrolled, whether the respondent obtain a different job, hours/week spent in training, and type of training program (occupational skills training, classroom training for basic skills, on-the-job training was promotion-related, either because it was required for a promotion or because it helped the respondent obtain a promotion or because it helped the respondent obtain a promotion or because it was required for a promotion or because it helped the respondent obtain a promotion or because it helped the respondent obtain a promotion of the types of non-governmental training variables present within the NLSY79 data set.

Survey Instruments: Both the main questionnaires and *Employer Supplements (ES)* are sources for the government jobs and training variables. The 1979 employer supplement series of questions was incorporated within the main questionnaire as Section 10 "On Jobs" for the 1979 survey year only. Relevant sections of the other questionnaires are as follows:

<u>Government Training</u>: Section 13 (1979); Section 10 (1980); Section 9 (1981 and 1982); and Section 8 (1983–87).
 <u>Government Jobs</u>: Sections 9 and 10 (1979); Section 8/ES (1980); Section 7/ES (1981 and 1982); Section 6/ES (1983–87).
 <u>Post-1987 Training</u>: Section 8 (1988–2000).

Questions of related interest on non-government training can be found in the "Other Training" sections of the 1979–87 questionnaires. The 1979 *Employer Flap* and the 1980–87 *Employer Supplements* identify the nature of government-sponsored jobs and contain detailed information on each job.

Data Files: Variables from the "Government Training" sections of the 1979–87 surveys are located in the "Government Training" area of interest on the main NLSY79 data set; government-related training variables for subsequent years are located in "Training." Variables relating to government-sponsored jobs are located in the "Government Jobs" and "Misc. xxxx" areas of interest. Detailed information on each government job, e.g., dates of employment, hourly rate of pay, occupation, and industry, can be found within "Job Information." The "Time Use" area of interest contains the 1981 time use questions. Note that data on government-sponsored jobs for the 1979–87 survey years are also found on the NLSY79 Work History Data File, which includes information on whether any jobs (up to five) held by a respondent since the last interview were government-sponsored jobs.

Documentation: The "NLSY79 Glossary of Terms" (Appendix D of this guide) provides descriptions of some of the locally operated programs and the three federal legislative acts authorizing employment and training funding which were in place during 1979–87. Background information on the development of federally funded employment and training programs and descriptions of the various government-sponsored programs and service providers in existence in the late 1970s and early 1980s can be found in the various Center for Human Resource Research reports listed below.

User Notes: Age restrictions relevant to Sections 8, 9, 10, and 13 of the 1979 questionnaire are discussed within the User Notes in the "Age" section of this guide.

Federal Funding Sources/Types of Service Providers: Users should note that the sources of federal funding and types of service providers reported by participants did not always keep pace with legislative reality. The Manpower Development and Training Act was replaced by the Comprehensive Employment and Training Act (CETA) in 1973, which in turn was replaced by the Job Training Partnership Act (JTPA) in 1982. Yet participation in defunct federal programs was reported as late as 1985 for MDTA and 1986 for CETA. Although JTPA funding of local programs occurred as early as 1983–84, JTPA as a category in the government-sponsor questions is presumably included under 'Other' and appears as a coding category within the 'Part of CETA/JTPA or WIN' questions beginning in 1986. Finally, although federally funded, these jobs programs were locally operated under a variety of names; appropriate federal funding sources may or may not have been known to the recipient.

Job Placement Questions: The wording of questions on job placement within the Employer Supplements and the "Government Training" sections of the questionnaires changed beginning with the 1984 survey. Prior to 1984, a question on whether the government training program in which the respondent had participated had placed the respondent in a job "outside" the program was followed by a question on whether that outside job placement had occurred to a CETA or PSE (Public Service Employment) job

and, if so, whether that subsidized job had been followed by another (presumably) unsubsidized job placement. Beginning with the 1984 survey and the enactment of JTPA, this rather complex series of questions was dropped and only two questions were asked (1) whether respondents had been placed, as part of their training, in a subsidized on-the-job training (OJT) or work experience slot and (2) whether respondents had been placed in a job by the program after completion of training. These OJT questions supplement the already-asked, on-the-job training questions in the services provided sections.

References

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NLSY79 Children

A series of quarterly work history variables have been created that indicate whether the child's mother was employed at a government-sponsored job for up to four quarters preceding the birth of her child and up to 20 quarters following the birth. For young adults, government sponsorship of a training program is incorporated within the regularly asked "Other Training" questions. Through 1998, all respondents are asked for information on multiple training programs in which they were enrolled. Questions differentiated between *where* respondents received their training (e.g., through an apprenticeship program, a business school, a vocational institute, or vocational rehabilitation center) and *what* organization paid for the training program (e.g., self, employer, JTPA, TAA, Job Corps, WIN, the Veteran's Administration, Vocational Rehabilitation, etc.). Information was collected for each training program on dates of participation, total weeks enrolled, whether the respondent completed the program, whether the training was used on their most current job or helped the respondent obtain a different job and/or promotion, hours/week spent in training, and services provided by the training program. Beginning in 2000, detailed information was asked only of the current or most recent training program.

Survey Instruments & Documentation: Data were derived from the cover page of the yearly Employer Supplements, the survey instrument completed for each of up to five employers for whom a respondent worked since the date of last interview. The constructed quarterly maternal work history variables are derived from the array on the main youth work history file.

The young adult training questions are located in Section 11 of the 1994, 1996, 1998, and 2000 questionnaires.

Data Files: The constructed quarterly work history variables are located in the "Work History" area of interest within the child's data on the compact disc. The young adult training questions can be found in the "Training" area of interest.

4.19 Health

NLSY79

NLSY79 questionnaires contain a variety of health questions. NLSY79 health sections are divided into two periods. From 1979 to 1996, most of the questions focus on health concerns that restrict or inhibit the respondent's ability to work. From 1998 on, as respondents reached middle age, the health section was expanded to provide a baseline profile of the respondent's overall health as they turn 40 years old.

Ability to Work

From 1979 to 1982 a standard set of health questions was administered during each survey. The focus of these questions was on health problems that restricted or prohibited a respondent's ability to work. For example, in each year the survey asked three questions: (1) Respondents not currently working were asked "Would your health keep you from working on a job for pay now?" (2) All respondents were asked, "(Are you/Would you be) limited in the kind of work you (could) do on a job for pay because of your health?" (3) All respondents were asked "(Are you/Would you be) limited in the kind of work you be) limited in the amount of work you (could) do because of your health?" If an individual answered 'yes' to being limited in either the kind or amount of work they could do because of health, the NLSY79 then probed for specific details on the health ailment.

While information is collected on up to three health conditions, the respondent is asked to identify which of the conditions is the "main" condition. Follow-up questions regarding the main condition include the month and year the condition began and how long the respondent has been limited in this way. In addition, the name of the condition is gathered and later coded using a modified version of the International Classification of Diseases (ICD-9) codes taken from the World Health Organization, *International Classification of Diseases*, Ninth Revision, 2 vols., WHO, Geneva, 1977 (vol. 1) and 1978 (vol. 2). See Attachment 8 of the *NLSY79 Codebook Supplement* for a detailed description of these codes.

Additional details collected on respondent health conditions include information on whether the youth ever saw or talked to a medical person regarding the condition, what the cause of the condition was, what part of the body was affected, and when the respondent first noticed the condition. If the condition was caused by an accident or injury, the date of the accident/injury, as well as information on the parts of the body that were hurt, was collected. A description of the coding scheme used for the body part information is also contained in Attachment 8 of the *NLSY79 Codebook Supplement*.

From 1983 to 1987, the amount of data collected on health was significantly reduced to basic information on whether the respondent had a work-limiting health problem and the duration of any limitation. While this same short series of questions has been asked in virtually every NLSY79 survey, significant additions were made in the late 1980s. For example, beginning with the 1988 survey, an extensive series of questions was initiated on work-related injuries or illnesses. The respondent is asked specifically for the most recent and most severe work injury. The questions are asked to determine the nature and extent of the condition, whether or not the respondent received Workers Compensation payments, and the impact of the condition on the respondent. A sample of the impact questions include whether there were lost wages, missed days at work, or whether the worker had to quit work, change occupations, or was fired from the job, etc., as a result of the injury/illness. Finally, 1998 and 2000, all respondents are asked about their participation in regular physical activity on and off the job.

Health Profile

Examining the raw unweighted data shows that approximately three percent of NLSY79 respondents each year are limited in the *amount* of work they do by health reasons. Additionally, approximately three percent of all respondents are limited in the *kind* of work they do by health problems. While these questions provide a detailed picture of a respondent's current health restrictions, they offer little insight into chronic health problems that will affect their labor force activity in the future. For example, a serious ailment that slowly develops over time will not be picked up by these questions until the respondent actually drops out of the labor market. For this reason and because of the aging of the cohort, an extended health module was administered to respondents beginning with the 1998 survey. This extended module was created to provide a baseline health profile of the respondent for examining the interrelationship of health and labor market activity in advance of the retirement years. To broaden the usefulness of the NLSY79 health data, this extended module, comprising four major parts, is not restricted to work-related health problems, and all questions are asked irrespective of the respondent's labor force status.

The first part of the 40-and-over module asks respondents to answer the Center for Epidemiological Studies Depression Scale (CES-D). This scale measures symptoms of depression, discriminates between clinically depressed individuals and others, and is highly correlated with other depression rating scales (see Radloff 1977; Ross and Mirowsky 1989). The 1998 and 2000 survey collected a reduced set of seven items from the original 20 item CES-D scale. This same set of seven items was also included in the 1994 survey; the full 20-item scale was administered in 1992.

The second part of the extended health profile asks respondents when they last saw a health care professional. These questions provide researchers with the date of the respondent's last physical exam and last visit to the doctor for any reason. Information on individuals who never visit a doctor is available as well. This subsection also gathers information about the health and life status of the NLSY79 respondents' biological parents. Questions which ask respondents about their parent's health are designed to improve researchers' understanding of hereditary health problems. Respondents are asked whether their

biological parents are alive and if not, their parent's age at death and cause of death. Information is also gathered about any major health problems afflicting either parent.

The third section reproduces the SF-12 scale, a 12-question health survey designed by John Ware of the New England Medical Center Hospital. The SF-12 is designed to provide a measure of the respondents' mental and physical health irrespective of their proclivity to use formal health services. Detailed information on the SF-12 is available from QualityMetric Incorporated (http://www.sf36.com/ or 640 George Washington Highway, Lincoln, RI 02865). QualityMetric also provides researchers with software and algorithms to score the SF-12.

The last section of the 1998 40-and-over health module asks respondents if they suffer from an extensive list of health conditions. Respondents with certain major conditions, such as cancer, hypertension, diabetes, etc., are probed on the date at which the condition was first diagnosed and other details relevant to the particular condition.

Respondent Characteristics

A respondent's height and weight are natural indicators of health. Height questions were asked in 1981, 1982, 1983 (only to females who were ever pregnant), and 1985. Users should exercise caution because the height questions have been collected in a variety of formats. The 1981 question combines feet and inches into a single number. Hence, respondents range from 400 (four feet and zero inches) to 611 (six feet and eleven inches). The 1982 and 1985 questions convert all answers into just inches. The 1983 height questions are found under two different reference numbers: female height in feet is provided in R09989., while height in inches is provided in R09990.

Since weight fluctuates more than height, questions on weight are asked more frequently. Weight questions appear in the 1981, 1982, 1985, 1986, 1988–90, and 1992–2000 surveys. Weight in all years is recorded in pounds. The weight data are normally distributed from 50 to 400 pounds in all years except 1989. In 1989, there are 11 individuals marked as weighing 996 pounds. This number is not a true weight but rather an out-of-range code. Users are advised to examine height and weight distributions prior to analysis in order to make informed decisions as to how to handle outliers.

Respondent hair and eye colors were collected during the 1985 interview and information on whether they were born left or right handed was collected in the 1993 interview.

Health Insurance

The NLSY79 provides researchers with a variety of insurance information. Almost every survey asked working respondents if their current or most recent job provided health insurance benefits. Table 4.19.1

is taken from the fringe benefits series and shows that, over time, an increasing number of NLSY79 respondents work in jobs that are covered by health insurance benefits. While only 39.3 percent were working in covered jobs in 1979, by 1996 more than 75 percent were covered.

Year	Percentage	Year	Percentage		
1979	39.3	1989	75.2		
1980	56.8	1990	75.9		
1982	55.6	1991	76.6		
1983	66.4	1992	76.4		
1984	68.9	1993	76.8		
1985	69.8	1994	72.6		
1986	71.8	1996	75.6		
1987	74.4	1998	78.4		
1988	72.6	2000	80.3		

Table 4.19.1 Percentage of Respondents Whose Current or Most Recent Job Provided Health Insurance Benefits

There are a number of problems with using the fringe benefits question series in the CPS and ES section to understand and track health insurance coverage. First, respondents who are not working are excluded from these questions. Second, not all health insurance is employer provided. Some individuals pay directly for health insurance, while others are covered by their spouse's or partner's plans. Lastly, while an employer may offer this benefit, workers might not participate in the plan and therefore may not be aware of its availability. To overcome these limitations, the health section of the NLSY79 was expanded beginning in 1989 to directly ask about sources of health insurance coverage.

The health section of the questionnaire in 1989, 1990, and 1992–2000 asks respondents if they are covered by a health plan. If the respondent answers "yes," the interviewer asks who pays for the plan. Responses include current employer, previous employer, spouse's employer, purchased directly, and Medicaid or welfare source. If the respondent is married, the same set of questions on medical coverage are asked about the wife or husband (and beginning in 1994, about the non-marital, opposite-sex partner, if any). Additionally, if the respondent has any children living in their household, the same questions are asked about the children's health insurance coverage.

Related Variables: Additional information on the relationship between health and labor force status can be found in the CPS section. The CPS section contains questions allowing respondents to state that they are not in the labor force because of health problems. Unfortunately, these questions do not describe the

specific problem, when the problem started, or how long the problem has lasted. Information on substance use (smoking, drugs, alcohol) is collected as part of a largely self-administered report in selected survey years. See the "Alcohol Use," "Cigarette Use," and "Drug Use" sections of this guide for further information on these topics. Information on health practices related to sexual activity and pregnancy can be found in the fertility section of selected surveys. For further information see the "Fertility" and "Sexual Activity and Contraception" sections of this guide. Information on self-perceptions and self-esteem measures can be found in the "Attitudes and Expectations" section of this guide.

Survey Instruments: Health and health insurance questions are located within the "Health" section of each questionnaire.

Documentation: Documentation augmenting the questionnaire and codebook include Attachment 8 in the *NLSY79 Codebook Supplement*.

Data Files: Data related to health can be found in the following NLSY79 main file areas of interest: "Health," "Alcohol," "Drugs," "CPS," "Birth Record," "Birth Record xxxx," and "Misc. xxxx."

References

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NLSY79 Children

Maternal prenatal care information and health-related characteristics are also provided on the NLSY79 Child and Young Adult CD. On this data file, information derived directly from the mother in the fertility section of the main NLSY79 youth questionnaire is linked appropriately to individual biological children. This information includes birth dates of children, postnatal care, infant health care, and health insurance information. A detailed written and statistical description of these data can be found in Center for Human Resource Research (1991).

As part of the child data collection, the *Mother Supplement* (MS) survey instrument includes a selection of scales measuring 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.

Information on the child's health is also collected from the mother in the *Child Supplement* (CS) survey instrument. The mother is asked to report on the child's health limitations, accidents and injuries, medical treatment in the last twelve months, dental care, and health insurance coverage. The child's height and weight at the time of interview are either measured by the interviewer or reported by the mother. Beginning in 1996, the mother also answered several questions about whether the child is right-or left-handed.

The health section of the young adult CAPI questionnaire gathers information on types of health limitations, accidents and injuries, number of hospitalizations, height, weight, and insurance coverage. 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, the mothers are asked a series of questions on the young adult's health comparable to those in the young adult CAPI questionnaire. Questions on whether the young adult is right- or left-handed were asked in 1996 and 1998 for all respondents.

For additional information on the NLSY79 Child and Young Adult data collections, users should consult the NLSY79 Child & Young Adult Data Users Guide.

Survey Instruments: Fertility sections of main youth questionnaires, *the Young Adult Self-Report Booklet*, the Health section of young adult questionnaires, the *Child Supplement* and the *Mother Supplement*.

Documentation: NLSY79 Child & Young Adult Data Users Guide.

Data files: See areas of interest "Natal," "Mom Wellness," "Birth Record xxxx," "YA Self," "Health," "Assessment xxxx," "Child Supplement xxxx," and "Mother Supplement xxxx."

References

Center for Human Resource Research, "Maternal-Child Health Data From the NLSY: 1988 Tabulations and Summary Discussion," CHRR, The Ohio State University, Columbus, OH: 1991.

Center for Human Resource Research, NLSY79 Child & Young Adult Data Users Guide, CHRR, The Ohio State University, Columbus, OH.

4.20 Household Composition

This section describes variables related to household and family composition, household identification, linkages between members of multiple respondent households, and household residence. Some familiarity with the following survey instruments which gather information on households is necessary: the NLSY79 *Household Interview Forms*, the NLSY79 "Household Enumeration," the NLSY79 *Face Sheet*, and the household screeners that were used to select respondents for the NLSY79 cohort. The "Survey Instruments" section in Chapter 3 of this guide provides descriptions of each of these instruments.

This section does not delineate variables pertaining to characteristics or experiences of household members, the presence of partners within the household, or geographical areas of residence. Those interested in information collected specifically on household members should explore the individual topic of interest, e.g., age, sex, educational status, etc. The availability of information on partners is discussed in the "Marital Status, Marital Transitions & Attitudes" section of this guide. Finally, those interested in information detailing the geographic residence of NLSY79 respondents, e.g., state, county, or SMSA, should refer to the "Geographic Residence & Environmental Characteristics" topical discussion.

NLSY79

Household and Family Composition: This section provides definitional and data collection information on household members, family members, and family size.

1. Household Members: The term "household" refers to all individuals sharing the respondent's primary residence at the time of the interview. For respondents living in temporary quarters (except temporary military quarters), the usual residence is defined as that person's permanent residence. For those living in their own dwelling unit or in military family housing, the usual residence is the person's dwelling unit. For example, if a male college student is living in a temporary residence, such as a fraternity, those who share his permanent residence, such as his parents' address, would be considered his household members. However, if that same college student were living in his own apartment, all those living in his apartment would be considered his household members. Household specification for those respondents enlisted in the military family housing, the household is the household of the respondent's spouse, and (2) for those in the military who are unmarried, no household information is recorded.

During PAPI surveys, information about a respondent's household was gathered during a separately administered household interview. Three different *Household Interview Forms* were used prior to 1987: Version A was completed by a parent of those respondents living in a parental household; Version B was administered to youth not living at a permanent address; and Version C was answered by those

respondents living in their own dwelling unit or independent living quarters. Table 4.20.1 details, by survey year, the relevant universes and residence types specific to each version; notes on variations in administration of the forms are included. A series of variables entitled 'Version of Household Record Used' is available for the 1979–80 and 1982–86 survey years. To determine the version of the household interview used in 1981, it is necessary to match information from the variable, 'Type of Residence R is Living In,' to residence information that was included on the three different forms. Beginning in 1987, only one version of the household interview was used, as all respondents were 22 or older and living predominantly on their own. Since the introduction of CAPI interviews in 1993, household information has been collected in the first section of the main questionnaire rather than in a separate instrument.

As household composition questions are asked during the household interview, answers are recorded (updated) on a section of the *Face Sheet* called the "Household Enumeration" or household record. All members of the respondent's household are enumerated each survey year on the household record; in 1978, household members were listed on the household screener. The relationship generally listed for each household member on the household record is relative to the youth respondent, e.g. 'Household Record - Relationship to Youth Member # 1.' For variables from the screener and for one series of 1979 household record variables, the relationship of household members (only family members in the screener) is relative to the householder. Anyone who lives in the residence but is temporarily away is listed; anyone who is there only temporarily is removed from the listing. For the screener and for interviews in which the respondent lives in a new household, i.e., living with new people rather than living at a new address, the householder generally is listed first, followed by a spouse; any children; any other relatives; and any roomers, boarders, hired help, or other usual unrelated residents.

Year	Household Version	Conducted with	R's Residence
1979	Version A Version B1 Version B2 Version C	Parent of R only Youth Respondent Youth Respondent Youth Respondent	Parental home Dorm, jail, hospital, temporary living quarters Military sample member Own dwelling unit, orphanage, religious institution, other living quarters
1980	Version A	Parent of R only	Parental home
	Version B	Youth Respondent	Dorm, jail, hospital, mil/temp living quarters
	Version C	Youth Respondent	Own dwelling unit, orph, relig, mil/other living quarters ²
1981	Version A	Parent of R only	Parental home ¹
	Version B	Youth Respondent	Dorm, jail, hospital, mil/temp living quarters
	Version C	Youth Respondent	Own dwelling unit, orph, relig, mil/other living quarters ²
1982	Version A	Parent of R only	Parental home ¹
	Version B	Youth Respondent	Dorm, jail, hospital, mil/temp living quarters
	Version C	Youth Respondent	Own dwelling unit, orph, relig, mil/other living quarters ²
1983	Version A	Parent of R only	Parental home ³
	Version B	Youth Respondent	Dorm, jail, hospital, mil/temp living quarters
	Version C	Youth Respondent	Own dwelling unit, orph, relig, mil/other living quarters ⁴
1984	Version A	Parent of R only	Parental home ³
	Version B	Youth Respondent	Dorm, jail, hospital, mil/temp living quarters
	Version C	Youth Respondent	Own dwelling unit, orph, relig, mil/other living quarters ⁵
1985	Version A	Youth R or Parent	Parental home ⁶
	Version B	Youth Respondent	Dorm, jail, hospital, mil/temp living quarters
	Version C	Youth Respondent	Own dwelling unit, orph, relig, mil/other living quarters ⁴
1986	Version A	Youth R or Parent	Parental home ⁶
	Version B	Youth Respondent	Dorm, jail, hospital, mil/temp living quarters
	Version C	Youth Respondent	Own dwelling unit, orph, relig, mil/other living quarters ⁴
1987–2000	One HH version only	Youth respondent only	Any residence

Table 4.20.1 Guide to the Household Interview Forms: NLSY79 1979–2000

¹ Includes youth respondents under 18, living in other parent's or spouse's parents' home.

² Includes youth respondents over 18, living in other parent's or spouse's parents' home.

³ Preferred version of household interview for youth respondents living in other parent's or spouse's parents' home.

⁴ Permissible (though not preferred) version of household interview for youth respondents living in other parent's or spouse's parents' home.

⁵ Included some youth respondents still in parental household (with explanation as to circumstances—code "17" added).

⁶ Included youth respondents in other parent's or spouse's parents' home (codes "18" and "19" added to reflect whether household interview conducted with the youth respondent or the parent).

2. Family Members: Within the listing of household members, family units are identified through family unit numbers and relationship codes. A family unit includes all those related by blood, marriage, or adoption. For each member of the household in every survey year, including the 1978 screener, the family unit number is listed on the "Household Enumeration" or the screener, e.g., 'Household Record - Family Unit # 1 Member # 1.' All family members in an interrelated group will share a family unit number, with number 1 assigned to the respondent's family. Each additional interrelated group or individual adult sharing the household but not related to another group or individual in the household constitutes an

additional family unit. For example, if Mr. and Mrs. Brown are boarders in the same house with Mr. and Mrs. Smith, the Smiths comprise the first family unit and the Browns are a second family unit. Users should note that the reliability of 1979–92 family unit numbers beyond those assigned to the respondent's family is questionable. Beginning in 1993, family units were assigned electronically; the definition of a family unit remains the same. Codes were added for partner's family/relations. All others are assigned a code of "9."

An enumeration of a respondent's children is also available. Several variables have been created as part of the Supplemental Fertility File (area of interest "Fertility and Relationship History/Created"), including variables such as '# of Own Children in Household,' 'Age of Youngest Child in Household,' and a variety of variables for each biological child listed, with some exceptions, in order of age. Unedited variables from the *Children's Record Form* (areas of interest "Child Record Form/Biological" and "Child Record Form/Nonbiological") are also available for both biological and non-biological children. See the "Fertility" section of this guide for more information about the collection of information on the respondent's children.

Finally, information on whether the mother and father of the 1st–8th child (in 1991, new children only) live in the household is available for the 1987–2000 survey years. In all other years, information on whether the father of the child is present is available for children of female respondents.

3. Family Size: Beginning with the 1990 release, a family size variable, comparable to the family size variable created for the computation of the 'Total Net Family Income' and 'Poverty Status' variables, was created for each year. The variable is constructed by simply cycling through the household record "relationship codes" and increasing the family size by one each time a qualifying relationship relative to the respondent is encountered. Qualifying relationships include all relations by blood, marriage, and adoption. Foster relationships, partners, boarders, guardians, and other non-relatives are considered non-family members for the purposes of this variable.

User Notes: Of particular concern to some users with respect to creation of 'Total Net Family Income' is the omission of partners from the family size and family income variables. Inferring a monetary relationship between non-relatives who have a non-legal relationship by their own design is more tenuous than inferring one between designated family members. Therefore partners are excluded. Users can easily add or subtract from the family size by designating their own qualifying or non-qualifying relationships.

Program Derivation: The SPSS program statements for a sample survey year (1979–92) FAMILY SIZE variable are as follows:

COUNT FAMSZXX=RELR1 TO RELR15 (0 THRU 32,37 THRU 44,47 THRU 49) IF (WEIGHTXX EQ 0) FAMSZXX=-5

After 1993, the roster was expanded to accommodate up to 20 individuals. The SPSS program is the same but the number of relationships to check is five larger. Additionally, the respondent is not on the household roster after 1992, so FAMSZXX is initialized to "1."

Household Identification and Linkages: The NLSY79 screening procedure allowed more than one member of a household to be selected for interviewing. The original 12,686 respondents were members of 8,770 households; 6,742 respondents or 53 percent of the sample were members of households from which more than one respondent originated, while 5,944 respondents or 47 percent were members of single respondent households (Table 4.20.2).

Household Type ¹	Households	Respondents	% of Sample ²
Single Respondent Households	5944	5944	46.9
Multiple Respondent Households	2826	6742	53.1
2 Respondent Households	1985	3970	31.3
3 Respondent Households	634	1902	15.0
4 Respondent Households	170	680	5.4
5 Respondent Households	32	160	1.3
6 Respondent Households	5	30	0.2
Total	8770	12686	100.0

Table 4.20.2 Distribution of Respondents Living within Single & Multiple Respondent Households: NLSY79

¹ Household types are based on information gathered during the 1978 household screening.

² Numbers have been rounded up to the nearest tenth.

To establish linkage of respondents originating from the same household, variables identify other interviewed household members and their relationships as of the 1979 interview. The 1979 variable providing the unique household identification number of each household is R00001.49, 'Household Identification Number' (HHID). The same HHID is assigned to all respondents who originated from the same household in 1979. In multiple-respondent households, the HHID corresponds to the lowest respondent 'Identification Code' of all respondents interviewed in that household; in single-respondent households, the HHID corresponds to the respondent 'Identification Code.' The HHID variable was constructed using other created variables from the NLSY79 main data set and exists only for 1979. Multiple respondent households can also be identified through variables that identify other respondents in the same household and their relationship to the first respondent. Reference numbers include R00001.50–R00001.61, e.g., 'Identification Code of 1st Other Interviewed Youth in R's Household.'

Type of Pair	Responde	ent Members	Households			
Type of Fail	1979	1992	1979	1992		
Siblings	5863	4806	2448	2149		
Two Siblings	3386	2744	1693	1572		
Three Siblings	1725	1427	575	446		
Four Siblings	604	519	151	116		
Five Siblings	130	99	26	13		
Six Siblings	18	17	3	2		
Spouses ¹	334	216	167	120		

Table 4.20.3 Number of NLSY79 Civilian Respondent PairsInterviewed in 1979 & 1992

¹ Excludes three cases in which the relationship assigned to the respondent pair is "spouse" for only one member of the pair.

Although these matches represent unique samples for a number of research topics, users should be aware that matches may be demographically non-representative due to the age restrictions applied to all members chosen from a household. The primary types of relationships that existed among respondents within multiple respondent households at the time the surveys began included brothers, sisters, husbands, and wives (Table 4.20.3). Other relationships included cousins, brothers- and sisters-in-law, step-brothers or - sisters, and other types of non-relatives.

User Notes: Persons analyzing military households should note that household screener information was not collected for persons in the military sample. Thus, while military units are included in the total 8,770 unique households, military units cannot be multiple respondent households.

Spousal pairs are inconsistent for three respondents. In the created relationship codes for household members (R00001.51, R00001.53), respondents 9707, 8522, and 1414 are considered spouses of 9706, 8521, and 1413, respectively. However, 9706 is considered 9707's partner, 8521 is considered 8522's "other non-relative," and 1413 is considered 1414's husband or brother-in-law. These assigned relationships are reflective of respondents' own explanations of the relationships. Relationship codes linking respondents may be weak outside of immediate family relationships. Researchers are not encouraged to use the 1982 'Version of Household Record from Last Interview' as a substitute for the missing 1981 version because it may contain inaccuracies and because not all 1981 interviewees were interviewed in 1982.

Beginning in 1993 with the advent of CAPI, the respondent is no longer listed on the household record, and, thus, the "zero" code is no longer available.

Household Residence: Household residence refers to the type of dwelling or living situation of the respondent. Household residence information is available for the respondent at each survey point, for the respondent during his/her childhood, and for the respondent's children during recent surveys. The variable 'Type of Residence R is Living In' classifies the respondent's actual place of residence at the time of each survey. From 1979–86, it was created based upon responses to several questions asking about different types of dwelling units. In these years, several versions of the *Household Interview Forms* (the instrument completed before the main questionnaire and used to construct the household enumeration) existed. The universes for these different versions were dependent upon the type of dwelling unit in which the respondent lived (parental home, own dwelling unit, individual or group quarters), the sample type of the respondent (military or civilian), and who answered the household interview section questions (respondent or parent). The responses to questions designating type of residence from each of these versions were combined into one variable reflecting type of residence for the entire sample.

Beginning in 1987, the several versions of the *Household Interview Forms* were combined and all types of residences were coded in one question. Therefore, after 1986, this question is no longer considered a "created" variable. The "Type of Residence R is Living In' variables include categories such as dorm, fraternity or sorority, hospital, jail or juvenile detention center, orphanage, religious institution, own dwelling unit, parents' household, and specific types of military quarters. The codes assigned to response categories for type of residence in 1979 differ significantly from those in other survey years. Also, in earlier years, respondents living in parental homes were treated as valid skips; in later years, these respondents were assigned a separate code that differs by year.

Retrospective information describing the respondent's childhood living arrangements was collected during 1988 in a three-part series of questions on the *Childhood Residence Calendar*. In Part 1, the respondent's identification of any type of parent with whom s/he lived for four or more months was recorded. Coding categories included biological, adoptive, and/or stepmother and/or father for each age from birth through 18 years, e.g., 'Lived with Biological Mother at Birth,' 'Lived with Adoptive Father at Age 16.' Ages at which the respondent stopped living with a parent, the reason for ending shared living arrangements, and the frequency of visitation with the absent parent during the first year after coresidence ended were also collected. For those ages when the respondent reported not living with a parent, information was collected in part 2 of the *Childhood Residence Calendar* on (1) coresidence with grandparent(s), other relative(s), foster parent(s), or friend(s); (2) residence in a children's home or orphanage, a group care home, a detention center/jail/prison, or another institution; (3) use of another type of arrangement; or (4) for those ages ten and over, whether the respondent was left to be on his/her own. Variable titles for this series include 'Lived with Foster Parent(s) (Not Living With a Parent) at Age-7,' 'Lived in Children's Home/Orphanage (Not Living With a Parent) At Age-2,' 'Left to be on Own (Not Living With a Parent)

at Age-15,' etc. The number of foster or group care arrangements experienced by the individual is also recorded. Finally, in part 3 of this supplement for each age during which the respondent experienced more than one living arrangement when not living with a parent, the place at which s/he stayed the longest is identified. Data quality issues are discussed by Haurin (1991).

Information on the residence of respondents' children is available, for the most part, since the 1982 survey year. The Supplemental Fertility File (area of interest "Fertility and Relationship History/Created") contains edited variables for all children for each post-1981 survey except 1993. Note that edited variables based on the 1989 and 1991 raw data are not available until the subsequent year's release. These edited variables, cleaned and checked for consistency, include residences of each biological child in birth order (with some anomalies), e.g., 'Usual Residence of 7th Child,' and combine information collected for residence of children of male respondents with that of children of female respondents. Coding categories include in the respondent's household, with other parent, with other relatives, in foster care, with adoptive parents, in a long-term care institution, away at school, deceased, lives part-time with both parents, lives part-time with the respondent and another person, and other. The unedited variables upon which the edited variables are based can be found in the "Fertility" section of the main youth questionnaire and include residence of all biological children; residence of all children born by the time of the previous interview, collected annually since 1984; and residence of all children born since the last interview, collected since 1983. Unedited residence information for non-biological children is available for 1985, 1986, 1988, 1990, 1992, and 1994–2000. Coding categories for all unedited variables are the same as for edited variables. These unedited variables are included within area of interest "Birth Record" for pre-1985 years and in the "Birth Record xxxx" files for 1985 and later.

The distance from the respondent's residence to that of each child not living in the household, as well as the distance each child lives from his/her mother (for children of male respondents) or father (for children of female respondents), is available in the "Birth Record xxxx" area of interest for 1984–86, 1988, 1990, 1992, 1994, 1996, 1998, and 2000. The distance from the respondent's residence to the residence(s) of the respondent's mother and father was collected during the 1979 interview.

Survey Instruments & Documentation: The 1988 childhood residence data were collected using questions in Section 16 "Childhood Residence" and the supplemental Childhood Residence Calendar. Information on residence of respondent's children information is collected in the "Fertility" section of the questionnaire. Questions on distance of a respondent's child to the child's mother, father, or to the respondent are located in the "Fertility" section. The questions on distance from the respondent's residence to that of his/her father/mother can be found in the "Family Background" section of the 1979 questionnaire. General information on the Supplemental Fertility File variables, such as the edited residence of children variables, can be found in Appendix 5 of the *NLSY79 Codebook Supplement*. A technical appendix in Morgan (1983) presents details on respondent sibling matching procedures.

Data Files: The family size and type of residence variables are included in the "Key Variables" area of interest. Edited residence of children variables have been placed in "Fertility and Relationship History/Created," while unedited residence of children variables have been placed in the "Birth Record" and "Birth Record xxxx" areas of interest. "Common" variables include the household identification numbers, identification numbers of other respondents in the same household, and relationship codes of those respondents. Information from the household interview, which is transcribed onto the household enumeration, is included in "Household Record."

References

- Haurin, R. Jean. "Childhood Residence Patterns: Evidence from the National Longitudinal Surveys of Work Experience of Youth." Columbus, OH: CHRR, The Ohio State University, 1991.
- Haurin, R. Jean. "Patterns of Childhood Residence and the Relationship to Young Adult Outcomes." *Journal of Marriage and the Family* 54,5 (November 1992): 846–60.
- Morgan, William R. "Sibling Influences on the Career Plans of Male and Female Youth." Columbus, OH: CHRR, The Ohio State University, 1983.

NLSY79 Children

Household and Family Composition: A household includes all individuals sharing the same permanent residence at the time of the interview. The family or family unit, in this context, includes all those related by blood, marriage, or adoption who share the same household or permanent residence. Thus, any interrelated group (i.e., all family members) in the same household is considered a family unit, while any unrelated person or group (which is interrelated but unrelated to other household members, such as a family of boarders) living in the household will comprise an additional family unit.

Both household and family composition of the mother of the child are delineated by a series of yearly variables created from household roster information, e.g. 'Is Spouse of Mother Present in HH of Mother.' This series includes presence/absence of spouse (for both married and never married mothers), partner, mother/step/grandmother, and father/step/grandfather of the mother in her household. Other variables include the 'Number of Family Members,' the 'Number of Family Units,' and the 'Number of Household Members,' specifies:

- number of adult members by (a) education: less than 12 years, 12–13 years, 14–15 years, and 16+ years; (b) sex: males and females; and (c) work experience: the number of adults and the number of adult females who work full- or part-time; and
- (2) number of members under 18 years of age by (a) four age categories: 0–2 years, 3–5 years, 6–11 years, and 12–17 years; and (b) one sex category: females.

Also available are the number of adult family members, the number of children of the mother, and the number of biological and step siblings of the mother. All information is derived from the household roster. The Young Adult survey contains a Household Record section that is comparable to that collected in the main youth survey.

Whether the father of children living in their mother's household lives in the household is available for 1984–88, 1990, 1992, and 1994–2000 ('Father of Child [Living in HH] Live in HH?'). If the father is not a member of the mother's household, variables present for 1984, 1986, and 1988 address whether he is living ('Father of Child [Living in HH] Living?'), his child visitations ('Times in Past 12 Months Child [Living in HH] Has Seen Father' and '# of Days Fathers Visits Usually Last with Child [Living in HH'], and the distance he lives from the mother ('Distance Father of Child [Living in HH] Lives from Mother').

Household Identification and Linkages: Due to the nature of the original NLSY79 sample design, the main cohort contains multiple respondents from the same household and often from the same family unit. A subset of respondents related to the mothers of the children are identified on the NLSY79 Child data set. Any spouse, sisters, aunts, and female cousins of the mother who were also interviewed in 1979 are identified by ID code on the file. The IDs for these relatives of the mother were derived from information about other interviewed NLSY79 respondents on the main file. Since all biological children of NLSY79 mothers are included in the NLSY79 Child data set, many children have siblings who were also interviewed and assessed. These siblings share the same mother ID embedded in their own child ID; thus, the first five digits of their ID numbers will be the same. Although these matches represent unique samples for a number of research topics, users should remember that the matched group of related respondents or children may not constitute a demographically representative sample.

Household Residence: For NLSY79 children, household residence can best be described as usual living arrangements or situation at the time of the mother's interview. The customary residence of the child at the mother's interview date is available for all years. In 1982 and 1984 to 2000, categories for 'Usual Residence of Child' include in the mother's household, with the father, with other relatives, with foster care, with adoptive parents, in a long-term care institution, at school, deceased, part-time with mother and part-time with father, part-time with mother and part-time with other. In 1979–81 and 1983, categories for 'Residence of Child (from HH Record)' include not in the household of the mother; in the mother's household; and deceased.

Household Composition: Young adults, regardless of whether or not they are living with their mothers, complete a household interview almost identical to that in the main youth. Through 1998, young adults were asked the name, age, relationship, highest grade completed, and work questions for all household members. Beginning in 2000, the highest grade completed and work questions were eliminated.

Survey Instruments: With the exception of those regarding the child's father and most regarding the child's residence, household and family composition variables are created from the mother's household record. Information for father variables originates from the "Fertility" section of the main youth questionnaire and is reconstructed with the child as the unit of observation. The variables describing the child's usual residence are created from the mother's household record in 1979–81, 1983, and 1985; in 1982, 1984, and 1986–2000, they are created from the 'Fertility' series.

Data Files: Household and family composition variables can be found in "Mother's Household Composition"; variables regarding type of residence, father presence and visitation, other siblings, and other interviewed relatives of the mother are located in the area of interest "Child Background."

4.21 Income

NLSY79

This section describes the income questions asked to NLSY79 respondents since the cohort's inception. The NLSY79 cohort is a unique source of income information. Because the original NLSY79 panel contained a supplemental sample of 5,295 economically disadvantaged, non-black youths, researchers are able to precisely measure income of low-income and minority households. Moreover, because in-depth income questions have been asked since 1979, detailed age/income profiles can be traced over time.

Most NLSY79 income questions refer to the previous calendar year. For example, if the survey is being fielded in 1992, most questions ask the respondent to report how much they earned during the 1991 calendar year. A summary of the questions asked in the early surveys is shown in Tables 4.21.1 and 4.21.2. During each of the first four surveys (1979–82) NLSY79 respondents were examined to see if they met one of following five criteria:

- 18 years old or greater
- Had a child
- Enrolled in college
- Married
- Living outside their parents' home

If they did not meet any of these five criteria, respondents were asked the simple income section outlined in Table 4.21.1. However, if respondents fell into one of these five categories, the interviewer asked a more detailed set of questions outlined in Table 4.21.2.

Question	79	80	81	82
Income from Wages, Salary, Tips	*	*	*	*
Unemployment Compensation		*	*	*
Income from Other Sources	*	*	*	*
Live in Subsidized Housing?	*		*	*

Table 4.21.1 Short Form NLSY79 Income Questions: 1979–82

Question	79	80	81	82
Military Income	*	*	*	*
Wages, Salary, Tips	*	*	*	*
Net Business Income	*	*	*	*
Net Farm Income	*	*	*	*
Unemployment Compensation	*	*	*	*
Child Support, Alimony	*	*	*	*
AFDC Payments	*	*	*	*
Food Stamps	*	*	*	*
Supplemental Security Income (SSI)	*	*	*	*
Other Welfare			*	*
Educational Benefit, Scholarship	*	*	*	*
Disability, Veteran Benefits		*	*	*
Parental, Relative Support	*	*	*	*
Other Income (Interest, Dividends, Rent)	*	*	*	*
Income Other Household Members	*	*	*	*

Table 4.21.2 Long Form NLSY79 Income Questions: 1979–82

Beginning in 1983, the NLSY79 questionnaire used the same set of income questions for all respondents, since all respondents would have been at least 18 years old and thus sent through the long series of questions. In this set of questions, all respondents are asked about income from a variety of sources, as shown in Table 4.21.3. First, they report how much money they received from working; questions are asked about their military income, wages, salaries, tips, farm income, and business income. Then respondents provide information about transfers from the government through programs such as unemployment compensation, AFDC payments, food stamps, SSI, and other welfare payments. Respondents are then queried about transfers from non-government sources such as child support, alimony, and parental payments. Finally, respondents report income from other sources such as scholarships, V.A. benefits, interest, dividends, and rent.

User Notes: Researchers interested in the income of a respondent's spouse or partner are cautioned that, until 1994, the survey contained separate sets of questions for spouses and partners. This means that researchers who are trying to compute the couple's income need to check answers to both spouse wages and partner wages. After 1994, the CAPI questionnaire combined these sets of questions into one. Hence, users not wanting partner's income data should examine the wording of income source questions carefully.

Question	83	84	85	86	87	88	89	90	91	92	93	94	96	98	00
Military Income	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Wages, Salary, Tips	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Net Business Income	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Net Farm Income	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Unemployment Compensation	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Receive Child Support, Alimony	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pay Child Support, Alimony	*	*	*	*	*	*									
Pay Child Support													*	*	*
AFDC Payments	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Food Stamps	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Other Welfare and SSI	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Education Benefit/Grant	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Disability, VA Benefits	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Inheritance, Gifts						*	*	*	*	*	*	*	*	*	*
Parent, Relative Support	*	*	*	*	*	*									
Other (Interest, Dividends, Rent)	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Income Other HH Members	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Rental Subsidy	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Table 4.21.3 Detailed NLSY79 Income Questions 1983–2000

Nonresponse: One major concern when asking individuals about their income holdings is nonresponse bias. While it is outside the scope of this section to fully investigate nonresponse bias in the NLSY79, this section briefly describes nonresponse in 1992 as an example. Researchers interested in a fuller discussion of nonresponse should consult Chapter 5 of this guide. There are two primary types of questions on income: general questions asking whether the respondent received income from a particular source and specific questions on the amount of income. Factors that are likely to contribute to nonresponse are suspicion, uncertainty, shared responsibility for family finances, and complex financial arrangements.

Table 4.21.4 provides information on response rates to income questions in 1992. The table is divided into three sections. The first section shows the response rates for questions asked about the respondent. The second and third sections show the response rates for the spouse and partner, respectively. The average response rates (99.9 percent) in the receipt column show that almost every NLSY79 respondent will tell the interviewer if they received income from a particular source. Additionally, the amount column, which is calculated based only on individuals who received a particular type of income, also shows high response rates. Except for alimony payments (54 percent), more than 90 percent of all NLSY79 respondents knew and were willing to divulge how much they earned from various sources.

Examining the sections labeled "Spouse's Income" and "Partner's Income" shows a very different picture. Spouse's income is known with less certainty and partner's income with much less certainty than the

respondent's income. For example, 91.9 percent of the respondents reported how much they earned from their own business or farm. However, these same individuals were able to report only 85.6 percent of the earnings of spouses and only 59.7 percent of their partner's income from the same source.

	Receipt	Amount
Respondent's Income		
Military Income	99.9	99.4
Wages/Salaries/Tips	—	97.8
Business/Farm	99.9	91.9
Unemployment Benefits	99.9	97.8
Alimony	99.7	54.0
Child Support	99.8	96.8
AFDC	99.9	97.0
Food Stamps	99.9	97.5
SSI/Public Assistance	99.9	93.5
VA Benefits/Disability	99.9	95.8
Spouse's Income		
Military Income	99.8	95.7
Wages/Salaries/Tips	—	95.6
Business/Farm	99.4	85.6
Unemployment Benefits	99.8	91.9
Partner's Income		
Military Income	99.5	56.1
Wages/Salaries/Tips	_	71.8
Business/Farm	96.7	59.7
Unemployment Benefits	96.2	_

Table 4.21.4 Response Rates to Questions on Income: NLSY79 1992

Top Coding: Because the NLSY79 is a public use data set distributed widely throughout the research and public policy communities, the survey takes extensive measures to protect the confidentiality of respondents. One method of ensuring confidentiality is to "top code" unusually high income values. The NLSY79 top code values were originally designed to prevent identification of the top two percent of respondents.

The NLSY79 has used four top coding algorithms for income. (1) From 1979 to 1984, every NLSY79 income question that elicited a response above \$75,000 was truncated to \$75,001. (2) From 1985 to 1988, the values were increased to \$100,000 and \$100,001 respectively. Unfortunately, this algorithm results in a sharp downward bias in the mean value of NLSY79 income holdings since the entire right hand tail is truncated. (3) To fix this problem, a new algorithm was introduced beginning in 1989. The new top code algorithm replaced all values above the cutoff with the average of all outlying values. (4)

Beginning in 1996, another new algorithm was used. This algorithm takes the top two percent of respondents with valid values and averages them. That averaged value replaces all values in the top range.

Top coding primarily affects seven of the NLSY79 income variables. The seven variables that are top coded include the income from respondent's wages, respondent's business, spouse's wages, spouse's business, partner's wages, rest of the family, and other sources such as rents, interest, and dividends.

A second issue with NLSY79 data concerns individuals living outside the U.S. Living outside the U.S. does not preclude a respondent from being interviewed. For example, in 1992, 125 respondents lived abroad. Between 1989 and 1992, for people who hold assets denominated in foreign currency, little effort was made to transform these assets into dollar figures. Instead, such values are classified as "invalid skips" in the data. Beginning in 1993, an effort was made to convert these currencies whenever the unit in which the response was made could be determined. While researchers are warned that this occurs, relatively few individuals live outside the U.S.

Created Variables and Summary Statistics: Each year, the CHRR staff creates an NLSY79 variable entitled "Total Net Family Income." This variable is designed to provide researchers with a summary variable of all the income received in the household. The actual computer code used to create this variable is found in Appendix 2 of the *NLSY79 Codebook Supplement*. Appendix 2 shows that each year a slightly different program is used to compute net family income. However, these programs all have a similar structure. For example, the 1992 net family income variable is created by:

- Initializing 19 different income categories to valid skip (-4).
- Examining various demographic variables such as military status to see which of the 19 categories can be automatically classified as zero.
- Counting the number of months a respondent or partner participated in a government aid program, such as AFDC or Food Stamps. Multiplying the number of months of participation by the average weekly/monthly benefit to create total yearly income from that source.
- Summing all 19 components to form total net family income. If any component is MISSING, REFUSED, or UNKNOWN, then set total net family income to MISSING, REFUSED, or UNKNOWN. Hence, if the respondent knows how much they received from all sources except for one, the net family income variable will be coded as missing.
- No items are subtracted from the 'Net Family Income' variables to account for taxes or other adjustments.

Researchers should note that in the survey years from 1979 to 1986, total net family income was created a little differently than from 1987 to present. In the early years when many of the NLSY79 respondents were younger and living in the parental household, the parent was given the *Household Interview* (Version A). These interviews obtained income from all household members related by blood or marriage. If

Version A was used, then the total net family income program picked up income from the *Household Interview*, and the component income variables from the income section of the questionnaire were ignored. Usually, if the parent completed the *Household Interview*, then the youth respondent went through a limited set of income questions that would not allow for the creation of total net family income. If Versions B or C of the *Household Interview* were given, then the respondent went through the income section and the program picked up the component income variables. Beginning in 1987, the three versions of the *Household Interview* were reduced to one (Version C) and all respondents go through the income section regardless of whether or not they are living in the parental household.

User Notes: Partner income and earnings are not included in the constructed "Net Family Income" variable.

Survey Instruments: The income variables are found in the following sections of the questionnaires: Section 11 (1991, 1993), Section 12 (1981, 1987, 1989, 1990, 1992), Section 13 (1983, 1986, 1994–2000), Section 14 (1982, 1985), Section 15 (1984, 1988), Section 17 (1980), and Section 21 (1979).

Data Files: Interested users should examine the "Income" area of interest for these variables.

NLSY79 Children

A small amount of income information is gathered for the NLSY79 children. In 1988–2000 in the *Child Self-Administered Supplement*, children 10 years of age and older were asked who made decisions about spending their money. Children were able to state if they, their mother, father, or another individual primarily made the decisions. In 1990–2000, children were asked if they worked for pay doing jobs like baby sitting, yard work, or fast-food worker. Children who answered yes were asked how much money they earned and how many hours they worked in a typical week.

More detailed income information is gathered from young adults. Their income section, which began with the first survey in 1994, is patterned after the main NLSY79 section. Young adults are asked about income from the military, wages, salaries, commissions, farm work, and businesses. Additionally, respondents are asked about income received from government programs including unemployment compensation, AFDC, food stamps, public assistance, welfare, WIC, G.I. Bill, disability, and other payments. The questionnaire also asks for detailed data about the receipt of child support payments.

Survey Instruments: The Children of the NLSY79 income information is found in the Child Self-Administered Supplement for all survey years. The young adult income questions are located in Section 15 of the questionnaire.

4.22 Industries

This section overviews the raw and created industry variables available for the NLSY79 main cohort and the NLSY79 Children and Young Adult groups.

NLSY79

Two sets of variables are available for each survey year (1979–2000) that provide information on the type of industry in which a respondent worked. Verbatim responses to questions such as "What kind of business or industry is this? What do they make or do?" have been recorded within the NLSY79 questionnaires and *Employer Supplements* during each year's survey. Coding of responses is performed at NORC using the 1970 and, for the CPS job only, the 1980 Census industrial classification systems (Census 1971, 1980). The Census system consists of the 14 industry groups, representing more than 19,000 industries.

Beginning in 1994, NLSY79 CAPI surveys are preloaded with the last industry and occupation. To reduce errors and save on the amount of coding, each respondent is asked if the industry and occupation reported last time is still correct. Only if the respondent states this information is no longer correct, is the industry or occupation recoded.

Agriculture, Forestry, and Fisheries
Mining
Construction
Manufacturing - Durable Goods
Manufacturing - Nondurable Goods
Transportation, Communications, and Other Public Utilities
Wholesale Trade
Retail Trade
Finance, Insurance, and Real Estate
Business and Repair Services
Personal Services
Entertainment and Recreation Services
Professional and Related Services
Public Administration

Figure 4.22.1 Major Industrial Groups: 1970 Census of Population

The first set of NLSY79 variables, 'Type of Business or Industry of Most Recent Job (CPS Item),' reflects the industry for the current or most recent job of those respondents who reported working for pay since the last interview. Included are those whose survey week activity was "working" as well as respondents who were unemployed or out of the labor force during the survey week but who had worked for pay since the last interview. The 1970 Census classification system is used to code industry information from the 1979–2000 surveys; industries of a respondent's most recent job identified during the 1982–2000 surveys

are doublecoded with the 1970 and 1980 Census codes. A second set of variables, 'Type of Business or Industry Job #1–5,' codes the industry of up to five jobs including the CPS job (generally considered to be Job #1) in which the respondent worked since s/he was last interviewed. Industry is not re-collected for the CPS job during the administration of the *Employer Supplements*. After 1993 all job specific information was removed from the CPS section and is only collected in the *Employer Supplements*. This set of variables is coded using only the 1970 Census classification system.

Tables 4.22.1 and 4.22.2 give the number of respondents in each category in each survey year by gender.

						In	dustrial	Sector						
Survey Year	Agriculture, Forestry, Fisheries	Mining	Construction	Manufacturing (Durable)	Manufacturing (Nondurable)	Transportation, Communication, & Public Utilities	Wholesale & Retail Trade	Finance, Insurance, & Real Estate	Business & Repair Services	Personal Services	Entertainment & Recreation Services	Professional & Related Services	Public Administration	All Males
1979	195	19	216	331	229	94	913	45	196	126	64	253	66	2747
1980	174	31	242	392	233	125	1018	63	221	99	75	290	70	3033
1981	164	54	287	423	265	151	1043	90	246	98	68	362	90	3341
1982	308	87	472	589	378	248	1339	109	398	172	126	467	205	4898
1983	306	85	497	515	404	267	1314	124	426	176	132	500	190	4936
1984	228	87	476	778	518	237	1054	130	450	228	120	480	219	5005
1985	191	78	591	647	396	276	1118	141	410	138	74	441	172	4673
1986	189	61	583	645	407	312	1031	176	415	106	73	432	203	4633
1987	189	34	580	616	455	349	898	163	457	164	81	396	202	4584
1988	195	60	601	620	444	376	890	187	424	114	91	425	241	4668
1989	183	37	644	687	425	389	883	201	408	115	76	464	203	4715
1990	176	49	625	674	409	390	869	196	423	100	71	440	234	4656
1991	159	34	555	547	357	361	738	175	349	87	73	402	207	4044
1992	180	49	502	533	365	344	665	168	401	87	60	427	255	4036
1993	164	28	548	517	357	343	652	173	353	89	51	452	248	3975
1994	141	27	501	482	351	359	603	164	357	89	44	446	261	3825
1996	143	33	513	507	340	369	585	155	392	89	53	438	261	3878
1998	134	27	490	532	314	415	539	157	371	74	64	429	260	3806
2000	118	20	484	469	305	408	540	160	363	62	63	416	245	3653

Table 4.22.1 Industrial Sector of Civilian Respondents' Most Recent Job by Survey Year: NLSY79 Males 1979–2000

Universe: Respondents who reported working for pay since the last interview and for whom an industry code from the 1970 Census classification system was assigned.

Note: Data from 1979 to 2000 are based on 1970 S.I.C. codes.

						In	dustrial	Sector						
Survey Year	Agriculture, Forestry, Fisheries	Mining	Construction	Manufacturing (Durable)	Manufacturing (Nondurable)	Transportation, Communication, & Public Utilities	Wholesale & Retail Trade	Finance, Insurance, & Real Estate	Business & Repair Services	Personal Services	Entertainment & Recreation Services	Professional & Related Services	Public Administration	All Females
1979	49	7	19	117	179	44	883	149	53	310	40	496	74	2420
1980	33	5	26	156	209	63	988	195	79	235	38	613	78	2718
1981	29	7	13	165	233	78	981	241	83	221	43	787	115	2996
1982	76	17	43	232	355	123	1444	310	165	297	87	1038	203	4390
1983	80	14	33	201	360	120	1405	347	177	363	78	1075	231	4484
1984	77	16	49	291	423	132	1152	328	227	395	114	1092	237	4533
1985	55	22	40	257	371	141	1173	351	255	381	62	1083	162	4353
1986	45	15	39	256	361	138	1072	380	268	362	56	1147	219	4358
1987	54	5	45	251	385	170	959	386	289	403	60	1127	213	4347
1988	59	11	51	252	388	161	945	391	272	347	65	1155	231	4328
1989	46	10	61	278	367	172	904	369	290	370	51	1211	208	4337
1990	46	13	57	257	384	173	854	370	271	312	47	1284	223	4291
1991	38	11	43	209	269	155	696	308	214	275	53	1125	204	3660
1992	48	8	39	225	294	153	643	296	213	225	50	1179	255	3628
1993	35	9	38	195	286	163	637	288	237	268	36	1158	224	3574
1994	40	9	35	192	272	165	587	282	217	239	38	1127	236	3439
1996	42	9	44	196	262	162	623	262	222	260	47	1228	248	3605
1998	42	9	54	212	238	166	617	260	260	231	54	1291	242	3676
2000	39	8	68	209	195	181	584	253	248	197	61	1265	244	3552

Table 4.22.2 Industrial Sector of Civilian Respondents' Most Recent Job by Survey Year: NLSY79 Females 1979–2000

Universe: Respondents who reported working for pay since the last interview and for whom an industry code from the 1970 Census classification system was assigned.

Note: Data from 1979 to 2000 are based on 1970 S.I.C. codes.

User Notes: Industry codes for the 1994 data release are in different format than other years. In the 1994 data, the industries of individuals who stayed in the same job are found in one variable while those who switched employers are found in a different variable. Users must combine the information in these two types of variables if they wish to match the industry coding of previous years. In the 1996 and later data releases, a combined industry variable is again computed for users.

Survey Instruments: The "Current Labor Force Status - CPS" section of the questionnaire collects the respondent's verbatim response, from which a code is assigned to the industry of his/her most recent job. The "Jobs" section of the 1979 questionnaire and, for subsequent years, the *Employer Supplements* gather information on the industries of all other jobs in which a respondent worked more than 10/20 hours per week for at least nine weeks since the date of last interview.

Data Files: The "CPS" area of interest houses the 1970 Census codes for the most recent job variables; however, the 1980 Census coding of these variables is located in the yearly "Misc. xxxx" area of interest. "Job Information" contains the variables for the industry of up to four other jobs.

User Notes: McClaskie (1988) analyzed the extent of match between the three-digit industry codes assigned during 1979–86 for respondents who had not changed jobs since the previous interview. These codes would theoretically match if no respondent or coding error was present. This analysis found two- and three-digit matches of approximately 80 percent for most years studied.

NLSY79 Children

In each survey, information has been collected from the children aged 15 and older, the young adults, on the type of industry in which they worked. Verbatim responses were recorded for the questions, "What kind of business or industry is this? What do they make or do?" Through 1998, young adult jobs were coded primarily with the 1970 Census codes to enable researchers to match industry and occupation with NLSY79 mothers. The first CPS job was also coded with the 1990 Census codes. Beginning in 2000, 1990 codes were used for all jobs, with the first CPS job also including 1970 codes. By the 2000 release, the 1994-1998 coded items will have both 1970 and 1990 codes available.

Survey Instruments: The *Employer Supplement* sections of the *NLSY79 Young Adults Questionnaires* contain the questions pertaining to the industry in which the young adult is/was employed.

References

- McClaskie, Stephen L. "NLSY79 Industry Codes." Internal Memo. Columbus, OH: CHRR, The Ohio State University, 1988.
- U.S. Census Bureau. 1970 Census of Population Classified Index of Industries and Occupations. Washington, DC: U.S. Government Printing Office, 1971.
- U.S. Census Bureau. 1980 Census of Population Classified Index of Industries and Occupations. Washington, DC: U.S. Government Printing Office, 1980.

4.23 Job Characteristics

The variables discussed in this section are limited to the 1979 and 1982 data collections for the NLSY79. Descriptions of the broader range of job characteristic data available for the NLSY79 can be found in the "Jobs & Employers" section of this guide.

NLS surveys conducted in 1979 and 1982 included a series of questions on characteristics of the respondents' current job, e.g., the amount of variety, amount of autonomy, opportunity to deal with people or develop friendships, opportunity to complete tasks, amount of significance they attributed to their job, and amount of performance feedback received. Items for this scale, the Job Characteristics Index (JCI), were developed by Sims, Szilagyi, and Keller and are an extension of the work first begun by Turner and Lawrence in 1965.

The JCI was preceded by an instrument developed by Hackman and Oldham known as the Job Diagnostic Survey (JDS), dimensions of which are also incorporated in the JCI, although in a simpler format. Comparisons of the JCI and JDS by Dunham et al. have shown that both scales tend to collapse to a one-dimensional scale measuring job complexity. Therefore, the JCI was shortened by selecting one scale item that loaded strongly on each of the dimensions of job complexity shown to be important in earlier research. In their 1976 article, Sims et al. reported the necessary factor analysis scores used to obtain the abbreviated scale. Question and reference numbers for the seven items that comprise the shortened JDI scale are listed in Table 4.23.1.

Survey Instruments: These questions are found within the "Current Labor Force Status" or "CPS" sections of each questionnaire.

Data Files: The NLSY79 variables have been placed within the "Misc. 1979" and "Misc. 1982" files.

Survey Year	Reference Numbers	Question Numbers
1979	R00481.–R00486. R00488.	Questions 23 (1–5)
1982	R07054.–R07059. R07061.	Questions 36A (1–5)

Table 4.23.1 Variables Needed to Construct the Job Characteristics Index: NLSY79

References

- Dunham, Randall B.; Aldag, Ramon; and Brief, Arthur P. "Dimensionality of Task Design as Measured by the Job Diagnostic Survey." *Academy of Management Journal* 20,2 (June 1977): 209–23
- Hackman, J.R. and Oldham, J.R. "Development of the Job Diagnostic Survey." *Journal of Applied Psychology* 60 (1975): 159-70.
- Hills, Stephen M. "The Attitudes of Union & Nonunion Male Workers Toward Union Representation." Industrial & Labor Relations Review 38,2 (January 1985): 179–94.
- Pierce, Jon L. and Dunham, Randall B. "The Measurement of Perceived Job Characteristics: The Diagnostic Survey vs. the Job Characteristics Inventory." *Academy of Management Journal* 21,1 (March 1978): 123–28.
- Sims, Henry R.; Szilagyi, Andrew; and Keller, Robert. "The Measurement of Job Characteristics." Academy of Management Journal 26,2 (June 1976): 195–212.

4.24 Job Satisfaction

NLSY79

Three sets of job satisfaction measures have been collected for employed respondents during select survey years. In addition, a job satisfaction index can be created using items collected during the 1979–82 and 1988 surveys.

- 1. Global Job Satisfaction 1979–2000: During each survey year, respondents employed since the last interview are asked to rate, on a four point scale from "like it very much," to "dislike it very much," how they feel about their current/most recent (CPS) job. This question provides a general or 'global' indication of a respondent's current job satisfaction. In 1994, 1996, 1998, and 2000, this question was asked about each job.
- 2. Satisfaction with Government Jobs Program: Respondents who were working at a job in conjunction with their participation in a federally funded employment and training program were asked, during the 1979–87 survey years, how satisfied/dissatisfied they were with their entire experience in the jobs program.
- 3. Facet-Specific Job Satisfaction Scale: During the 1979–82 and 1988 surveys, wage and salaried workers, as well as those self-employed in incorporated businesses, were presented with a series of descriptive statements about the pay, working conditions, promotion opportunities, supervisors, coworkers, etc., at their current job and were asked to rate each statement on a scale from "very true" to "not at all true."

Constructing a Job Satisfaction Index: A job satisfaction index can be constructed for the 1979–82 and 1988 survey years by coupling six of the facet-specific job satisfaction ratings listed above with the global job satisfaction measure and a question that asked respondents whether, given the freedom to make such a choice, they would take another job or keep the job they had at the survey point. This scale, a shortened form of the job satisfaction scales of the University of Michigan's *Quality of Employment Surveys*, developed by Quinn (1973), provides a reliable indicator of job satisfaction.

To construct the full seven-item scale, raw scores for each item listed in Table 4.24.1 should be converted to \underline{z} scores for each respondent. The scores can be multiplied by 100 to remove decimals and combined to obtain an unweighted average of the seven \underline{z} scores. The resulting scores for the satisfaction index are either positive or negative numbers that can be interpreted as deviations from the mean for the total sample of survey respondents.

User Notes: Cross-cohort analyses are possible using comparable items from the Original Cohorts.

	Reference Number for Scale Item							
Survey Year	Challenge	Comfort	Financial Rewards	Relations w/ Coworkers	Resource Adequacy	Opportunity	Global Job Satisfaction	
1979	R00489.	R00490.	R00494.	R00496.	R00497.	R00506.	R00508.	
1980	R02659.	R02660.	R02664.	R02666.	R02667.	R02676.	R02678.	
1981	R04473.	R04474.	R04478.	R04480.	R04481.	R04490.	R04492.	
1982	R07034.	R07035.	R07039.	R07041.	R07042.	R07052.	R07065.	
1988	R25296.	R25297.	R25302.	R25304.	R25305.	Not asked	R25329.	

Table 4.24.1 Varia	ables Needed to Construct t	the Job Satisfaction	Index: NLSY79
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Survey Instruments: All job satisfaction questions, with the exception of those relating to government jobs, are found in the "Current Labor Force Status" sections of the 1979 (Section 8), 1980 (Section 7), 1981 (Section 6), 1982–92 (Section 5), 1993 (Section 6), and the 1994, 1996, 1998, and 2000 *Employer Supplements* in the main questionnaires. The 1979 government job satisfaction questions can be found in Section 10 "On Jobs" while comparable questions for the 1980–87 survey years are located in the *Employer Supplements*.

Data Files: The global job satisfaction variables can be found in the "CPS" area of interest on the main NLSY79 data set. All individual job satisfaction items are located in the year-specific miscellaneous ("Misc. xxxx") areas of interest. The government jobs program variables can be found in the "Government Jobs" area of interest.

References

- Quinn, R.B. and Mangione, T.W. "Jobsat '72 and its Kinfolk—a Brief Manual." In *The 1969–1970 Survey of Working Conditions: Chronicles of an Unfinished Enterprise.* Ann Arbor, MI: Survey Research Center, Institute for Social Research, University of Michigan, 1973.
- Seashore, S. and Taber, T. "Job Satisfaction Indicators and their Correlates." *American Behavioral Scientist* 18 (1975): 333–68.

NLSY79 Children

In each survey, job satisfaction information was collected from the children aged 15 and older, the young adults. Respondents were asked questions similar to the "Global Job Satisfaction" and the "Facet-Specific Job Satisfaction" items described above for the main NLSY79. Beginning in 2000, only "Global Job Satisfaction" was asked.

Survey Instruments: All job satisfaction questions are located in the Employer Supplement sections of the NLSY79 Young Adult Questionnaire.

4.25 Job Search

NLSY79 job search questions provide data that show what methods were used, how intensively respondents searched, and the outcome of these searches. For researchers interested in job search information, the survey provides data on topics not found in many other key labor market data sets like the Current Population Survey (CPS). For example, the NLSY79 provides details on job offers rejected while searching, the desired characteristics of the job being sought, and whether the respondent searched while employed in another job. While every NLSY79 survey contains questions on job search activities, researchers interested in this area should examine the 1982, 1986, and 1987 surveys which contained special sections with a large number of job seeking questions. For users looking to quickly see many of the job search questions, pick the "Job Search" area of interest when using the NLS extraction software.

Who searches: The NLSY79 asks respondents in various surveys who are both working and not working if the they are searching for work. Table 4.25.1 shows the number of respondents who stated they are searching for a job. As the table shows, individuals who are not working are asked in every NLSY79 survey if they are searching. Questions which track searching by employed respondents are only available from 1979 to 1984 and then again in 1996 and 2000.

Year	# Not Employed Job Seekers	# Employed Job Seekers	Year	# Not Employed Job Seekers	# Employed Job Seekers
1979	2083	1131	1989	325	na
1980	1693	1194	1990	323	na
1981	1343	1371	1991	232	na
1982	1142	1335	1992	252	na
1983	999	1315	1993	282	na
1984	791	1589	1994	428	na
1985	598	na	1996	377	837
1986	485	na	1998	301	na
1987	482	na	2000	269	617
1988	400	na			

Table 4.25.1: Number of Employed and Not Employed NLSY79 Job Seekers(Unweighted Data)

Note: na means not available.

To find most of the questions which determine if a respondent is seeking work, search for questions which contain the phrase "looking for work." This phrase captures all of the employed job search questions plus all non employed job searchers from 1979 to 1993. To capture not employed job seekers after 1993, use the phrase "done anything to find work." Most questions about looking for work can be located in the "Job Search" area of interest.

Methods of Job Search: Respondents are asked not only if they searched for work but are also asked the specific types of activities they used to find work. Coded activities usually include: checking with a state employment agency; private employment agency; contacting an employer directly; contacting friends or relatives; placing or answering an ad; and looking in a newspaper. Depending on the specific year and set of survey questions the list of coded activities is sometimes longer than those just mentioned and includes other job search activities like: using a school placement service; taking a civil service exam; contacting an organization such as CETA or the Urban league; checking with a labor union; or asking a teacher for job leads.

In the 1986 and 1987 surveys, not employed job seekers were not only asked which methods they used but were also asked to tell interviewers the top three methods they used. Respondents also ranked these job search methods, allowing researchers to know which method was tried the most.

In 1981, the NLSY79 questionnaire contained an extensive set of time use questions. The time use questions not only covered daily activities but asked roughly 3,300 respondents how long they spent using specific methods of finding work. The job seeking time use section, which begins at R05173., tracks the number of minutes over the last seven days the respondent used employment services, asked relatives about finding work, answered ads, and a variety of other specific techniques. Combining the results from all these questions results in the total number of minutes spent searching for work in the past week.

Duration of Job Search: Questions for both employed and not employed job seekers in the CPS portions of the questionnaire refer to job search activity over the past four weeks. Even though the questions are only asked to respondents who recently searched, the total amount of time spent searching could be much longer than four weeks. If a respondent states that they were seeking work, the NLSY79 questionnaire probes for how long the respondent has been looking for work. While the specific format changes depending on the survey year, researchers can convert all answers into the number of weeks spent searching. While the mean length is under 2 months for those employed and around 3 months for those respondents not employed, users are cautioned that a small but significant number of respondents have very long job searches, with durations around two years.

Why Was the Search Started and Stopped: The NLSY79 has extensive information on both why the respondent started searching and why they stopped. While the exact list of answers varies depending on the survey year, in the questionnaires prior to 1994 there is a single question that asks not employed job seekers why they are searching for work. Job seekers can state they began a search because they lost their job, quit their previous job, left school, want to help the family with money, or a host of other reasons. The reasons are also asked in selected surveys to employed job seekers.

Beginning in 1994, there is no longer a single question which asks not employed seekers why they are looking. Instead the single question is replaced by a sequence (see for example the 1994 sequence R45541.00 – R45543.00) which first asks the respondent's activities before starting their job search, followed by questions which ask respondents how their last job ended. While this sequence of questions does not completely replicate the single question set of answers, combing the information from the sequence provides a relatively close match.

Given the NLSY79 is a longitudinal survey that tracks, month-by-month, the respondent's labor market status (see the work history section for details on this month-by-month tracking) it is relatively easy to see when a job seeker found a new position. However, not all job seekers find employment. The NLSY79 also contains some information on why people are no longer searching for work. For example, in the 1996 CPS section, selected respondents were asked why they were no longer looking for work. Responses included: chance for advancement improved in their current job, could not find a better job, pay increased at their current job, working condition improved at their current job, relocation plans changed, career plans changed, the respondent's financial situation improved, and a layoff ended.

Special Sections: The NLSY79 has periodically added a number of special job search sections to the questionnaire. In the 1982 survey a section entitled "job finding" was added. This section asked very detailed questions about how the respondents found their current primary job. The section contains the standard high level questions such as what was the main reason you were looking for work and what methods did you use to find work?

Beyond these standard questions, the section contains unique job search questions. Respondents are asked to specify exactly how many employers they directly applied to for work; how far they traveled to look for work; and if the respondent moved to take the new job. Additionally, respondents were asked if any specific person helped them to get a job. If a specific person did help them, that person's sex, relationship to the respondent, and degree of help are all quantified by the survey.

While most of the job search questions are found under the "Job Search" area of interest, other questions, particularly those that track job search by unemployed respondents are found in the Current Population Survey areas. These areas are labeled "CPS," "CPS 1994," "CPS 1996," and "CPS 1998."

In the 1986 and 1987 surveys the "gaps between jobs" section was expanded for the male portion of the cohort. For each gap between jobs, respondents were asked about all types of methods used to find work. Then, month-by-month within that gap, respondents were asked the specific search methods used during that shorter time period. Respondents who stated more than three methods were asked to list the three most frequently used.

Finally, for each of the top three methods the respondent was asked how many job offers each method produced, the highest wage for each method, and if the offer was accepted. If the person rejected the job offer they were asked why. A partial list of reasons for rejection includes unsuitable working conditions, too many hours, better offer provided, and transportation difficulties.

Beginning with the 1994 survey, the CAPI survey's employer supplement sections now contain a number of specific questions about how the respondent found the particular job on which the supplement focuses. Respondents are first asked if they were looking for work when they were offered the job. Then respondents who were looking for work were asked which job search method led to their being offered the job. Finally, respondents were asked if they turned down any other offers before accepting this job and how much those other offers paid.

Hypothetical Jobs: NLSY79 surveys from 1979 to 1982 included questions about hypothetical job offers. These questions can be found by looking for the word "hypothetical" in the any-word-in-context search. The set of questions in 1979 asked the respondent would they work at \$2.50 per hour, \$3.50 per hour and \$5.00 per hour washing dishes, doing factory work, cleaning, work checking out groceries in a supermarket, cleaning up the neighborhood, making hamburgers, and working in a national park.

Additional questions from 1979 to 1982 asked how much money it would take for a person to switch employers if the job was in the same general field. If the person was interested in switching the survey asked how many days per week the respondent wanted to work and how many hours per day they would like to be employed at the hypothetical job.

These questions provide information about the respondent's reservation wage, or the minimum pay needed to cause the individual to either switch jobs or join the labor force. Combining this with general labor market indicators found on the NLSY79 CD-ROM such as the local area unemployment rate, enables researchers to understand how the local labor market conditions affect an individual's work force decisions.

User Notes: Users should know that not all unemployed individuals are job seekers. While the vast majority of the unemployed are looking for work, this classification also includes respondents who are laid off and waiting for recall as well as those about to start a new job within 30 days.

4.26 Jobs & Employers

This section discusses the types of employer and job characteristic information available on the NLSY79 main data files. Job information present on a separate data set called the NLSY79 Work History File is discussed in the "Work History Data" section of this guide. A series of closely related variables providing information on (1) time spent with an employer, i.e., start and stop dates for each job, hours, tenure, type of shift worked; (2) time spent away from an employer either on unpaid or paid leave, i.e., gaps within jobs; and (3) periods not working or in the military, i.e., gaps between jobs, are discussed in the "Time & Tenure with Employers" section of this guide.

NLSY79

The NLSY79 collects detailed information about individual employers for whom a respondent has worked. These data are gathered within several sections of the main questionnaire and in some years in separately administered, job-specific instruments called *Employer Supplements*.

This section reviews the NLSY79 respondent-provided employer information and the survey instruments that collect these data. It then discusses in more detail (1) the types of employers about whom information is collected during each survey round; (2) the variable series which provides a cumulative count of employers for whom a respondent has worked; and (3) how information collected on a specific employer can be linked both within and across survey years. Concluding this section is an overview of the various types of job characteristic data that describe a respondent's employer and the position the respondent holds with that employer.

Readers should note that all references to a "job" are essentially references to a given employer; thus, the terms "job" and "employer" are used interchangeably within most NLSY79 employer-related discussions. This section assumes that the reader possess some general understanding of (1) the *Current Population Survey (CPS)* and its relevance to the NLSY79 questionnaire section by that name and (2) the functions of several NLSY79 survey instruments used in the collection of employer information, namely the questionnaire, the *Employer Supplement (ES)*, and the *Information Sheet*. Background information on these subject areas can be found in the "Labor Force Status" and "Survey Instruments" sections of this guide.

Employer Data Collection: Detailed information is collected during each interview on new and previously reported employers for whom a respondent has worked since the date of the last interview. Two sets of employers are identified based upon when the respondent first reports working for that employer: (1) new employers for whom the respondent reported working since the date of the last interview and (2) previously reported employers with whom employment has been maintained (for any

length of time) or renewed since the date of the last interview. Previous employers (category 2) are further distinguished by whether the respondent was working for them at or before the date of the last interview.

Until 1994, the current or most recent employer, called the "CPS employer," is differentiated in the data set from other employers for whom the respondent reported working since the last interview by title (i.e. start date for CPS job, start date for Job #2, start date for Job #3, etc.). Beginning in 1994 CPS job information is simply labeled as "job #1" because the jobs are all collected in the *Employer Supplement*. Every employer for whom a respondent worked since the last interview, including the CPS employer, is identified within the data set by a yearly job number, e.g., Job #1, Job #5, with the number reflecting the order in which the job was reported. The detailed job characteristic information at the end of this section is collected for each CPS job, regardless of whether it is a full- or part-time job.

Because the NLSY79 employer data collection relies on the successive administration of several survey instruments that not only gather information on multiple employers but also connect that information to data provided during earlier interviews, a brief overview of the mechanics of each interview's job collection effort follows.

Administration of the Survey Instruments Collecting Job Information: Two different sections of the NLSY79 questionnaire and until 1993 separate employer-specific survey instruments called the *Employer Supplements (ES)* collect employer-related information. Using these two instruments, interviewers gather details about all employers for whom a respondent has worked since the date of last interview. An interviewing aid called the *Information Sheet* is also provided to each interviewer; this document lists the names of employers reported during previous surveys and is used by the interviewer during the current interview to update each respondent's work record with a previous employer, if work with an employer took place since the date of last interview. A quick overview of the instruments used to collect NLSY79 jobs data and the function each performs is provided in Table 4.26.1.

Sections of the Main Questionnaire								
"CPS"	"On Jobs"							
Until 1993, functioned to identify the respondent's current or most recent job and to collect detailed information about the CPS job. Beginning in 1994, no job specific information was collected in the CPS section. Instead, it is all collected in the <i>Employer Supplements</i> .	Identifies and lists, in reverse chronological order, all employers for whom the respondent has worked SINCE the date of last interview (excluding the CPS job). Checks to see that the respondent has not missed any employers for whom he or she was working AT the date of last interview. Since 1994, this section mechanically determines the CPS job.							
Employer-Specific Instruments								
Employer Su	Employer Supplements (ES)							
Collect, in separate employer-specific supplements, detailed information on each employer for whom the respondent worked SINCE the date of last interview. The first instrument is generally completed about the CPS job and supplements information on that job collected in the "CPS" section of the main questionnaire. Additional supplements are completed for each job listed in the "On Jobs" section. Since 1993, Job #1 is always the CPS job if there is a CPS job.								
Intervie	Interviewing Aid							
Informat	tion Sheet							
Provides each interviewer with a respondent-specific list of employers for whom a respondent has reported working between the previous two interviews. Questions in both the "On Jobs" section of the main questionnaire and in each <i>Employer Supplement</i> route the interviewer to the names of employers for whom the respondent reported working at an earlier interview. Two sets of employers are listed: (1) names of each employer reported AT the date of last interview and (2) names of each employer for whom a respondent worked between the last and the PREVIOUS to the last interviews. An <i>Employer Supplement</i> is completed for each employer listed on the <i>Information Sheet</i> if the respondent has worked for that employer since the date of last interview.								

Table 4.26.1 Functions of the Various Job-Related Survey Instruments

The sequence in which employer-related questionnaire sections are administered has implications for the universe of respondents for whom job-related information is available. During all surveys to date, the "Military" section of the questionnaire has been administered prior to the two employer-related sections, the "CPS" and "On Jobs," and the *Employer Supplements*. After completing the "Military" section of the questionnaire, those respondents serving in the active forces were skipped past most or all of the "CPS" section to the "On Jobs" section in order to determine if they had been engaged in any non-military work since the last interview. Those not currently in the active forces have been routed directly to the "CPS" section, where detailed information on their current or most recent job and other labor market activities is collected. The universe for the CPS variables, thus, is civilian respondents—those not serving in the active forces—who were working for pay either during the survey week or since the date of last interview. The universe for "On Jobs" includes all respondents, both civilian and military. Users should note that although the sequencing of the "Military," "CPS," and "On Jobs" sections was modified beginning with the 1993 CAPI-administered interviews, no universe changes occurred.

During each interview, a separate *Employer Supplement* is completed about each employer for whom the respondent worked. Questions in each *ES* link information about these earlier jobs with the employer information collected in the "CPS" section of the main questionnaire, if appropriate, and with the employer (job) number of this employer, if any, assigned at the previous interview. Users should note that, after the implementation of CAPI, the *Employer Supplement* physically became a part of the questionnaire.

NLSY79 Employer Types: This section discusses the various types of employers about which information is collected during each survey. Incorporated within the discussion is specific information on (1) how the CPS employer is designated; (2) how information on the CPS job—collected during many survey years within two separate survey instruments—can be linked; and (3) how a specific employer for whom a respondent has worked since the last interview can be matched to the same employer reported during a previous interview.

Current or Most Recent (CPS) Employer: The NLSY79 replicates questions from the *Current Population Survey*, which specify the employer(s) with whom a respondent is associated at the time of the survey. A "CPS employer," or current/most recent employer, is designated for each civilian NLSY79 respondent who reported working for pay at some point since the last interview.

The methods employed to identify an employer as the CPS employer vary by interview mode. During the 1979–92 paper and pencil interviews, the CPS job was identified by NORC interviewers from the respondent's answer to the following open-ended question:

"For whom did you work last (week)? IF MORE THAN ONE EMPLOYER, PROBE: for whom did you work the most hours during the last week (you worked)?"

The actual name of the respondent's employer [e.g., the Aspen Ski Company, Oliver's Saloon] is manually recorded in the questionnaire and entered on the cover page of an *Employer Supplement*. Because not all respondents were at work during the survey week and some were at work for more than one employer, detailed instructions on how to identify the CPS employer are provided to NORC interviewers within the round-specific *Question by Question Specifications* manuals. A summary of instructions from the 1996 interviewers' manual appears in Table 4.26.2.

Table 4.26.2 Instructions to Interviewers for Identifying the CPS Employer for Civilian NLSY79 Respondents: 1996

For *those not at work* during the survey week but who worked for pay since the last interview: the CPS employer is the most recent employer

For *those who worked* during the survey week for one employer: the CPS employer is the current employer for two or more employers: the CPS employer is the employer for whom the respondent worked the most hours for two or more employers with the same number of hours each employer: the CPS employer is the employer for whom the respondent worked the longest

For *those absent* from their regular job during the survey week but who were working temporarily for another employer: the CPS employer is the current employer not the employer of absence

Source: CHRR. Question by Question Specifications - Main Questionnaire - NLS Round 17 (Q6 - Q33).

Information on the CPS job has been collected during the 1980–93 survey years within the "CPS" section of the main questionnaire and within a single *ES* for 1980–2000. Comparable information was gathered during 1979 in the "CPS" and "On Jobs" sections of the main questionnaire. A variable named, 'Is There a CPS Employer?' R41819. in 1993 for example, specifies whether or not there is a CPS employer for each respondent. The various types of job characteristic information collected about each CPS job/employer are discussed below.

Beginning with the 1993 CAPI-administered interviews, the CPS job is identified by internal CAPI procedures which factor in, for civilian respondents, stop date information specific to each recorded job. Additional information on CAPI CPS-designation procedures, e.g., how the CAPI program handles multiple employers with the same stop date, can be found in the documentation item entitled "Introduction to the 1993 through 1998 CAPI Questionnaires and Codebooks" in the 1979–98 *Codebook Supplement*.

Employers since the Last Interview—Jobs #1-#5: The "On Jobs" section of the questionnaire and the jobspecific *Employer Supplements*, both administered during most survey years immediately after the "CPS" section, gather information about each employer for whom a respondent worked since the date of last interview. A separate *Employer Supplement (ES)* is completed for each since-last-interview employer. Although information is collected about all employers for whom a respondent worked since the last interview, data on only the first five jobs or employers are released on the NLSY79 main data set. In each survey, the number of respondents who report more than five jobs is less than one percent of those interviewed.

During pre-1993 PAPI surveys, interviewers were instructed to collect information on the jobs a respondent held in reverse chronological order, with the current or most recent job first, followed by the

next most recent, etc. This means that for most—although not all—respondents, Job #1 will be the CPS job, Job #2 could be the job held concurrently with the CPS job or immediately preceding it, and so forth. The job number to which the content of the variable refers, e.g., Job #1, Job #2, etc., is appended to each variable title. The mechanics used to designate the CPS job in post-1992 CAPI interviews results in all CPS jobs being Job #1. Before 1994, the collection of information on the CPS job within the "CPS" section of the main questionnaire and within a separate *ES* means that researchers may find it necessary to link information collected within the two instruments or sections. The variable series that enables these data to be linked is described briefly below. Users should note that while the CD-ROM contains only information on all jobs reported by the respondent.

Linking Job #1 - Job #5 to the CPS Job: During administration of each *Employer Supplement*, an interviewer check item determines whether the employer about whom information is being collected, e.g., Job #1, is the CPS employer recorded in the "CPS" section of the main questionnaire. Interviewer responses to this item are found in the variable series 'Int Check - Is Job #X Same as Current Job?' Available for each survey year, these variables can be used to link information about the CPS job collected in an *ES* to that collected about the CPS job in the main questionnaire for survey years 1979–92.

Employers at or Prior to Date of Last Interview: In order to construct a continuous work record with each employer, information collected during the current interview is connected to data gathered about the same employer during earlier interviews. Information is updated on two sets of employers: (1) those employers for whom a respondent was actually working **at** the time of the last interview; and (2) those employers for whom a respondent had **previously** worked but for whom s/he was not working at the last interview date. Note: Information on these previous-to-last-interview employers is collected only if the respondent reports working again for that employer.

A separate interviewing aid called the *Information Sheet* provides NORC interviewers with a listing of the names and respective job numbers of each of these previous employers. Each set of employers is listed under a different *Information Sheet* item, e.g., Item 05, Item 06, etc. Users should note that these *Information Sheet* item numbers are not consistently numbered across years, e.g., the "at date of last interview" employers appear as Item 12 in 1980 but as Item 05 in 1991, while the "previous to date of last interview" employers appear as Item 13 in 1980 but as Item 06 in 1991. These *Information Sheet* item numbers are referenced within the *ES* question verbatims and will be found in the title of each such variable, as illustrated below. Questions at the beginning of each *ES* route the interviewer to the name and job number of each such employer listed on the *Information Sheet* in order to connect information collected during the current survey with information on that same employer gathered during an earlier

interview. Matching of employers across survey years is made possible with the linking variables described below:

Linking Job #1 - Job #5 to a Previous Employer: Employers for whom the respondent worked at an earlier survey about which information is collected during the current interview can be matched via a set of variables entitled 'Employer Number from Info Sheet, Item XX That Matches, Job #X.' These variables are taken directly from interviewer transcriptions (or since 1993, from the CAPI item) in each *ES*, which link the job number of an employer identified during a previous interview to that of the (same) employer about whom information is being collected in the current survey year's *ES*. The variable titles of this series include a reference to the *Information Sheet* item reflective of the series to which it belongs; in the examples below, the item 05 variables in the 1991 survey reference those employers for whom the respondent worked **at** the last interview (i.e., 1990 or earlier), while the 06 titles indicate employers reported **previous** to the last interview.

'Employer Number from Info Sheet, Item 05 That Matches, Job #1' - identifies the employer number (1 through 5) of the job at which the respondent worked **at** the last interview which is a match to Job #1, in the current interview.

'Employer Number from Info Sheet, Item 06 That Matches Job #5' - identifies the employer number (1 through 5) of the job at which the respondent worked **previous** to the last interview which is a match to Job #5, about which information is collected during the current interview.

Employer number for each item are not numbered independently. In other words, if Employer #2 appears under item #5, it cannot also appear under item #6. Since 1993, only one variable per job has been needed with the previous employer number. Users should note that question numbers assigned to these variables reflect the actual questions found in each *Employer Supplement*. These linkage variables should not be confused with a second set which contain, within their variable titles, similar references to Information Sheet items. These variables, entitled 'Info Sheet Item 05 - 1st Employer at Time of Last Interview,' or 'Info Sheet Item 06 - 1st Previous Employer,' do not provide comparable match information. Instead, they provide the job number of the first, second, third, etc., employer for whom a respondent worked at the time of an earlier interview, e.g., the job number of the first employer at the time of the last interview was "01." These variables should be used only to count the total number of jobs a respondent reported at an earlier date, not as a means of linking such past employment to a job about which information is being reported at the current interview. These non-match variables are identified by their reference number on a facsimile Information Sheet distributed with the NLSY79 main file documentation set. This variable series can be distinguished from the match set described above by different variable titles and by the assignment of fictitious question numbers as the source of the variable. The procedure for matching employers is detailed in depth in Appendix 9 of the NLSY79 Codebook Supplement.

Jobs Ever Reported as of Interview Date: The variable series 'Number of Jobs Ever Reported,' created for each survey year, provides a cumulative measure of the number of different employers that a respondent has reported up to the point of interview. Any employer identified as different from employers at the date of last interview and in the period before the date of last interview is counted as a different or new employer. This set of variables is created by simply counting each such employer in a current survey year and adding that sum to the total from the previous interview year in order to provide a cumulative figure through all survey years.

Users should be aware that a small degree of double-counting of employers may exist in these variables. It is only possible to track a given employer between contiguous interview years in which information was collected on the specific employer. It is therefore conceivable that a respondent who works for a particular employer during one year, leaves that employer for the next year or more and then subsequently returns to that same employer would appear to be working for a new employer during the second tenure because the previous tenure with that employer would have slipped out of scope for tracking purposes.

User Notes: Most of the variables described above can also be found on the NLSY79 Work History CD-ROM. When making extensive use of these variables, researchers may find the Work History CD-ROM easier to use than the main file.

Program Derivation: The PL/1 program statements which create the 'Number of Jobs Ever Reported' variables are contained in the Work History program (see the "Work Experience" section of this guide) and read as follows:

Table 4.26.3 Computer Code to Create Number of Jobs Ever Reported

/*** COMPUTE CURRENT JOBEVER() ***/ JOBEVER(NEWYEAR)=0; /* FIND GREATEST JOB CNT IN HHOLD HIST */ DO I=(NEWYEAR-1) TO 1 BY -1 WHILE (JOBEVER(NEWYEAR)=0); IF OLDHIST(I).OJOBEVER=-3 THEN JOBEVER(NEWYEAR)=-3; ELSE IF OLDHIST(I).OJOBEVER>0 THEN JOBEVER(NEWYEAR)= OLDHIST(I).OJOBEVER; END:
IF JOBEVER(NEWYEAR)>=0 THEN DO; /* ADD ANY ADDITIONAL JOBS? */
DO I=1 TO 10;
IF NUMBER(NEWYEAR,I)>100 & (PREVIOUSEMP#(NEWYEAR,I)=-3
PREVIOUSEMP#(NEWYEAR,I)=0) THEN JOBEVER(NEWYEAR=-3;
ELSE IF NUMBER(NEWYEAR,I)>100 & PREVIOUSEMP#(NEWYEAR,I)=-4 &
JOBEVER(NEWYEAR)>=0) THEN
JOBEVER(NEWYEAR)=JOBEVER(NEWYEAR)+1;
END;
END;
END:
,

Types of Job/Employer Characteristic Information: Descriptive information is collected about each job or employer and about the position a respondent occupies with that employer. The level of detail available for a given job varies by (1) whether or not that job was designated as the current or most recent job and (2) the number of hours per week and/or number of weeks that were worked. Complete job characteristic information is available for those jobs specified as the CPS job, as well as for those jobs at which a respondent reported working more than ten hours a week for more than nine weeks since the date of last interview. This section briefly summarizes the differences in the kinds of data collected for the CPS versus non-CPS jobs. It then reviews the various types of job characteristic information which are available and refers users to other sections of the guide which discuss each characteristic more fully.

User Notes: Users should be careful to distinguish these sets of job characteristic variables from the separate and distinct 1979 and 1982 data collections, which provide information on such qualitative aspects of a respondent's current job such as degree of autonomy, variety, opportunity to deal with people, and job significance. This series can be distinguished from the variables discussed below by the phrase JOB CHARACTERISTICS ITEMS, which has been appended to each of the 22 1979 and 1982 variable titles. (See the "Job Characteristics" section of this guide.)

<u>CPS Job</u>: All of the job characteristic information described below—including that on firm size and job satisfaction—is available for the job designated as the "CPS job." These data are available for any CPS job regardless of whether the job is a full-time, part-time, or temporary job. During paper-and-pencil interviews, all job characteristic information about the CPS job except that pertaining to usual earnings was collected within the "CPS" section of the main questionnaire. Beginning with the 1994 CAPI interviews, all CPS job-related information is gathered in the *Employer Supplement*. Wage information across survey years continues to be collected within the job-specific *Employer Supplements*.

<u>Non-CPS Jobs</u>: Some detailed characteristic information is only available for non-CPS jobs meeting certain time and tenure requirements. Detailed questions are asked about jobs at which the respondent has worked for at least nine weeks since the last interview and at which the respondent generally worked at least 20 (through 1986) or 10 (since 1987) hours per week.

Brief summaries of select sets of job characteristic data appear below. References are provided to other sections of this guide that discuss these variables in more detail. Several other sets of job characteristic variables, e.g., union membership, coverage by a collective bargaining agreement, and whether a respondent's association with a given employer was the result of a federally sponsored employment and training program, are also covered in other sections of this guide such as "Training."

<u>Class of Worker</u>: For each CPS job (whether full- or part-time) and to each non-CPS job for which a respondent worked for more than ten/twenty hours a week and more than nine weeks since the last interview, a code is assigned indicating whether the respondent (1) works for a private company or for an individual for wages, salary, or commission; (2) is a government employee; (3) is self-employed in his/her own business, professional practice, or farm; or (4) is working without pay in a family business or farm. Both the CPS and non-CPS series further identify government workers as Federal, State, or Local-level employees and distinguish the businesses of self-employed respondents as incorporated or unincorporated. See the "Class of Worker" section of this guide and refer to the "User Notes" in that section detailing the changes in coding for "Class of Worker" variables.

<u>Firm Size</u>: The number of employees both at the place where the respondent is currently employed and at other locations is available for the CPS job. These data were collected during all survey years except 1981–85. Beginning in 1994, these variables are available for all employers.

<u>Fringe Benefits</u>: During the 1979–93 interviews, information on the availability of various types of fringe benefits provided by the CPS employer was collected for those respondents working 20 hours or more a week. Beginning with the 1993 survey, those respondents working 20 hours a week or less were also asked if their employer made any benefits available, and if so, which ones. Beginning in 1994, fringe benefit information was collected for both the CPS and non-CPS jobs. [See the "Fringe Benefits" section of this guide.]

<u>Hours</u>: Information on the number of hours worked at the CPS job, at each non-CPS job, and at all jobs combined is available for each survey year. A set of created summary variables provides a count of the total number of hours worked since the date of the last interview and during the past calendar year. Details on the type of shift and the actual clock hours worked have been collected during select survey years for the CPS job. Beginning in 1994, these data were collected for all employers (CPS and non-CPS). [See the "Time & Tenure with Employers" and "Labor Force Status" sections of this guide.]

<u>Industry</u>: A code from the 1970 and 1980 Census industrial classification system is assigned to each CPS job (whether full- or part-time). A 1970 Census industry classification code is assigned to each non-CPS employer for whom a respondent worked for more than ten/twenty hours a week and more than nine weeks since the last interview. [See the "Industries" section of this guide.]

<u>Job Satisfaction</u>: Respondents employed since the last interview are asked to rate, on a four point scale, how they feel about their current or most recent (CPS) job. Beginning in 1994, this information was collected for all CPS and non-CPS jobs. [See the "Job Satisfaction" section of this guide.]

<u>Occupation</u>: A code from the 1970 and 1980 Census occupational classification system is assigned to each CPS job (whether full- or part-time). A 1970 Census occupational code was assigned to each non-CPS employer for whom a respondent worked for more than ten/twenty hours a week and more than nine weeks since the last interview. [See the "Occupations" section of this guide.]

<u>Wages</u>: Rate of pay information, including the time unit of pay, is collected for each CPS and non-CPS job (whether full- or part-time). A series of hourly rate of pay variables are created for each employer for whom a respondent worked since the date of last interview. [See the "Wages" section of this guide.]

User Notes: Some variation exists across survey rounds in the level of job characteristic detail available. "Job" should not be interpreted as occupation or employment duties but rather as an employer. If a respondent changes work activities for a single employer, this is counted as only one "job."

Survey Instruments: Select information on the CPS employer can only be found in the CPS section between 1979 and 1993.

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In each survey, extensive information on jobs and employers has been collected from the children age 15 and older, the young adults. These respondents were asked to provide information on up to five employers. Through 1998, the series of questions closely parallel those asked in the main NLSY79. Beginning in 2000, this series was greatly streamlined with the greatest detail asked only of the current or most recent primary employer.

Survey Instruments: The jobs and employers data can be found within the Employer Supplements section of the NLSY79 Young Adult Questionnaires.

4.27 Labor Force Status

The following section describes the various labor force status variables present in the NLSY79. It does not provide either a comprehensive discussion of all questions asked in the "Current Labor Force Status" sections of the various NLSY79 survey instruments or a thorough treatment of the detailed information available on labor market transitions and work histories. Users should consult the table of contents and index of this guide for references to additional labor market-related topics of interest, e.g., work experience, job characteristics, job satisfaction, industries, occupations, wages, etc. Each questionnaire's "Current Labor Force Status" section collects information on the labor market activity in which respondents were engaged during most of the full calendar week (Sunday-Saturday) preceding the date of interview. There is no CPS section in 2000.

This series replicates the questions asked in the monthly *Current Population Survey (CPS)* of American households conducted by the U.S. Census Bureau for the U.S. Department of Labor. The primary purpose of the CPS is to collect up-to-date information about the number of persons in the country who are employed, unemployed, or not looking for work during a given survey week. Results from the CPS surveys, released in the Bureau of Labor Statistics' monthly publication *Employment and Earnings*, provide detailed information classified by age, sex, race, and a variety of other characteristics, on the employment and unemployment experiences of the U.S. population.

NLSY79

A series of variables provides information on respondents' labor force status during the survey week and during each week since 1978. These point-in-time indicators are complemented by a set of summary measures, which provide a count of the total number of weeks a respondent occupied a given labor force status (e.g., working, unemployed, out of the labor force, in the active Armed Forces). In addition to the respondent-specific variables discussed below, data are also available on the work experience of respondents' parents, spouses, and other household members.

Survey Week Labor Force Status: The following three sets of variables on each respondent's labor force status during the week preceding the survey week are available for each survey year as indicated for the universes specified below:

Activity Most of Survey Week (1979–93): The 'Activity Most of Survey Week' variables reflect each civilian respondent's reply to the survey question "What were you doing most of last week?" "Last week" refers to the full calendar week (Sunday through Saturday) preceding the date of interview. The following seven categories of responses have been coded from each year's survey: (a) working, (b) with a job-not at work, (c) looking for work, (d) keeping house, (e) going to school, (f) unable to

work, and (g) other. Definitions for each of these activities are intended to be consistent with those used in the CPS. Tables 4.27.1 and 4.27.2 provide definitions of key CPS labor force concepts as well as the set of instructions provided during one survey year to NORC interviewers for coding respondents' labor market status. The main survey week activity question was followed by a second question, which sought to identify those respondents who did do some work in addition to a main survey week non-working activity (such as "looking for work" or "going to school"); this follow-up question was asked of all respondents except those who indicated that they were working or were unable to work. It is to these two groups, those whose primary activity during the survey week was working and those who responded that they indeed did some work even though it was not their primary labor force activity, that the series of questions on hours worked was administered.

- 2. Work for Pay or Profit Last Week (1994–2000): Beginning in 1994, the CPS section underwent significant changes as outlined later in this chapter. The 'Activity Most of Survey Week' question was replaced with "Last week, did you do any work for pay or profit?" Respondents can answer yes, no, retired, disabled, or unable to work. For those answering no, follow-up questions determine whether the respondent has a job from which he or she is temporarily absent, e.g., on vacation, sick leave, labor dispute, military duty, etc. Follow-up questions also probe for more information about disabilities or other reasons a respondent is unable to work. Note that the previously used follow-up question seeking to identify those who did some work in addition to a main survey week non-working activity no longer exists.
- 3. Employment Status Recode (1979–98): Created variables called 'Employment Status Recode' (ESR) are available for each survey year through 1998. These variables recode the survey week activity of civilian NLSY79 respondents into labor force status measures consistent with those developed for the CPS. This recalculation not only factors in the respondent's reported survey week activity but also takes into account variables such as hours worked, whether working for pay, whether looking for work, what the respondent is doing to find work, whether and why s/he was absent from a job, etc. Added to the seven labor market status categories listed in (1) above is an eighth category, "in the active forces." Tables 4.27.5 and 4.27.6 at the end of this section present frequencies for the ESR variables by survey year, race, and gender. The algorithm changed in 1994 in an attempt to match the new CPS algorithm as closely as possible.
- 4. Employment Status Recode-Collapsed: A collapsed version of ESR is available that classifies all NLSY79 respondents into one of the following four labor market activity categories: (1) employed ("working" or "with a job not at work"); (2) unemployed; (3) out of the labor force ("keeping house," "going to school," "unable to work," or "other"); and (4) in the active forces.

Survey Instruments: The questions "What were you doing most of last week?" and "Last week, did you do any work for pay or profit?" are located in the "Current Labor Force Status" or "CPS" section of each year's questionnaire: Section 8 (1979); Section 7 (1980); Section 6 (1981, 1993); and Section 5 (1982–92, 1994–98). Age restrictions relevant to the 1979 administration are discussed in the User Notes of the "Age" topical section of this guide.

Documentation: Each year's interviewers' reference manual, or *Question by Question Specifications (Q by Q)*, provides detailed instructions for interviewers on how to code the "Current Labor Force Status" sections of NLSY79 questionnaires. A special CPS specifications section of the *Q by Q* provides detailed definitions for each activity. Creation procedures for the 'Employment Status Recode' variables can be found within "Appendix 1 - ESR Variable Creation" in the *NLSY79 Codebook Supplement*.

Data Files: The 'Activity Most of Survey Week' and 'Work for Pay or Profit Last Week' variables are located on the main NLSY79 data set within the "CPS" area of interest; both versions of ESR are located in the "Key Variables" file.

Table 4.27.1 Definitions of Key CPS Labor Force Concepts

In the Labor Force: All persons in the civilian labor force (described below) and members of the Armed Forces stationed in the United States.

In the Civilian Labor Force: All civilians classified as either employed or unemployed during the survey week.

Employed: (1) All civilians who, during the survey week, did any work at all as paid employees in their own business or profession, or on their own farm, or who worked 15 hours or more as unpaid workers in an enterprise operated by a member of the family; and (2) all those who were not working but who had jobs or businesses from which they were temporarily absent because of illness, bad weather, vacation, labor-management disputes, or various personal reasons, whether they were paid for the time off or were seeking other jobs. Excluded are persons whose only activity consisted of work around the house (such as own home housework or painting or repairing own home) or volunteer work for religious, charitable, and similar organizations.

Unemployed: All civilians who had no employment during the survey week, were available for work, except for temporary illness, and (1) had made specific efforts to find employment some time during the prior four weeks, (2) were waiting to be recalled to a job from which they were laid off, or (3) were waiting to report to a new wage and salary job scheduled to start within 30 days.

Out of the Labor Force: All persons who are not classified as employed or unemployed or in the Armed Forces. Includes persons engaged in own home housework, in school, unable to work because of long-term physical or mental illness, retired, and other. The "other" group includes individuals reported as too old or temporarily unable to work, the voluntarily idle, seasonal workers for whom the survey week fell in an off season and who were not reported as looking for work, and persons who did not look for work because they believed that no jobs were available in the area or that no jobs were available for which they could qualify. Persons doing only incidental, unpaid family work (less than 15 hours in the specified week) are also classified as not in the labor force.

Source: Concepts and Methods Used in Labor Force Statistics Derived from the Current Population Surveys. BLS Report No. 463, Series P-23, No. 62, Current Population Reports. Washington, DC: U.S. Government Printing Office, October 1976.

User Notes: It should be noted that (1) NLSY79 fielding procedures include data collection from institutionalized individuals and (2) NLSY79 respondents on active military duty are not asked CPS questions. Additionally, although all respondents are asked the CPS questions concerning activity most of survey week and the CPS job, those age 15 and under in the early survey years were not asked the questions about looking for work.

Although the "Current Labor Force Status," or CPS, sections of the NLSY79 questionnaires follow the wording and format of questions in the Current Population Survey, users should be aware that NLS "CPS" sections include questions over and above those asked in the Current Population Survey. Additionally, while instructions provided to interviewers of NLSY79 respondents are designed to be completely consistent with those of the CPS, NORC interviewers may be less familiar with CPS methodology and procedures than CPS-trained Census interviewers.

CPS Changes in 1994: Beginning in 1994, the "Current Labor Force Status" (CPS) section was changed to ensure that the NLSY79 matched changes that occurred in the Current Population Survey. This survey underwent a major revision in January 1994, thus causing a revision of the corresponding NLSY79 section.

The Census Bureau and Bureau of Labor Statistics revised the national CPS for four major reasons:

- (1) Because the last major CPS revision occurred in 1967, research suggested that the wording of many CPS questions was dated and response lists no longer reflected typical answers. For example, the old set of CPS responses did not have child care problems on the list of reasons why a respondent was absent from work in the last week.
- (2) In 1979, the National Commission on Employment and Unemployment Statistics, or Levitan Commission, had suggested a number of changes to U.S. labor force classifications. The new CPS implements many of the recommendations, such as tightening the definition of discouraged workers.
- (3) Research in survey methodology suggested better ways of asking questions. For example, inserted before occupation and industry questions is a new question that checks if the respondent has changed jobs or employers since the last survey. This extra question dramatically reduces the number of spurious job changes recorded.
- (4) Advances in computer technology made it desirable to switch from a paper-and-pencil instrument (PAPI) to a computer-administered instrument (CAPI). Switching to CAPI eliminates a variety of data transcription problems, automates the survey's skip patterns, and allows answer checks during the interview instead of during a post-processing phase.

NLSY79 users will see a number of changes when they compare the 1994 NLSY79 CPS section with earlier years. First, there are many more data items. The 1993 CD-ROM contains data for 87 CPS items, while the 1994 version contains 228 data items. Not all of these new questions contain useful data since a number are internal machine checks.

Moreover, even though there are more data items, some respondents actually answer fewer questions in the new survey. For example, the 1994 NLSY79 contains information on 50 disabled individuals. These individuals answer only a small number of the section's questions. However, for many respondents the CPS section now contains more in-depth answers. Additional categories of answers are added to many questions, such as how respondents search for work and the number of multiple jobs a respondent holds.

Finally, NLSY79 researchers should know that the new CPS section increases the likelihood that a respondent is classified as unemployed. For example, data from the BLS parallel survey suggest that the new survey's introduction increased national unemployment rates by 0.5 percent. Moreover, this increase primarily occurs among women, not men.

Weekly Labor Force/Military Status: The detailed information on employment dates and gaps between jobs collected during the regular youth surveys has permitted the construction of weekly labor force status variables for each NLSY79 respondent for the period January 1, 1978, through the most current survey date. In the event that a respondent is not interviewed for one or more years, s/he is asked to provide retrospective information at the first reinterview point in order to maintain a continuous set of variables in the Work History data. These variables enable researchers to determine whether, during any week since January 1, 1978, a respondent was (a) working, (b) associated with an employer, (c) unemployed, (d) out of the labor force, (e) not working, or (f) on active military duty (for some survey years). Because these weekly labor force variables are constructed from actual start and stop dates and information on employment gaps within and between jobs, the coding categories and meanings differ from the survey week variables described above. These coding categories are defined in Tables 4.27.2 and 4.27.3. Users should note that the number of weeks in each array is greater than the actual number of weeks filled in to provide a "cushion" when creating the Work History data. The extra weeks found in these arrays contain no valid data; the Work History documentation provides further details.

Data Files and Documentation: The weekly constructed labor force status variables are found only on the Work History Data File. The Work History documentation provides background information on the development of this special file as well as descriptions and codes for each set of variables.

Table 4.27.2 Instructions to NORC Interviewers for Coding NLSY79 Respondents' Labor Force Status

Working: Working for pay at a job or running one's own business or profession (or farm) or working without pay in the family farm or business. Includes (1) jury duty if the respondent is paid for jury duty, (2) respondents working as civilian employees of the Armed Forces or the National Guard; (3) respondents not paid with money but paid "in kind" (meals, living quarters, or supplies received in place of cash wages). Excludes (1) the following kinds of unpaid work: (a) unpaid work that does not contribute to the operation of a family farm or unincorporated business; (b) unpaid work done for a related member of the household who does not operate a farm or unincorporated business but is, himself, a salaried employee; (c) volunteer work without pay for an organization; and (2) time for which a respondent is paid while on temporary duty in the Armed Forces Reserves or National Guard.

With a Job-Not at Work: Respondents who indicate that, for all or most of the survey week, s/he was absent from a job or business for such reasons as illness, vacation, bad weather, labor dispute, temporary or indefinite layoff, etc. This also applies to respondents who were unwilling to cross picket lines even though they were not members of the union on strike.

Looking for Work: Respondents who spent most of the week (1) trying to establish a business or profession or (2) looking for work by engaging in the following kinds of efforts: (a) registering at a public or private employment office, (b) being on call at a personnel placement office, a nurses' register, temporary office register, or other register, (c) meeting with prospective employers, (d) placing or answering advertisements, (e) writing letters or applications, (f) working without pay to get experience and training, (g) checking with a union or any other organization, (h) visiting locations where prospective employers pick up temporary help.

Keeping House: Respondents (male or female) who were primarily engaged with their own home housework during the survey week. This category applies to respondents who say they spent most of their time during the survey week managing or being responsible for the care of their home and for respondents who say their chief activity was the care of their children. It is not necessary for a respondent to be engaged in the actual physical labor of cooking, washing, or cleaning.

Going to School: Respondents who spent most of their time during the survey week attending any kind of public or private school, including trade or vocational schools in which students receive no compensation in money or kind. Includes (1) respondents who would have been going to school except that they were temporarily sick or on a short vacation such as spring or winter vacation and (2) student nurses who spent most of the time during the survey week attending classes. Excludes student nurses who spent most of their time performing ward or other nursing duties for pay or pay in kind.

Unable to Work: Respondents who, because of their own long-term physical or mental illness or disability, are unable to do any kind of work. Physical or mental illness or disability means something specific and not a combination of minor disabilities that normally come with advanced age. The specific illness must be of such severity that it completely incapacitates the individual and prevents him/her from doing any kind of gainful work. This category would not include, for example, a youngster with a mental handicap who is able to help on the family farm. S/he should be coded "unable to work" only if s/he could not perform any kind of work. Likewise a truck driver who says s/he is unable to drive a truck because of a heart condition but who might be able to do less strenuous work should not be coded "unable to work." Excluded are those who are temporarily ill or disabled and who expect to be able to work within six months of the time of interview. If the respondent is reported as ill or disabled and no definite indication is given of the time the illness or disability is expected to last, interviewers are instructed to find out from the respondent (and not to use their own judgment or observation) whether s/he expects to be able to return to work within six months.

Other: Respondents whose activity or status cannot be described by the codes defined above. Includes respondents who report that they are taking it easy, working without pay for a neighbor, doing volunteer work, on summer vacation from school, participating in a work relief program, performing jury duty, only in the Reserves or only on National Guard duty, or participating in a government (Federal, State, or Local) program.

Source: NLS Round 12 Question by Question Specifications. Chicago, IL: NORC-4512, University of Chicago, 1990.

Table 4.27.3 Definitions of NLSY79 Weekly Labor Force Activity Categories: NLSY79 Work History Data

Working: There was at least one job number or employer available for the respondent for a given week, indicating active employment with at least one employer.

Associated with Employer: Linkage with an employer is possible, but information on gaps within the tenure with an employer is not available. If all the time with an employer cannot be accounted for, this labor force status instead of a "working" status is assigned.

Unemployed: Not working, but was either actively looking for work or on layoff.

Out of the Labor Force: Not working, not actively looking for work or on a layoff.

Not Working: Not working, cannot distinguish between unemployed and out of the labor force status.

Active Military Service: Actively serving in the military (Army, Navy, Air Force, Marines, Coast Guard).

No Information Reported: Sufficient information to determine labor force status was not reported.

User Notes: It should be noted that respondents can specify the number of weeks, if any, during a gap within or between jobs that they are either looking for work or on layoff. However, specific weeks can not be determined from this information. In these cases, the "unemployed" status is assigned to the middle of such a gap and the "out of the labor force" status is assigned to the remaining weeks on each end of the gap. The DUALJOB array does not contain such information on labor force status. It contains job numbers only in the event that the respondent held more than one job during a given week. If this is not the case, the DUALJOB array contains a "0" code. For more detailed information, refer to the "Work Experience" section of this guide.

Summary Labor Force Status Indicators: A series of summary variables, listed in Table 4.27.4, are created based upon the week-by-week labor force status arrays produced by the NLSY79 Work History program. These summary variables are present on the NLSY79 main data files and provide a count of the number of weeks that a respondent held a given labor force status, i.e., working, unemployed, out of labor force, or in the active Armed Forces. Each summary variable is available for the period since the last interview and in the past calendar year. Variables which indicate the percentage (if any) of weeks not accounted for due to missing data or indeterminate status in the Work History arrays are also calculated.

Table 4.27.4 Created Summary Variables: 1979 to Current Survey

Number of Weeks Service in Active Armed Forces in Past Calendar Year Number of Weeks Service in Active Armed Forces, Last Int to Present Number of Weeks Out of Labor Force in Past Calendar Year Number of Weeks Out of Labor Force since Last Int Number of Weeks Unemployed in Past Calendar Year

Number of Weeks Unemployed since Last Int

Number of Weeks Worked in Past Calendar Year Number of Weeks Worked since Last Int

Number of Hours Worked in Past Calendar Year/Since Last Int Number of Weeks Unacctd for in Past Calendar Year/Since Last Int

The first set of variables uses "Past Calendar Year," i.e., the full calendar year previous to the year of current interview, for its summations. The second set, which uses "Last Interview Date" as the starting point, allows researchers to piece together a cumulative set of figures for each respondent (up to the most current point of interview) depicting total number of weeks with a given labor force status. The variables containing the percentage of weeks unaccounted for serve to alert users to the completeness of a respondent's record over time. Because respondents can skip interview years, users should be careful in employing these variables to compose cumulative histories. These variables provide cumulative labor force status for the same period of time for each respondent interviewed in a given year. Comparative analyses can be conducted for a comparable time period across all respondents interviewed in a given year.

Related Variables: Another created variable in this is total number of weeks since the respondent's last interview.

Survey Instruments: See the topical "Work Experience" section of this guide.

Data Files: The cumulative variables discussed above are located in the "Key Variables" file on the main NLSY79 data set and are present in the NLSY79 Work History data. One set of variables exists for each survey year.

Labor Force Status Tables: Tables 4.27.5 and 4.27.6 depict the labor force status, as measured by 'Employment Status Recode' variables, across survey years for the NLSY79 sample as a whole and for respondents by race and gender. Readers should note that these tables contain unweighted frequencies. The tables should only be used as an aid in describing raw frequency counts in these data and must not be used to make inferences about population data.

Readers should also note that the 1994 CPS revisions potentially modified results in these tables. BLS estimates, derived from running the new CPS simultaneously with the old, suggest that the new CPS

slightly increases unemployment rates. Therefore, readers are cautioned that a small number of people classified as unemployed in 1994 and beyond might have been labeled "out of the labor force" according to the old CPS section.

				In the La		Out o	f the Labo	r Force			
Year	Total Intv'd	Not Intv'd	Total	Empl'd	Unempl'd	Active Forces	Total	In School	Unable to Work	Keeping House	Other
1979	12686 ²	0	8245	5161	1867	1217	4440	3387	41	473	539
1980	12141	545	8493	5733	1766	994	3648	2542	37	624	445
1981	12195	491	8959	6334	1770	855	3236	1861	58	800	517
1982	12123	563	9116	6593	1698	825	3007	1430	67	965	545
1983	12221	465	9471	6956	1735	780	2750	1019	59	1077	595
1984	12069	617	9663	7562	1394	707	2406	732	67	1105	502
1985	10894	1792	8865	7341	1124	400	2029	455	64	1078	432
1986	10655	2031	8809	7533	948	328	1846	356	56	1064	370
1987	10485	2201	8705	7673	730	302	1780	204	61	887	628
1988	10465	2221	8753	7869	630	254	1712	118	85	1160	349
1989	10605	2081	8823	7942	632	249	1782	106	99	1254	323
1990	10436	2250	8706	7953	542	211	1730	85	144	1180	321
1991	9018	3668	7516	6738	594	184	1502	73	103	1013	313
1992	9016	3670	7540	6775	602	163	1476	67	116	991	302
1993	9011	3675	6952	6195	520	237	1555	65	123	1046	321
1994	8889	3795	7402	6794	477	131	1487	n/a ³	59	n/a ³	1428
1996	8636	4050	7242	6729	406	107	1394	n/a³	176	n/a ³	1218
1998	9332	4287	8068	6712	331	92	1264	n/a ³	131	n/a ³	1133

Table 4.27.5 Labor Force Status:	NLSY79 Civilian & Military Respondents 1979 ³ –1998 ⁴
	(Unweighted Data)

Note: Includes civilian and military respondents residing overseas.

¹ The NLSY79 Employment Status Recode was not created for the 2000 round of the survey.

² Includes one respondent with a missing value on 'Employment Status Recode.'

³ The NLSY79 Employment Status Recode options changed in 1994 due to the CPS revisions. While options such as going to school and keeping house are no longer available within the ESR, these data are still available in other CPS variables.

⁴ Numbers are derived for this table from the CPS section. Since no CPS section was administered in 2000 there are no 2000 numbers available.

Year	Total Intv'd	Total Males	Empl'd	Active Forces	Unempl'd	Out of Labor Force	Total Females	Empl'd	Active Forces	Unempl'd	Out of Labor Force
					Non-Black/I	Non-Hisp	anic				
1979	7510	3790	1764	580	410	1036	3720	1685	317	429	1289
1980	7201	3620	1901	458	442	819	3581	1815	243	409	1114
1981	7206	3617	2081	360	510	666	3589	1968	192	351	1078
1982	7187	3614	2215	338	466	595	3573	2055	164	347	1007
1983	7250	3658	2338	327	502	491	3592	2158	127	330	977
1984	7124	3577	2540	297	339	401	3547	2275	118	277	877
1985	6230	3040	2310	174	254	302	3190	2175	23	206	786
1986	6100	2965	2353	139	244	229	3135	2200	20	182	733
1987	6025	2906	2425	128	160	193	3119	2188	21	128	782
1988	6025	2926	2544	106	116	160	3099	2205	18	127	749
1989	6068	2932	2553	109	123	147	3136	2197	18	126	795
1990	5988	2891	2547	91	85	168	3097	2206	15	115	761
1991	4557	2255	1955	79	117	104	2302	1689	8	86	519
1992	4545	2252	1976	68	110	98	2293	1664	7	116	506
1993	4529	2240	1940	100	83	117	2289	1666	11	81	531
1994	4468	2218	1990	51	68	109	2250	1646	3	89	512
1996	4337	2153	1952	39	55	107	2184	1634	3	72	475
1998	4142	2073	1887	36	42	108	2069	1651	3	59	454
					BI	ack					
1979	3173	1612	538	162	370	542	1561	400	81	359	721
1980	3050	1540	639	156	309	436	1510	494	78	300	638
1981	3080	1563	706	169	324	364	1517	566	68	301	582
1982	3054	1539	699	192	332	316	1515	590	64	299	562
1983	3064	1545	744	194	316	291	1519	639	57	302	521
1984	3048	1535	860	177	292	206	1513	722	48	274	469
1985	2843	1419	880	129	249	161	1424	768	20	233	403
1986	3017	1613	934	113	179	160	1404	823	14	196	371
1987	2750	1362	966	100	142	154	1388	888	14	184	302
1988	2742	1377	1006	83	129	159	1365	884	12	148	321
1989	2770	1386	1012	77	139	158	1384	883	12	144	345
1990	2719	1365	1008	68	124	165	1354	893	12	129	320
1991	2699	1345	966	62	142	175	1354	859	10	137	348
1992	2699	1353	971	52	139	191	1346	884	10	114	338
1993	2722	1365	960	74	126	205	1357	865	15	114	363
1994	2699	1344	1001	45	101	197	1355	898	9	109	339
1996	2642	1312	976	38	100	198	1330	926	9	89	306
1998	2537	1235	963	29	67	176	1302	960	10	90	242

Table 4.27.6 Labor Force Status: NLSY79 Civilian & Military Respondents by Gender & Race/Ethnicity 1979–1998

Year	Total Intv'd	Total Males	Empl'd	Active Forces	Unempl'd	Out of Labor Force	Total Females	Empl'd	Active Forces	Unempl'd	Out of Labor Force
					spanic						
1979	2002	1000	436	53	163	348	1002	338	24	136	504
1980	1890	932	479	43	185	225	958	405	16	121	416
1981	1909	951	551	50	173	177	958	462	16	111	369
1982	1882	935	585	56	149	145	947	449	11	105	382
1983	1907	945	576	65	181	123	962	501	10	104	347
1984	1897	943	644	58	123	118	954	521	9	89	335
1985	1821	912	675	50	107	80	909	533	4	75	297
1986	1765	886	699	39	82	66	879	524	3	65	287
1987	1710	848	678	37	61	72	862	528	2	55	277
1988	1698	850	703	33	53	61	848	527	2	57	262
1989	1767	878	723	29	57	69	889	574	4	43	268
1990	1729	856	726	22	45	63	873	573	3	44	253
1991	1762	871	702	22	64	83	891	567	3	48	273
1992	1772	876	706	22	66	82	896	574	4	57	261
1993	1760	859	686	31	60	82	901	582	6	56	257
1994	1722	847	693	19	42	93	875	566	4	68	237
1996	1657	810	660	16	40	94	847	581	2	50	214
1998	1622	792	659	11	32	90	830	592	3	41	194

Table 4.27.6 Labor Force Status: NLSY79 Civilian & Military Respondents by Gender & Race/Ethnicity 1979–1998 (continued)

NLSY79 Children

Data are available on the work activity of those children who were age ten and over at the interview date as well as on each mother's survey week activity and work history during quarterly periods preceding and following the child's birth.

- 1. Child's Work Activity: The 1988–2000 surveys collected information from children who were 10 years of age or older on whether they worked for pay outside of their own home doing such jobs as delivering newspapers, babysitting, office, food service, or yard work. Additional information gathered includes how often the child worked, number of hours worked in a usual week during the past three months, and usual weekly earnings. Since 1994, the children aged 15 and older, the young adults, have responded to an extensive list of questions pertaining to their usual work experience. The young adults were also asked the number of hours they would like to be working and their reasons for not working.
- 2. Mother's Labor Force Status: Using data from the NLSY79 Work History File, variables were constructed detailing each mother's employment history for the period surrounding the birth of her child, i.e., up to four quarters prior to birth and each 13-week interval since the child's birth for a

period of five years. While no specific status variables are present within this series, users can derive a quarterly employment status variable ("with a job" versus "with no job") from the quarterly 'Number of Jobs Held by Mother in X Quarter before/after Birth of Child' variables.

Survey Instruments: The labor force status questions can be found within the Employer Supplement sections of the NLSY79 Young Adult Questionnaires. In the 1994, 1996, and 1998 surveys, the young adult questionnaire included both a CPS and "Gaps in Employment" section nearly identical to these sections in the main youth. By 2000, both of these sections were eliminated.

Data Files & Documentation: Descriptions of the child-specific work activity variables can be found within the "CSAS" areas of interest on the child compact disc. The quarterly work history variables have been placed within the "Work History" area of interest on the child CD.

4.28 Marital Status, Marital Transitions & Attitudes

This section reviews the marital status and transition data available for NLSY79 respondents. It also describes the special NLSY79 and NLSY79 Children marital attitudes and expectations data collections and young adult dating and cohabitation information.

NLSY79

Marital Status: Marital status information for NLSY79 respondents is available from (1) responses to questions fielded during the annual or biennial surveys; (2) two sets of created variables specifying marital status as of the interview date; and (3) an item on the marital status of each respondent as of the previous interview derived from the interviewing aid called the *Information Sheet*.

The marital status of each respondent, i.e., whether he or she was married, widowed, divorced, separated, or never married, was collected during the 1979 survey and is available as a single variable, 'Marital Status.' The 1980–87 interviews collected change in marital status information. During the 1988 and subsequent surveys, 'Current Marital Status' interview checks are included in the questionnaire to verify separately the marital status of respondents who report a change in status since the date of last interview and respondents who do not.

Two created variables provide data on the respondent's marital status, incorporating any changes, as of each interview date. The first set of yearly created 'Marital Status' variables is constructed with coding categories of "never married," "married," "separated," "divorced," and "widowed." Although two additional categories, "remarried" and "reunited," are present within the "Marital History" section of the questionnaire, those respondents who are remarried or reunited are simply coded as "married" in the created variable series. A collapsed version of this variable that codes the respondent's status as "never married," "married spouse present," or "other" is also available. Prior to 1988, marital status was created based on the last actual stated change in marital status. Marital status for 1988 and subsequent survey years has been created from the interview checks mentioned above. Since 1980, a marital status variable has been available from each interview's *Information Sheet*. This variable reflects the respondent's current marital status as of the date of the last interview. Coding categories are similar to those for the created marital status variables but differ slightly across years.

In addition to these data, information is available on respondents' age at first marriage, the presence of opposite-sex partners, and the marital status of household members. The 'Age Began 1st Marriage' variable series has been created for 1982 through the present from the created 'Month/Year Began 1st Marriage' variables (see "Marital Transitions" below) and from the 1979 date of birth.

Prior to 1982, presence of a partner was indicated by an interview check coded "yes" if the respondent lived with one unrelated adult of the opposite sex ('Int Check - Does R Live With Opposite Sex Adult as a Partner'). From 1982–86, Version C of the *Household Interview Form*, completed by those who lived in their own dwelling unit or in military family housing, asked those respondents who were living with at least one unrelated adult of the opposite sex but no spouse whether they lived with a partner. Since 1987, only one version of the *Household Interview Form* has been used; all respondents not living with a spouse have been asked about opposite-sex partners. The partner variable originating from the household interview is titled 'Currently Living as Partner with Opposite Sex Adult'.

The marital status of household members is available from the 1978 household screening only, e.g. 'Household Screener: Family Member #1 - Marital Status.' Categories include "presently married," "widowed," "divorced," "separated," and "never married/annulled."

Marital History/Transitions: A series of edited Supplemental Fertility File variables (area of interest "Fertility and Relationship History/Created") that reflects the beginning and ending dates of marriages was constructed for 1982 through the present. These variables include the month and year the respondent began a first, second, or, beginning in 1988, a third marriage and the month and year a first or second marriage ended, e.g., 'Month Began 1st Marriage.' Unedited data items 1979 include 'Number of Marriages,' 'Month/Year of 1st/Most Recent Marriage,' and 'Month/Year During Which 1st Marriage Ended.' For all subsequent years, 'Change(s) in Marital Status Since Last Interview' are described. Users should note that a separate category for the transition to "reunited" was not added until the 1981 survey. Evaluations of the marital history data for the NLSY79 can be found in Haurin (1988, 1994). A related variable, also located in the "Fertility and Relationship History/Created" area of interest, provides the number of months between the respondent's first marriage and the birth of the respondent's first child.

Cohabitation: The following cohabitation information is available from the 1990 and 1992–2000 surveys: (1) the month and year the respondent and his/her opposite-sex partner began living together; (2) whether the respondent lived with his/her spouse before marriage; (3) the month and year the respondent and his/her spouse began living together; and (4) whether the respondent and his/her spouse lived together continuously until marriage. A household member's relationship to the respondent may be listed as "partner" in the "Household Record" portion of the *Face Sheet*, which is filled out during the yearly household interview. This is true regardless of whether the "partner" is of the same or opposite sex as the respondent. However, only opposite-sex partners are referenced during the interview for questions relating to household, income, and dating/relationship.

Spousal Characteristics: Information collected as part of the household roster is available for spouses and partners at each survey point if they are listed as members of the household. Users first need to identify

the appropriate relationship to the respondent (i.e., code "1" for spouse; code "33" for partner) via variables that are specific for this purpose. Typically, information on the age, relationship to respondent, highest grade of schooling completed, and employment in the past calendar year is collected during each survey. See the various topical sections of this guide, such as "Age," "Educational Status and Attainment," and "Household Composition" for information on specific characteristics.

User Notes: Collection of information on partners as distinguished from spouses has varied over time in the NLSY79. To some extent, the term partner is used more interchangeably in sections of the questionnaire such as "Fertility" and "Childcare" than in sections such as "Marriage" and "Income and Assets," where items may specifically include or exclude partners. Users are cautioned not to assume the interchangeability of terms but to carefully check the wording of all the questionnaire items of this type that are of interest.

In addition to information available via the household roster, across time, additional information has been collected on the spouse as part of the "Marital History" section of the questionnaire. The month and year of birth of the most recent spouse has been collected at each interview. For respondents who are widowed, the month and year of their spouse's death is available as part of the marriage end dates collected in the core marital transition history for each survey.

From 1980 to 1982, questions were included that updated the spouse's educational enrollment status and additional education completed since the last survey. Since 1979, information has been collected during each interview on the usual occupation of the spouse (Census 3-digit code), weeks worked in the past year, hours worked per week in the past year, number of weeks not working in the past year, and number of weeks the spouse was looking for work or on layoff. In 1982, 1998, and 2000 respondents answered questions concerning their new spouse's current religious affiliation, attendance at religious services, and religion in which the spouse was raised. During the 1982 interview, information was gathered on whether the spouse had a health condition that limited the amount or kind of work he/she could do, the month and year the health condition began, and the effect of the spouse's health condition on the respondent's work (e.g., prevent work; work more or fewer hours; or affect the schedule, kind, or location of the respondent's work).

Beginning with the 1986 survey, data on the kind of employment shift worked by the spouse has been collected. This information began with a single question eliciting the type of shift (e.g., regular day, evening, split, or hours vary) in 1986 and has gradually expanded to include questions on the time the spouse usually begins and ends work on the current job as well as other details. Similarly, in 1990 a series of questions was added to the "Marital History" section of the questionnaire that collects information on

the rate of pay at the spouse's current job. This series also began with only a few questions and has expanded to gather significantly more detail, such as information on overtime pay, etc. Users should consult each relevant survey year's questionnaire or codebook to ascertain the specific items collected in the given year. Information on income has been selectively collected for the respondent's spouse or partner. Users should see the topical section on "Income" in this guide for further details.

Marital Attitudes and Expectations: A series of relationship satisfaction questions were asked during the 1988, 1992, and 1994–2000 interviews of those mothers living with a spouse or opposite-sex partner. These questions dealt with both positive and negative interactions in the relationship, e.g., 'Frequency R and Husband/Partner Calmly Discuss Something' and 'Frequency R and Husband/Partner Argue About - Money.' In addition, mothers without a spouse or partner were asked for information on 'Frequency R Goes Out on Dates,' whether the 'Oldest Child Encourage(s) R's Dating,' and 'Likelihood of Marriage in the Future.' In 1979, all never married respondents were asked for information on 'Age Expects to Marry.'

Environmental Characteristic Data: For the 1979–82 interview years, the Geocode CD-ROM includes marriage and divorce rates and percent of families with female heads of household for the county and SMSA in which the respondent resided. These statistics are taken from the 1972 and 1977 *County & City Data Books*. From 1983 until 1996, marriage and divorce rates and the number of families with a female head are included for county of residence only, based on statistics from the 1983 and 1988 *County & City Data Books*. The 2000 release will include the same information based on statistics from the 1988 and 1994 *County & City Data Books*, similar to the 1998 release.

Survey Instruments: The "Marital History" section (Section 2) of the questionnaire has collected information on each respondent's marital history as of 1979, as well as all subsequent changes in marital status. Questions regarding presence of an opposite-sex partner in the household are located on the *Household Interview Forms* (Version C for 1982–86). The 1979–81 interview checks on partners can be found in the "Assets and Income" section. The 1988, 1992, 1994, 1996, 1998, and 2000 dating and relationship series for mothers can be found in Section 10, "Child Care." The 1979 marriage expectations questions are located in Section 22, "Aspirations and Expectations." The set of 1979 variables on marital status of household members was derived from the 1978 *Household Screener*. Copies of the yearly *Information Sheet*, from which the previous interview marital status variables are derived, can be found near the beginning of the yearly *Question by Question Specifications* (*Q by Q*) for all survey years except 1980 and 1988. *Information Sheet* marital status variables by reference number are available within the documentation package for 1988 and subsequent years.

Documentation: Information on the creation of the marital status and collapsed marital status variables is presented in the "User Notes" below. General information regarding creation of the Supplemental Fertility File (area of interest "Fertility and Relationship History/Created"), including marital transition data, age at first marriage, and months between first marriage and first birth, is found in "Appendix 5: Supplemental Fertility Files" in the *NLSY79 Codebook Supplement*.

Data Files: The "Key Variables" area of interest includes the created marital status variables. Raw data on marriages, marital status changes, and spouse characteristics, along with the 1988, 1992, 1994, 1996, 1998, and 2000 series on attitudes of mothers, are located in the "Marriage" area of interest. Variables from the *Information Sheet* can be found in "Last Interview Information." Variables on the presence of an opposite-sex partner are included in the "Misc. xxxx" area of interest, except for the 1979–81 interview checks, which are located in "Income." Variables for marital status of household members from the *Household Screener* are located in "Misc. 1979." Constructed marital history/transitions, age at first marriage, and months between first marriage and first birth variables are in "Fertility and Relationship History/Created." The 1979 question about expected age of marriage can be found in "Attitude." Marriage/divorce rate variables for respondents' area of residence are located in the yearly "Geocode xxxx" areas of interest available on the Geocode CD.

User Notes: A detailed memo, "Inconsistencies in the NLSY79 Marital History Data" (Haurin 1988), identifies those respondents whose marital histories through the 1986 survey contained inconsistencies; it also summarizes the edits made, if any, to each case during preparation of the 1986 Supplemental Fertility File (area of interest "Fertility and Relationship History/Created").

Researchers using the constructed marriage dates should be aware that there is a very small percentage of people who have ended their third marriage or have entered a subsequent one. The use of information from the *Information Sheet* to designate respondents' current marital status is not encouraged because this information is dated. However, *Information Sheet* data do permit users to detect inconsistencies reported over time. The program statements used to create marital status for the 1992 survey years are listed in Table 4.28.1. Creation procedures for other years after 1988 are almost identical to the procedure presented here, except that different reference numbers are used in the 1989-1996 PL/1 code and the code was converted to SPSS in 1998. Prior to 1988, interview checks verifying marital status at the previous interview did not exist in the questionnaire; marital status was created based on the last actual stated change rather than an interviewer check or verification of the status last reported.

/* EXPANDED & COLLAPSED MARITAL STATUS 1992*/
MARST EXPAND=-4;
MARST COLLAP=-4;
IF WEIGHT92=0 THEN DO;
MARST EXPAND=-5; MARST COLLAP=-5;
ELSE DO;
IF R(37017.)>=0 THEN MARST_EXPAND=R(37017.);
ELSE IF R(37030.)>0 THEN MARST_EXPAND=R(37030.);
IF MARST EXPAND=0 THEN MARST COLLAP=1;
ELSE IF MARST EXPAND=1 & SPOU92=1 THEN MARST COLLAP=2;
ELSE IF MARST_EXPAND>0 THEN MARST_COLLAP=3;
ELSE MARST COLLAP=-3;
END;
MARST_COLLAP=R(40072.);
MARST_EXPAND=R(40073.);
/* SPOU92 INDICATES IF A SPOUSE IS LIVING IN THE HOUSEHOLD (0=NO, 1=YES).
TO CREATE SPOU92:
1. INITIALIZE SPOU92=0.INITIALIZE SPOU92=0.
SET SPOU92=-5 IF NOT INTERVIEWED IN 1992 (I.E., IF WEIGHT92=0).
SEARCH THROUGH THE HOUSEHOLD ENUMERATION AND COMPUTE SPOU92=1 IF THE
RELATIONSHIP TO YOUTH IS CODED AS A SPOUSE (CODE=1). */

Table 4.28.1 Expanded and Collapsed Marital Status: NLSY79 1992

References

- Haurin, R. Jean. "Inconsistencies in the NLSY79 Marital History Data—1986 Supplemental Fertility File." Columbus, OH: CHRR, The Ohio State University, 1988.
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- Mott, Frank L. "Selected Mother and Child Tabulations from the 1984 (Sixth Wave) Survey of the National Longitudinal Study of Work Experience of Youth." Columbus, OH: CHRR, The Ohio State University, 1988.

NLSY79 Children

Marital Status: Information on whether each mother's spouse or partner is present within the mother's household is available on the Child CD for each survey year; variable titles are 'Is Spouse of Mother Present in HH of Mother' and 'Is Partner of Mother Present in HH of Mother.' In 1994, 1996, 1998, and 2000, information on the current marital and cohabitation status of the children aged 15 and older, the young adults, as well as a marital/cohabitation history was also collected.

Marital Attitudes and Expectations: During the 1988–2000 child assessment surveys, children 10 years and older indicated what they thought were the best age and the youngest age to get married, i.e., 'What is the Best Age to Get Married?' In 1994, 1996, 1998, and 2000, the same series of relationship satisfaction

questions that was administered to the main youth respondents was also administered to the young adults living with spouses or partners.

Survey Instruments: The 1988–2000 Child Self-Administered Supplements contain the series of marital attitude questions asked of children 10 and older. In 1994, 1996, 1998, and 2000, these questions are contained in the Young Adult Self-Report Booklet for children 15 and older. The questions pertaining to marital status as well as the series of relationship satisfaction questions can be found in the "Dating and Relationship History" sections of the 1994 and 1996 NLSY79 Young Adult Questionnaires. The "Survey Instruments" section of the NLSY79 discussion above contains additional information on the data collection for mothers.

Data Files & Documentation: Presence of mothers' spouse/partner variables are described in the "Household Composition" sections of the *NLSY79 Child Codebook*. Users will find the 'Presence of Spouse' and of 'Partner' variables in the child "Mother's Household Composition" area of interest and the child attitude variables in "CSAS." All other variables related to maternal marital history or status must be accessed through the mothers' variables on the main youth files.

4.29 Military

NLSY79

The NLSY79 is unique in that respondents are chosen from both the civilian and military populations. Since most surveys focus on one or the other, researchers rarely can compare outcomes simultaneously for both groups. Funding by the U.S. Department of Defense in the early years of the survey and continued interest by BLS has enabled the NLSY79 to collect a large amount of data on military occupations, training, wages, and testing scores.

Although funding cutbacks reduced the size of the military sample in 1985, military questions continue to be a part of every NLSY79 survey. Researchers will find that the questionnaires from 1979 to 1985 contain substantial information on military experience. While questionnaires from 1986 to 2000 contain less information, the interviews continued to ask respondents about key variables such as military enlistment, pay, and training. Researchers should note that respondents age 16 and under at the 1979 interview were not asked any military service questions; this group was asked three questions concerning attitude toward military service and the possibility of enlisting in the future.

NLSY79 military members consist of two groups. The first group is a special oversample of members of the Armed Forces. This group, which in 1979 included 1,280 respondents, was reduced to 201 respondents in 1985 because of funding cutbacks. The second group consists of NLSY79 respondents who joined the military while part of the sample. For example, in 1979 (R00431.) 508 respondents stated that they would "definitely try to enlist in the Armed Forces in the future." For more information on the sample composition, interested readers should refer to Chapter 2, "Sample Design and Attrition."

Table 4.29.1 shows the number of NLSY79 respondents who are in the active military by year and the number of individuals who have enlisted in any branch of the service since the last interview. Researchers must understand the difference between active and reserve duty. Large portions of the military section are either skipped or answered depending on a respondent's active or reserve duty status. Many people believe that active duty personnel are in full-time military jobs while reserve duty are part-time military jobs, but this is not the case. While many reservists serve two weeks a year, a number of reservists are employed full-time, year-round by the Armed Forces. A more complete picture of military service is gained by examining data on both active and reserve personnel.

While Table 4.29.1 shows a steadily falling number of active duty personnel, it also shows that a large number of respondents are enlisting in the Armed Forces. A careful look at the data suggests that many of the NLSY79 active duty personnel enlist in the reserves when their active duty term is finished.

Year	In Active Forces	Enlisted Any Branch	Year	In Active Forces	Enlisted Any Branch
1979	1218	(NA)	1989	249	36
1980	994	212	1990	211	30
1981	855	251	1991	184	19
1982	825	254	1992	163	20
1983	780	228	1993	145	10
1984	707	162	1994	134	8
1985	400	93	1996	107	11
1986	328	87	1998	92	6
1987	301	53	2000	58	5
1988	257	63			

Table 4.29.1 Number of NLSY79 Respondents in the Active Armed Forces and Number Who Enlisted in Any Branch in That Year

Note: Each year the NLSY79 contains a variable that states if the respondent enlisted during the past year (e.g., R02326. in 1980).

User Notes: While there is no created NLSY79 variable that identifies members of the active forces, there is a simple method of identifying these individuals through 1993. Active members of the Armed Forces can be indirectly identified by the first CPS question. The CPS section should not be answered by active duty personnel (but should be answered by reservists) since it pertains only to civilian work. Hence, individuals who are valid skips (-4) for the question entitled "Activity During Most of the Survey Week" are on active duty (also see the "Labor Force Status" section of this guide). In 1994 and subsequent years, there is a machine check variable identifying members of the active forces (e.g., R45358. in 1994).

There is no similar simple method of identifying reservists; researchers must instead create their own military event history. The NLSY79 data set contains information on the date an individual left the most recent branch of service and the date the respondent enlisted in a service branch. When following these variables for an individual, researchers should note that a number of respondents switch branches of the service and hence report a military stop and start date during a single interview.

The NLSY79 contains more than 1,500 variables pertaining to life in the Armed Forces. The following sections explore some of these variables in more depth. Researchers should note that military information can be combined with other NLSY79 data to provide useful insights into residence characteristics, marital status, fertility, and schooling while an individual serves in the Armed Forces.

Military Occupation: Questions about military occupations were asked in 1979–85. In each year, respondents in the military were asked to report their primary military occupation (e.g., R16324. in 1985) and their secondary occupation (R16337. in 1985). These questions were part of a section that also asked

for information about how much training the respondent had recently received. Researchers who use the Census Bureau's 3-digit occupation codes should note that while military occupations also are coded with 3-digit codes, the classification scheme is completely separate. CHRR coded military occupations with codes developed by the Department of Defense (1977). Users interested in a respondent's Military Occupation or Specialty (MOS) should search for MOS for Army, Marine Corps, and National Guardsmen. Respondents in the Navy or Naval Reserves are classified by their "Primary Rating," while Air Force and Air Force Reserves respondents are classified by their "Air Force Specialty Codes (AFSC)."

Military Training: One focus of the NLSY79 military section is training. In 1980 members of the active Armed Forces were asked why they enlisted in the military (R02516.). The most important reason cited by the majority (217 respondents out of 993) was "To get trained in a skill that will help me get a civilian job when I get out." To understand military training, surveys prior to 1986 asked each respondent about the primary and secondary job for which they were trained.

Pre-1986 surveys also asked military respondents about the number of weeks of formal training received in the military, the amount of on-the-job training, and the amount of formal schooling. Each survey also contains two questions that explore the usefulness of military training for civilian life. One question asks if the respondent is doing the same kind of work in civilian life as in the military; the second asks if the respondent uses any skills learned in the military in any civilian jobs. Researchers interested in more details on how military training is transferable to civilian work should see Mangum and Ball (1986).

Military Pay and Bonuses: The NLSY79 contains a large amount of information on military pay and bonuses. During the early years of the survey, pay information was collected for individuals in the military, individuals in the reserves, and individuals who had separated from the military. Additional information was gathered on the amount of educational and enlistment benefits received. Finally, for individuals who left the Armed Forces, some interviews contain information on the primary reason for separation. A number of respondents stated low pay as their primary reason for leaving the military. Table 4.29.2 summarizes pay variables for members of the military.

Variable	1979	1980- 1985	1986- 2000	Variable		1980- 1985	1986- 2000
In Service: Current Pay Grade	*	*	*	Participate in VEAP?1	*	*	*
Monthly Pay	*	*		Amount VEAP Benefits		*	*
In Reserves: # Weekly Drills Paid	*	*		Participate in Tuition Assistance		*	
Number of Weeks Served on Duty	*	*		Tuition Amount		*	
Left Service: Last Pay Grade	*	*	*	Received Enlistment Bonus, Amount	*	*	
Last Monthly Pay	*	*		Received Reenlistment Bonus, Amount	*	*	

 Table 4.29.2 Military Pay Variables in the NLSY79 1979 Cohort

¹VEAP questions are now combined with other educational benefits.

ASVAB Administration: During the summer and fall of 1980, NLSY79 respondents participated in an effort of the U.S. Departments of Defense and Military Services to update the norms of the Armed Services Vocational Aptitude Battery (ASVAB). NLSY79 respondents were selected because they comprised a preexisting, nationally representative sample of young people born from 1957 through 1964. This testing, which came to be referred to as the "Profiles of American Youth," was conducted by NORC representatives according to standard ASVAB procedure guidelines.

A composite score derived from select sections of the battery can be used to construct an approximate and unofficial Armed Forces Qualifications Test score (AFQT), a general measure of trainability and a primary criterion of enlistment eligibility for the Armed Forces, for each youth. For more details on the AFQT and *ASVAB*, refer to the "Aptitude, Achievement & Intelligence Scores" section of this guide.

Survey Instruments: The questions on the military are located in the following sections of the NLSY79 questionnaires: Section 7 (1979), Section 6 (1980), Section 5 (1981), and Section 4 (1982–2000).

Data Files: The variables may be found within the "Military" area of interest on the CD-ROM.

Reference

- Mangum, Stephen and Ball, David. Occupational Skill Training and Transferability: How Does the Military Fare? Proceedings of the Thirty-Ninth Annual Meeting, Industrial Relations Research Association (1986) 412–21.
- U.S. Department of Defense, Manpower Reserve Affairs and Logistics. *Occupational Conversion Manual*. Alexandria, VA: D.M.D.C., 1977.

NLSY79 Children

The young adult questionnaire has a military section similar to the main NLSY79. However, the young adults are asked for greater detail about military jobs and training. To find these variables, users should search for the "Military" area of interest on the Child/Young Adult CD.

4.30 Occupations

NLSY79

Regularly fielded sections of NLSY79 survey instruments have collected information on the occupation of respondents' current/last job, jobs since last interview, military job, vocational/technical or government training programs, type of job to which they aspired, and, for those unemployed and out of the labor force, the kind of occupation they were seeking or planned to seek. In addition to this respondent-specific information, data on occupations are also available for other family members, including the spouse and parents of the respondent. Finally, the 1980 school survey collected data on the types of vocational/technical training offered within a respondent's high school.

Verbatim responses to open-ended questions eliciting information on kinds of work or training are entered directly into the survey instrument by the interviewer and subsequently coded by NORC staff using one or more occupational coding schemes. The occupational classification systems listed in Table 4.30.1 have been used to code occupations within the yearly NLSY79 surveys. Background information on the development of the 1980 classification system and the relationship between the 1970 and 1980 coding categories is available in the 1989 Census publication listed in this section's references.

Table 4.30.1 Occupational Coding Classification Systems: NLSY79

- 1. The 3-digit 1970 Census classifications (U.S. Census Bureau 1971) are used to code all job and training questions as well as the occupational aspiration series found in the questionnaires and *Employer Supplements*.
- 2. Beginning with the 1982 survey, the 3-digit 1980 Census codes (U.S. Census Bureau 1981) have been used, in addition to the 1970 codes, to classify occupations of respondents' current or most recent job.
- 3. The 1977 military occupational specialty codes (U.S. Department of Defense 1977) are used to classify responses to the 1979–85 questions on military jobs and military occupations.
- 4. The 1979 CPS job is coded using the Duncan Index of occupational prestige. The scores, ranging from 0 to 97, may be interpreted either as estimates of prestige ratings or simply as values on a scale of occupational socioeconomic status. For details, see Duncan (1961).

Survey Instruments: Data on occupations have been collected within various topical sections of the NLSY79 questionnaires: "Current Labor Force Status," "Regular Schooling," "Government Training," "Military," "Family Background," etc. The yearly *Employer Supplements* collect occupational information on the type of job performed for a given employer. The separately administered 1980 *School Survey* was used to collect information on types of vocational and technical courses offered by those schools surveyed.

Data Files & Documentation: Occupational data for the NLSY79 are found within various areas of interest, e.g., "CPS," "Job Information," "Military," "Misc. xxxx," "School," "Training," "Marriage," "Family Background." "Attachment 3: Industry and Occupation Codes" in the Codebook Supplement

provides the detailed codes for the Census and DOD classification systems discussed above. The *NLSY High School Transcript Survey: Overview and Documentation* contains a copy of the school survey that asked about vocational/technical course offerings.

User Notes: "Employer" is the unit for which occupations are asked in the NLSY79. Thus changes in occupation are not asked directly but rely on the accuracy of coding across survey years. Users should be careful in making inferences about occupational and/or industry mobility as miscoding is present. When industry codes for the same employer in adjacent interview years are compared (see NLSY79 Work History Data), it has been found that respondents use slightly different words to describe their industry/occupation and coders may interpret the same words in different ways in different years. When one code is missing, occupational descriptions are used in creating industry codes and vice versa. Therefore, workers who change occupations, even though they stay in the same firm, may tend to generate changes in industry codes.

The 1979 occupation and industry codes for Job #1 (the CPS job) are only blank placeholders, due to the structure of the job history and "CPS" sections in the initial survey year (1979). The information is contained in the "CPS" section, but these variables were used as placeholders in anticipation of the future structure of the *Employer Supplement*.

References

- Duncan, O.D. "A Socioeconomic Index for All Occupations." In *Occupations and Social Status*, A.J. Reiss, Jr. et al. New York: Free Press, 1961.
- U.S. Census Bureau. 1960 Census of Population Alphabetical Index of Occupations and Industries (Revised Edition). Washington, DC: U.S. Government Printing Office, 1960.
- U.S. Census Bureau. 1970 Census of Population Alphabetical Index of Industries and Occupations. Washington, DC: U.S. Government Printing Office, 1971.
- U.S. Census Bureau. "1970 Occupation and Industry Classification Systems in Terms of Their 1960 Occupation and Industry Elements." Technical Paper 26. Washington, DC: U.S. Government Printing Office, 1972.
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- U.S. Census Bureau. "The Relationship Between the 1970 and 1980 Industry and Occupation Classification Systems." Technical Paper 59. Washington, DC: U.S. Government Printing Office, 1989.
- U.S. Census Bureau. U.S. Census of Population: 1960. Subject Reports. Occupational Characteristics. Final Report PC (2)-7A. Washington, DC: U.S. Government Printing Office, 1960.

- U.S. Department of Defense. "Occupational Conversion Manual: Enlisted/Officer/ Civilian, Defense Manpower Center." Arlington, VA: DOD 1312.1-M, 1977.
- U.S. Department of Labor. "Dictionary of Occupational Titles (Fourth Edition)." Washington, DC: U.S. Government Printing Office, 1977.

NLSY79 Children

Occupation of mother at main job during each quarter preceding and following the birth of a child is available for each child. These variables are coded with 1970 Census codes and the Duncan Index. Additionally, in 1994, 1996, 1998, and 2000, verbatim responses to open-ended questions eliciting information on kinds of work or training from the children aged 15 and older, the young adults, were entered directly on to the instrument and later coded by NORC using both the 1970 (all jobs) and 1990 (CPS job only) Census occupation codes. In 2000 NORC coded using the 1990 (all jobs) and 1970 (CPS job only) Census occupation codes. The 2000 release includes 1990 codes for all jobs coded in the 1994-1998 surveys

Survey Instruments: The young adult questions are located within the *Employer Supplement* sections of the *NLSY79 Young Adult Questionnaires*.

Data Files & Documentation: Descriptions of CPS occupations can be found in the "Employment Income" area of interest, and the quarterly variables can be found in the "Work History" area of interest on the child compact disc. "Attachment 3: Industry and Occupation Codes" provides the 1970 Census occupational classification system used to code mother's occupations. Young adult attachments 3 and 4 present the Census classification systems used to code young adult occupations.

4.31 Pension Benefits & Pension Plans

NLSY79

Prior to 1994, pension information for the NLSY79 was restricted to that collected on pension income. The focus, in general, was on receipt of pension, Social Security, or disability income by various household members, e.g., by the respondent's parent's family (parental unit), the respondent and his/her spouse or partner, or other family members. Income from pensions or annuities was seldom differentiated from Social Security income.

- 1. Pension Benefits & Social Security Payments. Information on whether income was received by the respondent and/or spouse from other (unspecified) sources such as Social Security, pensions, or annuities was collected during the administration of each survey's "Income and Assets" section. Follow-up questions asked whether any other family members (1979–2000) or an opposite-sex adult/partner (1979–84, 1990–2000 had received Social Security/Railroad Retirement or pension income in the past calendar year. Household income received by those respondents living in their parental home or by any other household member related to these respondents from (1) governmental or private pensions or annuities or (2) Social Security/Railroad Retirement benefits was collected during the 1979–86 household interviews.
- 2. Disability Payments. Fielded during the 1980–2000 surveys was a set of questions that asked whether the respondent or his/her spouse (and since 1994, "or partner," if applicable) had received any income during the past year from veteran's benefits, Worker's Compensation, or other disability. If such income was received, an amount was recorded.

1994 Changes: Beginning in 1994 and continuing in 1996, 1998 and 2000, the *Employer Supplements* section on fringe benefits was expanded to include a large amount of pension information. The pension questions are asked for each job that a respondent works at 20 hours a week or more. The pension section elicits information from the respondent on the following 11 subjects:

- 1. If eligible for a plan
- 2. How many participating in
- 3. How many plans eligible for with each employer
- 4. Knowledge of each plan
- 5. Number of years enrolled in a plan
- 6. Type of plan
- 7. Employer contributions
- 8. Employee contributions
- 9. Whether choice in investment strategy
- 10. How much the plan is worth
- 11. Investment strategy

In addition, in 1994, 1996, 1998 and 2000 a series of four questions added to the asset section of the questionnaire began to track retirement savings. Prior to 1994 this information was asked for as part of the answers to other asset questions, while in 1994 pension questions were separated out. The first question asks if the respondent/spouse has any IRA accounts. If the answer is yes, respondents are queried about how much money is held in their IRA. Then the respondent is asked if they or their spouse or partner hold any 401k or 403b accounts. If the answer is yes, they are questioned how much money is held in these accounts.

Survey Instruments: Income source questions are located within the "Income & Assets" sections of each questionnaire: Section 21 (1979), Section 17 (1980), Section 12 (1981, 1987, 1989, and 1992), Section 14 (1982 and 1985), Section 13 (1983, 1986, 1990, 1994, 1996, 1998 and 2000), Section 15 (1984 and 1988), and Section 11 (1991 and 1993). The household income questions can be found on Version A of the *Household Interview Form.* The "Household Composition," "Poverty Status & Public Assistance Support Services," and "Survey Instruments" sections of this guide present additional information on the collection of household and income data.

Data Files: Pension source variables are found in the "Pensions," "Income," and "Misc. xxxx" areas of interest.

4.32 Poverty Status & Public Assistance Support Sources

NLSY79

Two sets of family poverty variables, family poverty status and family poverty level, are available for NLSY79 respondents. In addition, detailed information is provided on public assistance income sources, and a series of environmental variables describe the extent of family and individual poverty within the respondent's geographical area of residence. Family income information collected during the 1978 screening was used to designate the economically disadvantaged oversample of NLSY79 respondents.

Economically Disadvantaged Sample Assignment: The economically disadvantaged non-black/non-Hispanic oversample includes those youth located during the screening who were selected for and completed a base year interview (1) whose family income during the past 12 months (reported by the householder) was equal to or below the 1978 poverty guidelines established for that family size and (2) whose race was coded by interviewer observation as not black or Hispanic, i.e., "non-black/non-Hispanic" or "other" and whose origin or descent (reported by the householder) was neither one of the Hispanic codes nor black, Negro, or Afro-American. A family was designated as in poverty if its income over the past 12 months was equal to or less than \$3140 + (\$1020 * (N-1)) for a non-farm family or equal to or less than \$2690 + (\$ 860 * (N-1)) for a farm family, where N is the number of persons in the family unit.

Family Poverty Status (1978-2000): Variables have been created for each survey year that indicate whether or not a respondent's total family income for the past calendar year was above or below the poverty level. Information used to create the 1979-2000 poverty variables is derived from either (1) the total family income information provided during the household interview by the parent when the respondent was living in the parental home or (2) the sum of component income sources reported by the respondent (when not living in the parental home) during administration of the "Income" section of each questionnaire. Income sources for the respondent and all persons related to them by blood, marriage, or adoption are included in the calculation. Availability of data for individual respondents has been affected by nonresponse to the income questions. Poverty status data are not available for those respondents who, during post-1986 survey years, had one or more income components missing. Nor are they available for those respondents who, during the 1980-86 interviews, were "refusals" or "don't knows" to both the household interview dollar amount question and a follow-up question requiring a "yes-no" response to a question on level of family income. The method used to create the 1978 family poverty status variable was unique. "Appendix 2 - Total Net Family Income" in the Codebook Supplement provides a narrative description; R02179.30 identifies which of three income sources was used to determine each respondent's status.

Two sets of poverty level indicators have been used across survey years. The yearly poverty income guidelines (issued by the U.S. Department of Health and Human Services and based on Census Bureau poverty guidelines) were used to determine poverty status for the 1978, 1979, and 1987–2000 survey years. Projected poverty income levels computed by CHRR were used for the 1980–86 poverty status variables. More complete information on the calculation procedures developed by CHRR to create 'Total Net Family Income' and 'Family Poverty Status' and to project poverty guidelines for the 1980–86 survey years can be found in "Appendix 2 - Total Net Family Income" in the *NLSY79 Codebook Supplement*. Copies of the official poverty guidelines and the projected 1980–86 cutoff values are included in the appendix.

Family Poverty Level (1979, 1987–2000): The poverty level variables provide the amount of total family income, controlling for family size and state of residence, below which a respondent (and his/her family) would be considered to be in poverty for that year. They are available for those survey years during which CHRR relied on official poverty guidelines for the creation of the 'Family Poverty Status' variables.

User Notes on Poverty Level versus Poverty Status: The poverty level is the level of income below which a family the size of the respondent's is considered to be in poverty. The poverty status is the actual status of the respondent's family vis-a-vis that poverty level.

Public Assistance Support Sources (1979–2000): The "Income" and "Health" sections of each year's questionnaire collects information on amounts and time periods during which cash and noncash benefits were received from such sources as public assistance, Supplemental Security Income (SSI), Aid to Families with Dependent Children (AFDC), food stamps, government rent subsidies, public housing, or welfare-provided health/hospitalization coverage. The universes and types of data collected vary across survey years as indicated in Table 4.32.1.

Survey Years	Universe	Source of Assistance	Data Collected
1979–2000	R/spouse/partner ¹	Aid to Families with Dependent Children (AFDC)/TANF after 1996	Whether R spouse/partner received income from, the average monthly income amount, and which specific months since the last interview such income was received
1979–84	Opposite-sex adult	Aid to Families with Dependent Children (AFDC)	Whether opposite-sex adult received such income in past calendar year
1990–93	Partner	Aid to Families with Dependent Children (AFDC)	Whether opposite-sex adult received such income in past calendar year
1979–84	R/spouse	Other (specified and unspecified) Public Assistance	Whether R/spouse received income from, the average monthly income amount, and which specific months since the last interview such income was received
1979–84	Opposite-sex adult	Supplemental Security Income, Other Public Assistance, or Welfare	Whether opposite-sex adult received such income in past calendar year
1990–93	Partner	Supplemental Security Income, Other Public Assistance or Welfare	Whether opposite-sex adult received such income in past calendar year
1980–84	R/spouse	Supplemental Security Income	Whether R/spouse received income from, the average monthly income amount, and which specific months since the last interview such assistance was received
1985–98	R/spouse	Supplemental Security Income, Other Public Assistance, or Welfare	Whether R/spouse received income from, the average monthly income amount, and which specific months since the last interview such assistance was received
1979–98	R/spouse	Food Stamps	Whether R/spouse received income from, amount received most recently, and which specific months since the last interview such assistance was received
1979–2000	Other family member	AFDC or Public Assistance	Whether other family member received income from either source in past calendar year
1979–84	R/other family members	Public Housing	Whether R and other family members lived in such housing in past calendar year
1979–85	R/other family members	Government Rent Subsidy	Whether R and other family members received such a subsidy in past calendar year
1986–2000	R/other family members	Public Housing/Government Rent	Whether R and other family members lived in public housing or received a rent subsidy in past calendar year
1989, 1990 & 1992–2000	R/spouse/or children	Medicaid/Welfare Health/Hospitalization Coverage	Whether Medicaid/welfare was source of health/hospitalization coverage
1998	R/spouse/partner	Targeted Benefits/Assistance	Whether R/spouse/partner received income from, the average monthly amount, and which specific months since the last interview such assistance was received
2000	R/spouse/partner	Targeted Benefits	Whether R spouse/partner received welfare or social service agency support to cover part of wages

¹ Universe includes partner from 1993 survey on.

Poverty Characteristics of Respondent's County (1979–2000)/SMSA of Residence (1979–82): Based on data from the 1977 and 1983 *County & City Data Books*, variables such as percent of families with money income below the poverty level, number of persons below the poverty level, and families with female heads of household below the poverty level are available for each respondent's area of residence on the Geocode CD. The geographical area (county or SMSA) for which these data are available varies across survey years.

Value of Food Stamps: The created variable 'Total Net Family Income,' used to determine a respondent's poverty status, includes in its calculation the noncash value of food stamps. In 1987, a 'Total Net Family Income in Past Calendar Year (Census)' variable was created by CHRR that excluded food stamp income for the 1986 calendar year only. Census poverty calculations for the U.S. do not include the value of food stamps. Hence, NLSY79 income calculations are similar, but not exactly the same as, other national data sets.

Welfare Reform Questions in 1998. In 1998, an additional set of questions was included to solicit information on the effects of welfare reform on certain behaviors of respondents related to seeking assistance. Respondents reporting AFDC or SSI/Other Public Assistance were asked whether they had sought work, enrolled in training/school, or performed community service in response to changing requirements. Respondents not reporting these types of assistance, but reporting a combined R and spouse/partner income of 125 percent of the poverty level or less, were asked whether they had applied for assistance, why they had not received any, and if and how the welfare reform changes affected them. (The determination of poverty level for the purpose of conducting the survey was based on the number of household members. This may be a relatively crude measure of family size, but should result in more conservative estimates, which should tend to include rather than exclude more respondents from this set of questions.) These items are part of the "Income" area of interest.

Created Recipiency Variables. Beginning with the 1996 data release, recipiency event histories are included on the NLSY79 CD-ROM. A set of both monthly and annual recipiency histories were created to minimize the confusion caused by the large number of CAPI and PAPI questions that respondents have answered about money received from Unemployment Insurance, AFDC, Food Stamps, SSI, and other public assistance/welfare programs. For each year between 1978 and the current survey year, the types of variables included for R/spouse unemployment benefits, AFDC/TANF, Food Stamps, and SSI/Other Public Assistance are:

- Amount received each month of each year (if any) for each type of assistance listed
- Source year of information for each month of each year
- Cumulative amounts per year for each type of assistance
- Cumulative amounts per year for AFDC/TANF, Food Stamps, and SSI/Other Public Assistance combined

These variables are updated with each round and may be found in areas of interest "Recipient Month" and "Recipient Year." Existing variables may be updated with retrospective information collected in later survey rounds for those who skipped previous interviews. Creation of these recipiency variables is described in Appendix 15 of the *NLSY79 Codebook Supplement*.

Table 4.32.2 below summarizes respondents' poverty status in 1979 and 1988 by gender and a number of other residence and household characteristics.

			In Parent	tal Home		(Own Dwell	ing Unit	
		Not in	Poverty	In Po	verty	Not in	Poverty	In Po	verty
		1979	1988	1979	1988	1979	1988	1979	1988
Males									
Race	Hispanic	484	82	220	27	87	456	12	77
	Black	685	142	484	65	62	584	10	96
	Non-Black/Non-Hispanic	1988	210	333	35	357	1914	56	143
Highest	NA	4	2	1	2	0	23	0	0
Grade	Under 12 Years	2354	65	927	45	143	422	26	136
Completed	12 Years or more	799	367	109	80	363	2509	52	180
# Own Children in Household	0 1 2 3 4 5 6 or more	3131 23 3 0 0 0 0	403 21 8 2 0 0 0	1024 12 1 0 0 0 0	114 7 3 3 0 0 0	390 85 28 3 0 0 0	1635 607 507 169 29 7 0	68 8 1 1 0 0 0	155 45 51 41 16 5 3
Current	Rural	670	87	249	30	104			81
Residence ¹	Urban	2486	340	788	93	396			221
Employment	Employed/In Active Forces	1615	374	319	75	402	2815	41	217
Status	Unemployed/Out of Labor Force	1542	60	718	52	104	139	37	99
			Females						
Race	Hispanic	477	58	210	20	116	455	47	142
	Black	617	99	467	68	102	554	66	310
	Non-Black/Non-Hispanic	1743	156	334	26	641	2137	149	300
Highest	NA	1	4	3	2	1	27	1	11
Grade	Under 12 Years	2043	22	822	36	219	293	139	300
Completed	12 Years or more	793	287	186	76	639	2826	122	441
# Own Children in Household	0 1 2 3 4 5 6 or more	2720 95 20 2 0 0 0	224 53 29 4 3 0 0	876 109 22 3 0 1 0	40 38 21 12 2 1 0	551 233 68 6 1 0 0	1236 794 785 268 44 17 0	122 75 43 17 5 0 2	109 146 249 169 49 17 13
Current	Rural	588	55	276	25	187	671	62	194
Residence ¹	Urban	2248	255	735	88	671	2376	200	547
Employment	Employed/In Active Forces	1271	266	226	42	511 2010 200 522 2450 74 337 696 188			245
Status	Unemployed/Out of Labor Force	1566	47	785	72				507

Table 4.32.2 Poverty Status by Type of Residence: 1979 & 1988 (Unweighted Data)

Note: Universe includes respondents who had valid values on 'Family Poverty Status' and 'Type of Residence,' were living in their parental home or own dwelling unit, and who were interviewed in both 1979 and 1988.

¹ Some respondents are missing sufficient data to determine rural-urban residence.

Survey Instruments & Documentation: Public assistance support source questions are located in the "Income & Assets" section of each survey: Section 21 (1979), Section 17 (1980), Section 12 (1981, 1987, 1989, 1990, and 1992), Section 14 (1982 and 1985), Section 13 (1983, 1986, 1994, 1996, 1998, and 2000), Section 15 (1984), and Section 11 (1988, 1991, and 1993). The 1979–86 household series were collected with the *Household Interview Forms*. "Appendix 2 - Total Net Family Income" describes the creation of the 'Family Poverty Status' variables. Copies of the projected poverty income levels developed by CHRR for those years in which the official poverty income guidelines were not used are provided in the *NLSY79 Codebook Supplement*.

Data Files: The 'Family Poverty Status' and 'Family Poverty Level' variables are found in the "Key Variables" area of interest. The public assistance support sources variables are in "Income." The county/SMSA of residence poverty characteristic variables are located in the "Geocode xxxx" areas of interest on the Geocode CD. Select variables on total welfare income for other family members and months that the respondent/spouse/partner received income from SSI can be found in the "Misc. xxxx" areas of interest.

NLSY79 Children

Data have been collected during each interview from the children aged 15 and older, the young adults, on whether they had received AFDC, food stamps, public housing, or other sources of public assistance. The questions are structured similarly to those in the main NLSY79.

Data Files & Documentation: The young adult questions are located within the "Income and Assets" section of the 1994, 1996, 1998, and 2000 NLSY79 Young Adult Questionnaire.

4.33 Race, Ethnicity & Nationality

NLSY79

The following race and ethnicity variables are available for NLSY79 respondents: (1) a racial/ethnic variable based on the sample identification code assigned by NORC; (2) a series of self-reported ethnic origin variables collected during the 1979 survey; and (3) a set of interviewer identifications of the race of the respondent at the time of the interview. Race and ethnic origin information is also available for each household member identified during the 1978 household screening. Of related interest is a series of immigration questions, fielded in 1990, that included the collection of information on country of citizenship at the time that foreign-born respondents entered the U.S.

Race/Ethnicity: The variable 'Racial/Ethnic Cohort from Screener' (R02147.) designates the respondent as "Hispanic," "black," or "non-black/non-Hispanic" and *provides the basis for weighting* NLSY79 data. This variable is collapsed from R01736., 'Sample Identification Code,' a code, e.g., "supplemental male black," "cross-sectional female Hispanic," assigned by NORC to each respondent based on information gathered during the 1978 household screening. In the creation of the 'Sample Identification Code' and thus the 'Racial/Ethnic Cohort' variable, both race and ethnic origin information collected at the time of the 1978 household screening were used. Interviewers conducting the screening were instructed to (1) code race by observation into three categories, "non-black/non-Hispanic," "black," or "other"; (2) inquire about the ethnicity of all household members age 14 or above; but (3) assign ethnicity, without asking, to those members who were under age 14.

Coding procedures used by NORC to assign the "Hispanic," "black," and "non-black/non-Hispanic" identifications to respondents included the following classification guidelines:

- (1) "Hispanics" were those who self-identified as Hispanic, i.e., those with an ethnicity screener code of 1–4 (i.e., 1–Mexican American, Chicano, Mexican, Mexicano; 2–Cuban, Cubano; 3–Puerto Rican, Puertorriqueno, Boriccua; and 4–Latino, Other Latin American, Hispano, or Spanish descent). Persons who did not self-identify as Hispanic but who met the following conditions were also classified as "Hispanic": (1) those who identified themselves in the ethnic origin categories that included Filipino (code 6) or Portuguese (code 13); (2) those whose householder or householder's spouse reported speaking Spanish at home as a child; and (3) those whose family surname is listed on the Census list of Spanish surnames.
- (2) "Blacks" included those for whom race was coded "black" and ethnic origin was "non-Hispanic" or those whose ethnic origin was coded black, Negro, or Afro-American (code 5) regardless of race coding.

- (3) "Non-black/non-Hispanics" included those whose race was coded "white" or "other" and who did not identify themselves as either black or Hispanic in answer to the ethnicity question. Instructions to interviewers for coding race included (1) classifying those of Latin American descent as "nonblack/non-Hispanic" unless they were obviously black or of some other non-white race and (2) coding in the "other" category those persons who were Japanese, Chinese, Vietnamese, Asian Indian, Native American, Korean, Eskimo, Pacific Islander, or of another non-black, non-white race.
- (4) Father's race was to be used to assign race for those of mixed descent except for some cases of those under age 14 of Spanish descent. Users should note that this decision rule is different from that applied to the NLSY79 children, for whom the mother's race is used. Spanish origins were to be given preference; if at least one ethnicity mentioned was of Spanish origin, the Spanish origin was to be coded (or, for those under 14, if at least one parent was Hispanic, the Hispanic parent's ethnicity was assigned).

Additional instructions for coding race, ethnic origin, and the racial/ethnic identifier variable can be found in the *Household Screener and Interviewer's Reference Manual* (1978) and in a NORC memo dated 10/4/78 available from NLS User Services.

A series of ethnic identification variables, '1st–6th Racial/Ethnic Origin' and 'Racial/Ethnic Origin with Which R Identifies Most Closely' (R00096.–R00102.), provide extensive ethnicity information. Respondents were asked during the 1979 interviews to name the racial/ethnic origins with which they identified. A listing of more than 20 categories, including "Black," "English," "French," "German," "American Indian," "Irish," "Mexican," "Mexican-American," and "Puerto Rican," were presented on a Show Card. If a respondent offered more than one origin, he or she was also asked for the ethnic group with which he or she most closely identified. Users should be aware that frequency counts for the coding category "Indian American, or Native American" are unusually high. About 5 percent of respondents reported this racial/ethnic origin, compared to Census estimates of approximately 0.5 percent of the population. This may have resulted from some respondents' misinterpretation of the term "Native American." Table 4.33.1 compares frequencies of the 1979 first (or most closely held) ethnic identification with the NORC assigned racial/ethnic identification.

Each interview except the 1987 telephone survey also collected information on the interviewer's direct observation of the race of the respondent ("black," "non-black/non-Hispanic," or "other").

User Notes: Users should note that the interviewer's identification of the respondent's race can be subjective. Researchers should also be aware that no special instructions are provided within the *Question by Question Specifications* as to how the interviewer is to code race.

Respondent's Self-Ider	NORC-assigned Race/Ethnicity			
Racial/Ethnic Group ¹	Total	Non-Black Non-Hispanic His Non-Hispanic Black His		Hispanic
Total	12686	7510	3174	2002
Black	3049	19	3017	13
Total Hispanic	1834	46	5	1783
Cuban	116	1	0	115
Chicano	59	0	0	59
Mexican	383	5	0	378
Mexican-American	734	15	1	718
Puerto Rican	328	7	1	320
Other Hispanic	118	7	0	111
Other Spanish	96	11	3	82
Total European	5281	5100	82	99
French	311	290	10	11
German	1395	1376	5	14
Greek	31	29	0	2
English	1561	1476	51	34
Irish	949	933	3	13
Italian	497	474	7	16
Polish	238	234	3	1
Portuguese	97	88	3	6
Russian	45	45	0	0
Scottish	122	120	0	2
Welsh	35	35	0	0
Total Asian	117	93	11	13
Asian Indian	22	20	2	0
Chinese	26	22	4	0
Filipino	43	33	4	6
Japanese	19	14	0	5
Korean	6	3	1	2
Vietnamese	1	1	0	0
Hawaiian/Pacific Islander	20	17	0	3
American Indian	622	585	17	20
Other	779	736	21	22
American	743	692	10	41
None ²	241	222	11	8

Table 4.33.1 Ethnicity by Racial/Ethnic Cohort from Screener (Unweighted Data)

¹ R00102., 'Racial/Ethnic Origin with Which R Identifies Most Closely,' is used unless it was not answered; otherwise R00096., '1st or Only Ethnic Origin' is used. Those listing only one ethnic background did not answer R00102.

² Includes totals of 98 "don't know," 132 "none," 10 "invalid skips," and 1 "refusal."

Race and ethnicity variables for household members are based on information collected on the *Household Screener*; in which race and one ethnic background for each household member were recorded.

Immigration: In 1990, NLSY79 respondents born outside the United States, its territories, or Puerto Rico were asked a series of questions on their immigration history and visa status. Dates of first and most recent entrance into the United States to live for six or more months and information on whether the respondent was the principal entrant/immigrant were collected. For respondents' or principal entrant/immigrants' first and most recent entry or change in visa/immigration status, details were gathered on (1) visa or immigration status at entry date; (2) form of temporary entry visa; (3) citizenship status (i.e., citizen or permanent resident alien) and relationship of the sponsoring relative; and (4) country of citizenship at entry date or date of change of status.

Also recorded for the respondent was information on (1) current citizenship/residence/visa status in the United States; (2) residence inside/outside the United States; (3) expectations to return to the United States to live permanently or to return to his/her country of birth to live permanently; and (4) the total number of years spent outside the United States since initial entry. Citizenship status at the time of the 1990 interview is depicted below (Table 4.33.2). Of related interest are the following variables, 'Is R a Citizen of the U.S.,' available from the 1984 interview (R12148.), and 'Current Residence in U.S.?,' created for the 1988 through 2000 survey years.

Citizens	302
Born Abroad of U.S. Parents	78
Naturalized	224
Lawful Permanent Resident of the U.S.	248
Applicant for Naturalization or Legal Permanent Residence	70
For Naturalization	36
For Permanent Residence	34
Refugee/Asylee	2
On Temporary Visa	2
Living/Working in U.S. without Permission	8
Other	28

Table 4.33.2 Current Immigration/Naturalization Status: 1990 NLSY79 Respondents Born Outside the United States

Note: Categories are not mutually exclusive.

Related Topics: 'Birthplace (Country and State) of R's Mother/Father' and 'Birthplace (Country) of Father's Father' are available in "Geocode 1979" (on the Geocode CD) areas of interest. For each household member, information is available from the screener on presence of a Spanish surname and whether Spanish was the language spoken in the home when that individual was a child. The 1979 interview asked whether a foreign language (Spanish, French, German, other) was spoken at home during the respondent's childhood. In addition, interviews record for each survey whether English, Spanish, or

another foreign language was used to administer the *Household Interview Forms* ('English or Foreign Language Used for Household Record') and questionnaire ('Int Remarks - Was Interview Conducted in English or Foreign Language').

Survey Instruments: Race and ethnicity variables originating from the screener are located on the second page of the *Household Screener*. Questions concerning the ethnicity of the respondent are included in the "Family Background" section (Section 1) of the 1979 questionnaire. Interviewer remarks regarding race are located in the final section ("Interviewer's Remarks") of each questionnaire. Immigration questions are located in Section 13, "Immigration," of the 1990 questionnaire.

Documentation: For further information on the coding of race and ethnicity in the *Household Screener*, see the *1978 Household Screener and Interviewer's Reference Manual* (NORC 1978). Those needing additional information on coding procedures should request a copy of a NORC memo dated 10/4/78 available from NLS User Services.

Data Files: Race and ethnicity variables are included in the following areas of interest: 'Racial/Ethnic Cohort from Screener' is a "Common" variable. Ethnicity variables originating from the 1979 interview as well as all immigration variables have been placed in the "Family Background" area of interest. The interviewer's remarks variables are located in "Interviewer Remarks." Race variables for household members originating from the 1978 household screening are located in "Misc. 1979." 'Current Residence In U.S.?' is found in "Misc. xxxx."

Reference

NORC. 1978 Household Screener and Interviewer's Reference Manual. Chicago, IL: National Opinion Research Center - University of Chicago, 1978.

NLSY79 Children

All information on the race and ethnicity of the NLSY79 younger children is derived from the mother's data on the main youth files. 'Race of Child' is reconstructed from the youth data with the child as the unit of observation, i.e., each child born to a NLSY79 mother is assigned the mother's race ("black," "non-black/non-Hispanic," "Hispanic") from the NLSY79 1978 *Household Screener*. Table 4.33.3 gives the race/ethnicity breakdown for the NLSY79 children from 1988 through 2000. Race/ethnicity of the young adult children as well as race/ethnicity of their biological father is asked directly of the young adult children in their first Young Adult interview. They are also asked about ethnic origins and primary ethnic identification.

Related Topics: Variables entitled 'In What Language Was This Child Assessed' and 'What Language Was This Child Self-Administered Supplement' (English, Spanish, Other) are available from the 1988–2000 *Child Supplements*. These variables are located in "Child Supplement xxxx" for the corresponding years.

Documentation and Data Files: Child's race, based on mother's race/ethnicity, is included in the "Child Background" area of interest. Detailed race and ethnicity questions asked directly of the young adults are in the family background section of the questionnaire.

	1986	1988	1990	1992	1994	1996	1998	2000
Hispanic	937	1158	1304	1483	1546	1520	1550	1193
Black	1604	1895	1994	2133	2350	2330	2229	1914
Non-black, non-Hispanic	2430	3213	2505	2893	3193	3253	3288	3310
Total	4971	6266	5803	6509	7089	7103	7067	6417

Table 4.33.3 NLSY79 Child Sample by Race/Ethnicity: 1986–2000 (Unweighted Data)

4.34 School & Transcript Surveys

This section describes (1) the separately administered surveys that collected information from the high schools attended by respondents in the NLSY79 cohort and (2) the special transcript data collections that gathered, from the high school records of respondents, detailed information on courses taken and grades and credit received. Also discussed is the 1995 survey of schools attended by the NLSY79 Children.

NLSY79

NLSY79 High School Survey: A separate mail survey of the schools attended by civilian NLSY79 respondents was conducted during 1980. Schools eligible for survey were non-foreign schools attended by civilian respondents who had both been interviewed in 1979 and completed the 1979 "School and Record Information Release Form." A follow-up release form, the "Student Release/Locating Form," was administered by NORC Profiles of American Youth examiners during the summer of 1980; 2,200 forms were collected. Designed to supplement both subjective respondent information on educational experiences collected during the main surveys and the transcript data collections described below, the school survey gathered information on each school's total enrollment, type of grading system, number of books in the school library, vocational/technical course offerings, dropout rate, ethnic/racial composition of students and faculty, percent of economically disadvantaged students, characteristics/qualifications of the staff, and percentage average daily attendance.

Also collected was respondent-specific information for the school surveyed including month/year last enrolled; reason not enrolled; highest grade attended; and whether or not the respondent had participated in remedial English, remedial mathematics, English as a second language, or bilingual education classes. Scores from intelligence and aptitude tests administered to the youth during his/her schooling were also collected. Table 4.3.1 in the "Aptitude, Achievement & Intelligence Scores" section of this guide presents the names of the tests and the numbers of respondents for whom scores are available.

NLSY79 Transcript Surveys: During 1980–83, transcript information was collected for 8,778 civilian NLSY79 respondents who were 17 years of age or older and who were expected to complete high school within the United States. The types of information gathered for each of up to 64 courses included grade level at which the course was taken, a code for the high school course, the final or computed grade for that course, the source of the final grade, and the credits received. Rumberger and Daymont (1982) review the types of academic and vocational courses reported during the initial transcript fielding effort.

Additional information collected from each school for each surveyed respondent included number of days the respondent was absent from school in each of the high school grades attended, the respondent's rank in class for the last year attended, number of students in the respondent's class for the last year attended, dates (month/year) last enrolled at this school, and reason left this school. Users should be aware that these data have high nonresponse rates. In some cases, individual items are only available for small numbers of youth.

Summary variables include the final transcript disposition status, the year in which these transcript data were collected, and an error flag for these transcript data. Scores (math and verbal) from standardized tests collected during this special survey are discussed in the "Aptitude, Achievement & Intelligence Scores" section of this guide. Table 4.34.1 depicts fielding periods, target samples, and the number of eligible respondents for each of the transcript fielding efforts.

Round	Fielding Period	Target Sample	# of Eligible Respondents	# for Whom Transcript Data Collected ¹
Round I	April – October 1980	Rs 17 years of age or older as of the 1979 interview	8420	5825
Round II	September– December 1981	Rs born in 1963, i.e., age 17 as of January 1981, plus Round I Rs with less than eight semesters coursework and still enrolled	2376	1927
Round III	September – December 1983	Rs born in 1964 plus Rs born before 1964 with less than eight semesters coursework supplied during Rounds I & II	1576	1258

Table 4.34.1 Transcript Data Collection, Rounds I–III: 1980–83 NLSY79

¹ Some amount of information was collected for 8951 respondents.

User Notes: Although the survey of schools and the transcript data collections were conducted as a single fielding effort, the eligible universes were slightly different (NORC 1980). Transcript data are not available for the following NLSY79 respondents: (1) those considered out-of-scope either because they were members of the military sample (1280), because they were under age 17 (724) or because they were enrolled in foreign schools (175); (2) those for whom release forms were not available (378); and (3) 1,341 respondents for whom data are not available for some other reason.

Survey Instruments & Documentation: This information was collected using the "School Questionnaire" and the "Student's School Record Information" forms, copies of which appear in the NLSY High School Transcript Survey: Overview and Documentation. This document, a composite of the round-specific technical documentation prepared by NORC (1980, 1982, 1984), also provides background information on the administration of this survey, a discussion of data quality and consistency issues, a copy of the "Transcript Coding Sheet," and a listing of course codes.

Data Files: The 96 variables from the school survey are labeled as 1979 raw variables and can be found in the "School Survey" area of interest on the main data set. Transcript data from all years are labeled as

1981 created variables and can be found within the "Transcript Survey" area of interest. The absenteeism/rank/ enrollment information collected during the transcript survey is located in the "Misc. 1981" area of interest.

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NLSY79 Children

In 1995 a separate child school survey was conducted for children born to female respondents of the NLSY79. The survey included data collection for about 2,900 children who were in grades one through twelve in either the 1993–94 or 1994–95 school years. This represents about 75 percent of the children eligible to be interviewed.

For every eligible child, an effort was made to complete several documents. The first was a questionnaire addressed to the school principal that solicited a variety of information about characteristics of the school and school policies. Second, the school central staff was asked to complete a questionnaire that focused on the individual youth's academic success, social adjustment, and involvement in a variety of school activities. This questionnaire also gathered selected characteristics and policies relevant to the grade level in which the youth was enrolled. In addition, the youth's transcript was obtained whenever possible.

Selected standardized testing information has been culled from these records for about 40 percent of sample. The data may be linked by ID with the NLSY79 1996 child data release. Interested researchers should contact NLS User Services for more information on obtaining these data.

4.35 School Discipline

NLSY79

The 1980 survey included several questions on school discipline problems, i.e., whether NLSY79 respondents had ever been suspended or expelled from school, and if so, the number of times, date of most recent disciplinary action, and when/if the youth had returned to school. Almost one quarter of the sample, or 3,030 respondents, reported having been suspended at some point in their schooling; a smaller number (538) reported having been expelled. The "Regular Schooling" sections of each questionnaire collect information on the reason why non-enrolled respondents, i.e., those who had been enrolled in school since the last interview but who had left school before the current interview, had left school. "Expelled or suspended" is a possible response to this question. Although a distinction cannot be made between expulsions and suspensions, a record of the dates that a respondent left school because of an expulsion/suspension and the dates that school was reentered can be constructed between survey years by linking information collected in these sections of the NLSY79 questionnaire.

Survey Instruments and Data Files: School discipline information is collected in Section 5, "On School Discipline," of the 1980 questionnaire and in the "Regular Schooling" sections of the questionnaires (Section 4 in 1979–81 and Section 3 in 1982–2000). The school discipline variables are located in the "Misc. 1980" area of interest. The school-related variables can be found in the "School" area of interest.

NLSY79 Children

The 1988–2000 surveys of NLSY79 children asked mothers of school aged children and school aged children a series of questions on their child's schooling including classroom activities and teaching styles. Additionally, information was collected on behavior problems evidenced by a child that resulted in either the parent's notification or disciplinary action. Questions include the following: if the child was not attending school at the time of the survey, was expulsion or suspension the reason; had the child's behavior at school ever required the parent to meet with a teacher or principal; had the child ever been suspended or expelled from school; and, if so, at what grade level did the first disciplinary action take place.

Survey Instruments and Data Files: The child-specific questions can be found in Section 5, "School & Family Background," of the 1988–98 *Mother Supplements* and in the *Child Supplements* for 2000. These child-specific variables for 1988–2000 are located in the "Mother Supplement xxxx" areas of interest on the compact disc for the corresponding years. Young adults are asked about gaps in schooling and reasons for gaps.

4.36 Sexual Activity & Contraception

NLSY79

Sexual Activity: In 1983, 1984, and 1985 NLSY79 respondents were asked about their sexual activity. Once the respondent answered the questions, he or she was not asked the series in subsequent surveys. Out of a total of 12,686 respondents, 310 did not answer any of the questions in these three years.

The first activity question asked respondents whether they had ever had sexual intercourse. This question was skipped if the respondent had previously reported either being a parent or being pregnant. Out of the 11,797 respondents, 889 or 7.5 percent stated that they had **never** had sexual intercourse. Researchers should note that the youngest respondents answered this question when they were 18. The validity of these items is evaluated in Mott (1985). These data should be used cautiously because inconsistencies in reports of first intercourse with subsequent fertility events can sometimes occur. Respondents who had ever engaged in sex were then asked at what age they first had intercourse. Table 4.36.1 includes frequencies broken down by race and gender, as well as a total for the whole cohort.

		Male			Female			Total	
Age	Hispanic	Black	NB/NH	Hispanic	Black	NB/NH	Number	Percent	Cum. %
<10	16	75	29	0	2	7	129	1.1	1.1
10	3	50	17	0	3	8	81	0.7	1.8
11	12	58	19	0	4	7	100	0.9	2.7
12	30	140	91	1	14	14	290	2.5	5.2
13	38	158	160	10	35	50	451	3.9	9.2
14	87	207	249	32	73	132	780	6.8	16.0
15	139	273	415	71	181	275	1354	11.8	27.8
16	178	276	742	125	313	584	2218	19.4	47.2
17	177	136	621	143	293	625	1995	17.4	64.6
18	117	90	527	145	282	711	1872	16.3	81.0
19	52	24	216	136	118	367	913	8.0	88.9
20	25	11	155	63	74	233	561	4.9	93.8
21	12	11	72	60	32	140	327	2.9	96.7
22	8	3	56	31	14	79	191	1.7	98.4
23	4	0	22	9	4	49	88	0.8	99.1
24	0	1	14	3	3	26	47	0.4	99.5
25	3	2	10	6	3	9	33	0.3	99.8
26	3	0	3	5	1	3	15	0.1	100
27	1	0	1	0	0	3	5	0.0	100
Total	905	1515	3419	840	1449	3322	11450	100	100

Table 4.36.1 Reported Age at which Respondents First Had Sex by Race and Gender

Note: Numbers are based on responses from the 1983, 1984, and 1985 NLSY79 surveys (R09880., R10207., R13122., R13796., R16916., and R17600.). Universe includes only respondents ever reporting sexual intercourse.

Questions in this section also ask NLSY79 respondents if they have had sex in the past month. In 1983, respondents provided a yes/no answer. However, in 1984 and 1985 they were asked the number of times they had sex in the last month. The data contain some outlying entries; users should carefully decide how to interpret outlying data points in these distributions. Additionally, there is evidence of a significant number of youth who changed their "ever had sex" status from yes to no between 1983 and subsequent survey years.

In 1984, the survey also asked if respondents had taken a sex education course. If so, they were asked at what date they took the course. Respondents also stated whether the first course they took covered:

- The female menstrual cycle
- Contraception methods
- Where to obtain contraception
- Effects of contraception
- Sexual diseases

To test reproductive knowledge, respondents were also asked when pregnancy is most likely to occur during the female monthly menstrual cycle. Answers in 1984 show a substantial portion of respondents did not choose the medically correct answer of about two weeks after the period. Approximately 25 percent of men and 12 percent of women stated they did not know the answer.

Answer	Males	Females
Right before Period	1283	1185
During Period	352	128
Right after Period	963	806
About 2 Weeks after Period	1441	2549
Anytime	496	597
Don't Know	1480	725

Table 4.36.2 Knowledge of When Pregnancy Most Likely to Occur

Source: The data are from the 1984 survey: males R13150. and females R13826.

Contraception: Since 1982, NLSY79 respondents have regularly been asked about their use of contraception. These contraception questions appear in the "Fertility" section of the questionnaire. The questions were asked annually from 1982 to 1986. After 1986 the questions were asked only in even years corresponding with the child supplements (i.e. 1988, 1990, 1992, etc.). After 1994, the surveys became biennial and the questions were included in each survey.

The standard sequence for these questions is to first show respondents a hand card listing a variety of birth control methods. The respondents are then asked if they use birth control. If they state that they do, the

second question asks the frequency of these methods using a three-point scale of "always," "sometimes," or "almost never." Finally, respondents are asked to state all the methods they have used in the past month from the following list:

- Pill
- Condom, rubber
- Foam
- Jelly or cream alone
- Suppository or insert
- Diaphragm with or without jelly or cream
- Douching after intercourse
- IUD, coil, loop

- Operation-Female sterilization, tubes tied
- Operation-Male sterilization, vasectomy
- Natural family planning, safe period by temperature of cervical mucus test
- Rhythm or safe period by calendar
- Withdrawal/pulling out
- Contraceptive sponge
- Other Method

Over time the list has been expanded and now includes three additional choices:

- Abstinence
- Norplant
- Cervical Cap

In most years, at the end of this three-question series, the interviewer fills in a question that states if anyone else was present during this part of the questioning. Small children under three years old are not counted by interviewers when filling in their response.

In addition to these questions, female respondents who are pregnant or who have given birth since the last child survey year are asked about their contraception methods before conceiving. Respondents are asked if before becoming pregnant they used one of the birth control methods listed, or if they stopped all birth control methods before becoming pregnant. Finally, they were asked if the reason they stopped using birth control was because they wanted to become pregnant.

Survey Instruments: The questions on sexual activity and contraception can be found in the "Fertility" section of each questionnaire. In 1983, the fertility section was fielded as a separate supplement for those respondents who were not interviewed in 1982.

Data Files: The variables described above can be found within the "Birth Record" and BIRTHXX areas of interest.

Reference

Mott, Frank L. "Evaluation of Fertility Data and Preliminary Analytical Results from the 1983 (Round 5) Survey of the National Longitudinal Surveys of Work Experience of Youth." Columbus, OH: CHRR, The Ohio State University, 1985.

NLSY79 Children

NLSY79 Children have been asked about sexual intercourse but not contraception since 1988. Each child over age ten is asked to fill in a booklet called the *Child Self-Administered Supplement (CSAS)*. If the child is 13 years or older, an extra sheet of paper is inserted into the *CSAS* that asks about sexual intercourse.

The confidential *CSAS* card for 1988–2000 asked child respondents if they "ever had sexual intercourse? 'had sex', 'made it', etc." If they answered "yes," respondents were asked to fill in their age in years the first time they had sex and the date of this experience. Since 1992, an expanded confidential *CSAS* has asked the respondent if they ever had any children. If they answered "yes," the booklet then probed for additional information about these grandchildren of NLSY79 respondents.

NLSY79 young adults, those 15 and older, have been asked about both sex and birth control methods in the confidential section of each survey. Young adults are first asked if they have ever had sexual intercourse. If the answer is "yes," the respondent reports the number of partners, age when he or she first had sex, and how long ago he or she last had sex. Respondents are also asked if they used birth control the last time they had sex. If they had used birth control they stated the type used. Since 1998, questions have been asked about the relationship, age, and cohabitation status of the most recent sexual partner.

Female young adults who have had sex are asked if they have ever become pregnant and the type of birth control used when they became pregnant. Finally, questions in 1994 and 1996 were asked to female respondents who had terminated a pregnancy about the number of abortions they had and the age at which they occurred.

Survey Instruments: For all years, the sexual activity questions are located in the *Child Self-Administered Supplement* confidential card and the "YA Self" area of interest or in the YASRB for 1994, 1996, and 1998 and the CAPI self-report section for 2000.

4.37 Time & Tenure with Employers

NLSY79

This section reviews the types of variables present within the NLSY79 main data files that provide information on (1) time spent with an employer measured in terms of the number of hours worked, the type of shift or actual clock hours, the specific dates that employment began and ended, and total tenure in weeks; (2) time spent away from an employer during which the employment contract was maintained or renewed, commonly called a within-job gap; and (3) periods of time when the respondent was neither working for an employer nor serving in the active forces. Time spent away from any employer, commonly called a between-job gap, is measured in units of one week or more.

User Notes: Understanding the NLSY79 time and tenure variables requires some knowledge of the NLSY79 employer and labor force status data collections. Readers will find more information on those subjects within the "Jobs & Employers" and the "Labor Force Status" sections of this guide.

Hours Worked: During each survey, information is collected on (1) the number of hours during the survey week that a respondent worked at all jobs; (2) the number of hours per day and week usually worked at the CPS job; and (3) the usual hours per day and per week worked at the non-CPS Jobs #1–5. Post-1987 surveys differentiated, for each job, the number of hours worked at home from the hours worked at the place of employment. Follow-up questions double check that these at-home hours are included in the total hours reported working. The creation procedures for the 'Hourly Rate of Pay' variables factor in all values. Two summary variables are created for each year that provide information on the total number of hours that a respondent worked: 'Number of Hours Worked Since Last Interview' and 'Number of Hours Worked Past Calendar Year.'

Survey Instruments & Documentation: The "Current Labor Force Status (CPS)" and Employer Supplement sections of the main questionnaires and the 1980 through current survey year Employer Supplements collect information on hours. The hourly summary variables are created from the week-byweek arrays produced by the NLSY79 Work History program.

Data Files: Information collected on hours worked both at all jobs and at the CPS job has been placed in the CPS area of interest, while information related to Jobs #1–5 is located in "Job Information." The series of summary variables is in "Key Variables." Since 1993, Job #1 is always the CPS job if there is one.

Shift & Times Worked: Data on the type of shift usually worked at the respondent's current or most recent (CPS) job, e.g., "day shift," "evening shift," "split shift," etc., have been collected during all but the 1986 and 1987 surveys. Beginning with the 1986 survey, information on the actual times (24 hour clock)

that a respondent usually began and ended the CPS job is available. Coding categories for the 1988 and 1989 shift variables were collapsed into "same or fixed shift" and "shift rotates." All respondents were asked a follow-up question beginning in 1990 on the actual or usual time work began and ended during the last week (or most recent week) they worked.

Survey Instruments: The "Current Labor Force Status (CPS)" section of the main questionnaires gathered information on shift and clock hours worked until 1994 for CPS job. From 1994 on, this information is gathered in the *Employer Supplements* for all jobs.

Data Files: The NLSY79 shift variables can be found in the "CPS," "Job Information," and "Misc. xxxx" areas of interest. The post-1985 clock variables are in "Misc. xxxx" and "Job Information."

Periods Working for an Employer Including Unpaid & Paid Leave: Periods of time that a respondent worked for a specific employer can be identified via information collected on start and stop dates, i.e., the day, month, and year that employment began and ended. Those respondents with a stop date for an employer are asked for information on the reason the job ended and whether or not a new job was lined up before the respondent left this job. Interrupted employment with an employer of one week or more during which the respondent was either on unpaid leave or unpaid vacation is also detailed. The total number of such separate within-job gaps is identified, along with the specific start/stop dates and the main reason for not working, e.g., "on strike," "on layoff," "quit job but returned to same employer," "job ended but began again," "attending school," "health problems," "child care problems," "pregnancy," etc.

Active job search by the respondent during a period of not working, e.g., whether the respondent was looking for work during "some," "none," or "all" weeks, is specified. For those respondents who indicate that "some" weeks of a non-working period were spent looking for work or on layoff, information is available on the number of weeks duration for each period of unemployment or layoff, the total number of weeks spent looking and not looking, and the main reason s/he was not looking for work. Users should note that the specific week numbers during which the respondent was unemployed versus out of the labor force within a single gap are not available if both statuses apply. Information is collected only on the total number of weeks that were spent in either of the two non-employed labor force states. For example, an eight week within-job gap that occurred between week number 152 and week number 160 may identify two of those weeks as weeks of unemployment and six of those weeks as out of the labor force, based upon responses given. It will not designate the specific week numbers 154 and 155 as the precise two weeks that the respondent was unemployed as opposed to out of the labor force.

During post-1987 surveys, female respondents (only) are asked for information on the total number of separate periods of paid leave from an employer which were taken due to either pregnancy or birth of a child. Start and stop dates are collected for each period of leave.

Types of information collected about periods of paid and unpaid leave are summarized in Table 4.37.1.

		Type of Employment Gap			
Type of Information	Paid Leave ¹	Within Job Gap Between Job Gap			
Description	Paid leave for periods due to pregnancy or birth of a child	Periods of one week or more of unpaid leave or unpaid vacation during which R did not work but the association with an employer was maintained or renewed	Periods of time during which there was no association with any employer or active military duty		
Number of Periods ²	Up to two periods of one full week or more	Up to three periods of one full week or more	Up to four periods of one full week or more		
Start Date	Month/ Day/Year	Month/ Day/Year	·		
Stop Date	Month/ Day/Year	Month/ Day/Year			
Main Reason for Not Working	Pregnancy or childbirth (unspecified)	On strike, on layoff, quit job but returned to same employer, job ended- restarted, attending school, health problems, child care problems, pregnancy, etc.	Coding categories for reason not working vary by both type of job gap and survey year for the between-job gap data collections		
Amount of Weeks Looking or on Layoff	na	Some/None/All			
Week Numbers (Rs Looking for Work/on Layoff)	na	Week number period began Week number period ended			
Number of Weeks Looking or on Layoff	na	Total Weeks			
Number of Weeks Out of the Labor Force	na	Total Weeks			
Reason Out of the Labor Force	na	Did not want to work, ill/disabled, pregnancy, child care, no work available, labor dispute/strike, could not find work, in jail, transportation problems, etc.			

 Table 4.37.1 Gaps in Employment: NLSY79 Main Files

¹ Pregnancy/childbirth leave information is available beginning in 1988.

² Although information is collected about all periods of nonemployment, data on the main file public release is currently restricted to the numbers specified here. The Work History CD may contain additional periods.

Survey Instruments: Each *Employer Supplement* includes questions on periods working and not working for that employer. The *Jobs Calendar*, used during administration of the military- and job-related sections of the main questionnaire, and the *Employer Supplement*, function to (1) provide a graphic summary of a respondent's military and employment history since the date of last interview and (2) identify the duration of gaps between periods of labor force activity. Each calendar gives the interviewer the week numbers attached to the last few calendar years; weeks are numbered consecutively beginning in January 1978 (week 01) through December of the current survey year (e.g., week 758).

Data Files: Variables related to periods working for an employer have been placed in the "Misc. xxxx" and "Job Information" areas of interest. Those variables related to employment gaps are located in "Periods Not Working within Job Tenure" and can be identified through variable titles that include the phrases PERIOD #, JOB #, and, for many variables, the NOT EMPLD universe.

User Notes: The collection of job-specific start and stop dates and gaps in the work record that are linked to specific week numbers allows a chronological weekly work history from 1978 to current survey date to be constructed for each respondent. This weekly chronicling of a respondent's work experience is released on the NLSY79 Work History Data; this data are arranged in arrays, i.e., a weekly labor force status array, a weekly usual hours worked array, and a weekly dual jobs array, etc. Users are cautioned that the week numbers associated with the various periods of unpaid leave may be assigned imprecisely if the gap is split between an unemployment and out of the labor force classification. In this case unemployment is arbitrarily assigned to middle weeks.

Related Variables: Assignment of a specific labor force status to each week in the respondent's work history permits creation of a series of "summary labor force variables." These variables provide a count of the total number of weeks a respondent spent in a given labor force state calculated for two different periods of time, i.e., the past calendar year and since the last interview. Because these variables, e.g., 'Number of Weeks Out of Labor Force in Past Calendar Year,' 'Number of Weeks Unemployed Since Last Interview,' etc., summarize time spent in a given labor force state, they are discussed in the "Labor Force Status" section of this guide.

Two other sets of summary variables in which time with a given employer is delineated include (1) 'Total Tenure (in Weeks) with Employer as of Interview Date Job #X'; and (2) 'Number of Different Jobs Ever Reported as of Interview Date.' A description of the tenure variable follows; creation procedures for the jobs ever reported can be found in the "Jobs & Employers" section of this guide.

Total Tenure with Employer: The variable series 'Total Tenure (in Weeks) with Employer as of Interview Date Job #X' is created from (1) the start (or last interview) and stop dates for an employer; and (2) a match, if any, of employers identified during the current interview as the same employer from a previous interview year. Tenure in weeks with an employer is first calculated for the period between the date of last interview and the current interview date (tenure since the date of last interview). Next, a match with employers reported during the previous interview is attempted. If such a match is established, the total tenure in weeks with the matched employer from the previous interview is added to the total weeks tenure with that employer since the date of last interview. This creates a cumulative tenure in weeks with that employer was first reported up to the current interview date.

Tenure with employers for whom no match exists in the previous interview is simply the tenure with that employer since the date of last interview. Further information on matching employers can be found in "Appendix 9: Linking Employers through Survey Years," included in the *NLSY79 Codebook Supplement* and as part of the NLSY79 Work History compact disc documentation.

Data Files & Documentation: The tenure variables are located in the "Job Information" area of interest. One tenure variable exists for each of five jobs in each survey year. The topical "Work Experience" section of this guide includes a discussion of these variables.

Periods Not Working or in the Military: During each survey, information is collected on up to six periods since the date of last interview during which a respondent is not affiliated with an employer or in the active forces. Data available for each period of not working include month, day, and year that the period began and ended; the specific week numbers associated with the non-work period; whether any of these non-working weeks (coded as "none," "some," or "all") was spent looking for work or on layoff; and, if some were, the number of weeks spent looking for work or on layoff, the number of weeks the respondent was out of the labor force, and the main reason that the respondent was not looking for work. All respondents with between-job gaps are routed through the periods of no work questions.

Survey Instruments: The periods not working questions can be found in the "Gaps when R was not Working or in the Military" or "Gaps" sections of the main questionnaires.

Data Files: The "Misc. xxxx" and "Between Jobs Gaps" areas of interest contain the gaps between jobs variables.

NLSY79 Children

In each survey, information has been collected from the children aged 15 and older, the young adults, on the start and stop dates of employment, the number of hours worked, and the type of shift worked, as well as within-job gaps and between-job gaps for all jobs held since January 1 of the year preceding this fielding. The questions asked closely parallel those in the main youth survey. An extensive collection of more than 400 variables related to mother's tenure is available on the 1996 Child CD-ROM. These variables are all classified under the "Work History" area of interest and provide longitudinal information on the mother's work history over the child's life. Beginning in 2000, young adults were not asked for between job gaps and only limited information was collected concerning job gaps over time.

Survey Instruments: The questions described above can be found within the Employer Supplement sections of the NLSY79 Young Adult Questionnaires.

4.38 Training

Overview: This section reviews the core data collections and year-by-year variations present within the NLSY79 training sections. Descriptive tables present the number of respondents participating in various types of training programs by survey year. Summary variable tables for the NLSY79 provide details on the types of training programs and training providers about which data have been collected across surveys.

This section describes the types of information collected within the "Training/Other Training" sections of the NLSY79 questionnaire. Users should keep in mind that these data provide only a partial picture of the entire training investments of an individual. A fundamental concern of the Employment and Training Administration of the U.S. Department of Labor, which funded the 1979–86 rounds of the NLSY79, was the efficacy of various federally funded employment and training programs in helping youths to acquire skills and secure employment. The 1979–86 "Other Training" sections of the questionnaire supplemented data collected in three other core question series: (1) "On Jobs," which gathered detailed information on government jobs and associated training; (2) "Government Training," which highlights other opportunities in which respondents participated over and above those reported in the "On Jobs" section; and (3) "Military," in which data on formal and on-the-job training for military jobs were collected. In 1987, when funding of the NLS shifted to the Department of Labor's Bureau of Labor Statistics, the collection of extensive information on government jobs and training information ceased and the "Other Training" section of the questionnaire was restructured.

In addition to these regularly fielded series, special data collections that focused on high school courses, degrees and certifications, and time use provide supplementary information on NLSY79 respondents' training investments. The "Government Training & Jobs Programs," "Educational Attainment & School Enrollment," and "School & Transcript Surveys" sections of this guide review some of these additional variables.

Core Data Collection: In general, the "Training" and/or "Other Training" sections of each NLSY79 questionnaire (1) collect information on each respondent's participation since the date of the last interview in three (or more) training programs and (2) confirm and update information on two (or more) training programs in which s/he was enrolled on the date of last interview. For each program, a core set of variables is collected on the type of provider offering the training, start and stop dates (i.e., month and year), whether the training was completed, and the number of hours per week usually spent in each training program (Table 4.38.1).

'Any Vocational/Technical Training Enrolled' ¹ 'Attended Vocational/Technical Program or On-the-Job Training'
'Type of School or Vocational/Technical Program Enrolled In'
'Month/Year Began' 'Month/Year Completed/Left'
'Completed Vocational/Technical Program Enrolled In'
'Hours Per Week Spent at Vocational/Technical Program Taken'

¹ Note that the 1979–86 data collections asked only about training programs in which the respondent had been enrolled for more than one month.

Below is a discussion of the variations present in the regular fieldings of the "Other Training" and/or "Training" sections of the 1979–2000 questionnaires, followed by an overview of types of training providers and the primary types of training about which data have been collected within the following five sections of the NLSY79 questionnaire: "Other Training," "Training," "Jobs," "Government Training," and "Military."

Year-by-Year Variations: During the 1979–86 surveys, the focus of the NLSY79 training data collection was on the types of formal training programs in which a respondent was enrolled other than those already reported in the previously administered jobs, government training, military, and regular schooling sections of the questionnaire. After 1987, the series of questions dealing specifically with government-sponsored training was no longer fielded and the "Other Training" section was renamed "Training." The types of information collected for the 1979–86 and 1988–2000 survey years differ; each is discussed separately below.

Data collection during the 1979–86 interviews was limited to only those training programs in which the respondent had been enrolled for one month or more. Specific information on the occupation for which the respondent was being trained was also gathered in these years. In addition to the core sets of variables described above, the 1979 questionnaire included the following sets of questions: (1) retrospective questions on up to three training programs in which the respondent had participated before 1978 and on up to four other types of training in which s/he had ever participated and (2) information on the activities of the respondent during the summer of 1978, e.g., worked at a regular job, at an odd job, was on vacation, participated in a training program, or was enrolled in regular school. Included within the 1979 and 1980 training sections was a series of questions on the types of degrees and/or certifications that the respondent had ever received or received since the last interview. Age restrictions during the 1979 and 1980 interviews limited the administration of these other training questions to respondents who were 16 years of age and older. The supplemental 1981 "Time Use - Time Spent in Other Training" section

gathered, from those who had been enrolled during the past seven days in a training program, information on the type of training provider and the hours spent at the training school.

The 1982–84 questionnaires included an expanded series detailing (1) the firm specificity of each training program, i.e., whether a respondent had enrolled in a given occupational training in order to qualify for a specific job at a specific firm; (2) the involvement, if any, of the respondent's employer in encouraging or requiring the training and whether the training took place during regular work hours; (3) the source of money to pay for the training, e.g., employer, self, friends, government, or bank, with a distinction made between outright grants and loans; (4) the relationship to the respondent of those persons who encouraged enrollment in the training, e.g., friend, relative, employer (former or prospective), job counselor, teacher, etc.; and (5) the primary reason the respondent enrolled in the specific occupational training program, e.g., jobs are plentiful, pay is high, program sounded interesting, or [the training] related to the job at the time.

Because the 1987 survey was conducted mainly by telephone, the interview was abbreviated and only one question was asked about training. In this survey, respondents simply reported whether any training or assistance had been received from any government-sponsored program.

The 1988–92 series dropped the one month training duration limitation, the question that specified the job or occupation for which the respondent was being trained, and some of the provider types, e.g., barber/beauty school, flight school, and nurses program, that had been coding categories since 1979. The 1988 reference period was the last two years; other surveys referred to only the period since last interview. Company training programs run by the employer were differentiated from those conducted at the work place by someone other than the employer and those that took place outside of work. The number of training programs for which data were released was expanded to four. New questions included who paid for or sponsored each training resulted in the respondent getting a different job, and the type of training that had been provided, e.g., skilled classroom training, basic/remedial skill training, on-the-job training, work experience, etc. Definitions of each training type and of some of the providers offering such training, drawn from the 1991 NLSY79 *Question by Question Specifications*, are listed in Table 4.38.2. Table 4.38.3 presents, by survey year, gender, and race/ethnicity, the number of respondents enrolled in the six types of training programs for which data were collected during the 1988–93 interviews.

Beginning in 1990, two questions were added on the relationship of each training program to the respondent's promotion possibilities, i.e., was the training necessary to get a promotion and did it assist the respondent in obtaining a promotion. Information was collected beginning in 1991 on the primary reason the respondent enrolled in the training program (this question had been taken out after 1984 but

was returned to the survey in 1991), the specific employer who sponsored the training, and whether a guaranteed student loan was used to pay for the training.

Table 4.38.2 Training & Training Providers: Definitions from the NLSY79 Question-by-Question Specifications (1991)

Apprenticeship Program: A formal program in which a person agrees to work in return for wages and training in a skilled trade or art for a prescribed period of time.

Business School: Is not to be confused with business classes in college or graduate school. It does not contribute to an undergraduate or professional degree.

Classroom Training - Basic Skill: Includes academic instruction in a classroom setting leading to specific certification for a GED or academic instruction in basic education such as English or math. See description of GED below.

Classroom Training - Job Skill: Includes vocational instruction in a classroom setting, designed to teach work tasks of a particular job group, for example, auto mechanics, health services, clerical training, etc.

Correspondence Course: Training courses offered through the mail.

General Educational Development Test (GED): A certificate that is equivalent to a high school diploma obtained as a result of taking the General Educational Development Test. The test provides a valid means of measuring the educational proficiency of individuals taking the test in comparison with high school graduates.

On-the-Job Training: Includes institutional instruction in a work setting intended to enable an individual to learn a skill and/or qualify for a particular occupation through demonstration and practice.

Vocational Rehabilitation Center: Facility offering specialized training to prepare disabled persons to enter or re-enter the work force.

Vocational Technical Institute: For example, a beauty school, auto mechanics training, welder's school, etc.

Work Experience: Includes short-term or part-time work with employing agency to enhance employment ability of an individual through development of good work habits and basic work skills.

Note: Descriptions of service providers and training types specific to federally funded employment and training programs can be found in the 1979–91 *Question-by-Question Specifications*. Users should note that, to some extent, these types of training and training providers are respondent-defined.

Table 4.38.3 Number of Respondents Participating in Training by Survey Year,Type of Training, Gender, and Race/Ethnicity:NLSY79 1988–94

	Basic Sk	ill Classroom	Training	Job Ski	II Classroom	Training	On-the-Job Training			
Year	Total	Male	Female	Total	Male	Female	Total	Male	Female	
_				All Re	spondents		·			
1988	338	170	168	1374	741	633	538	302	236	
1989	255	128	127	1016	540	476	446	246	200	
1990	66	30	36	1066	548	518	437	237	200	
1991	39	15	24	863	453	410	311	183	128	
1992	46	21	25	853	421	432	283	154	129	
1993	40	19	21	1000	495	505	294	143	151	
1994	57	21	36	956	464	492	268	129	139	
				-Black/Non-H		ondents				
1988	181	96	85	824	459	365	314	169	145	
1989	133	72	61	612	341	271	251	138	113	
1990	32	16	16	643	325	318	237	118	119	
1991	18	7	11	514	275	239	149	93	56	
1992	17	11	6	478	251	227	134	77	57	
1993	17	8	9	586	296	290	128	62	66	
1994	24	10	14	524	269	255	128	68	60	
				Black R	espondents					
1988	110	49	61	355	166	189	147	87	60	
1989	86	39	47	263	131	132	136	73	63	
1990	18	5	13	260	132	128	122	75	47	
1991	10	2	8	213	110	103	100	53	47	
1992	18	8	10	215	100	115	89	44	45	
1993	17	7	10	256	124	132	101	45	56	
1994	26	9	17	262	124	138	94	44	50	
				Hispanic	Respondents	S				
1988	47	25	22	195	116	79	77	46	31	
1989	36	17	19	141	68	73	59	35	24	
1990	16	9	7	163	91	72	78	44	34	
1991	11	6	5	136	68	68	62	37	25	
1992	11	2	9	160	70	90	60	33	27	
1993	6	4	2	158	75	83	65	36	29	
1994	7	2	5	170	71	99	46	17	29	

Table 4.38.3 Number of Respondents Participating in Training by Survey Year, Type of Training, Gender, and Race/Ethnicity: NLSY79 1988–94 (continued)

	Joh	Search Assis	tance	W	ork Experien	ce	Other Training			
Year	Total	Male	Female	Total	Male	Female	Total	Male	Female	
					spondents					
1988	103	47	56	189	113	76	287	172	115	
1989	48	20	28	146	81	65	195	113	82	
1990	26	8	18	83	44	39	168	93	75	
1991	20	3	17	70	46	24	126	70	56	
1992	22	12	10	73	45	28	151	77	74	
1993	30	13	17	70	33	37	150	73	77	
1994	29	9	20	82	45	37	113	44	69	
			Non	-Black/Non-H	ispanic Resp	ondents				
1988	50	32	18	109	65	44	179	108	71	
1989	13	6	7	82	44	38	120	70	50	
1990	12	4	8	46	20	26	108	60	48	
1991	9	2	7	34	24	10	78	41	37	
1992	11	6	5	36	23	13	89	51	38	
1993	8	5	3	32	14	18	91	46	45	
1994	11	3	8	39	26	13	63	19	44	
				Black R	espondents					
1988	39	10	29	47	29	18	59	37	22	
1989	28	12	16	47	29	18	40	20	20	
1990	8	2	6	21	13	8	33	21	12	
1991	9	1	8	16	10	6	26	18	8	
1992	9	6	3	16	9	7	31	15	16	
1993	15	6	9	18	11	7	35	20	15	
1994	10	2	8	20	13	. 7	28	15	13	
					Respondents					
1988	14	5	9	33	19	14	49	27	22	
1989	7	2	5	17	8	9	35	23	12	
1990	6	2	4	16	11	5	27	12	15	
1991	2	0	2	20	12	8	22	11	11	
1992	2	0	2	21	13	8	31	11	20	
1993	7	2	5	20	8	12	24	7	17	
1994	8	4	4	23	6	17	22	10	12	

The 1993 series of training questions included the collection of information on (1) up to six training programs in which the respondent was enrolled since last interview and (2) up to four in which he or she was participating as of the last interview date. For those respondents who were enrolled at either point in time in a training program sponsored by an employer, a new question elicited information on whether the respondent had to be working for that employer for a period of time before training was made available.

Those enrolled in any training program were asked a series of (1) skill transferability questions, i.e., the amount of skills learned in each training program that the respondent thought would be useful in doing a

different kind of work for the (same) employer or in doing the same kind of work for a different employer and (2) high school course relevancy questions, i.e., whether the skills learned in this training program added to those acquired in high school courses in which the respondent had enrolled and, for those who did not take such high school courses, how much of what was learned in the training program could have been learned in high school.

In addition to this expanded set of questions on formal training experiences of NLSY79 respondents, the 1993 survey collected, for the first time, information on informal training opportunities. Those respondents with a current (or most recent) civilian job were asked a series of questions designed to tap the methods used to either learn their job and/or to upgrade skills required on that job.

Those respondents with a CPS employer who had implemented workplace changes in the past 12 months that necessitated the learning of new job skills were asked for information on (1) the type(s) of changes, e.g., a new product/service/equipment was introduced; an upgrade of employee's basic skills or computer skills was needed; employer policies regarding safety, compensation, or benefits were changed; etc.; (2) whether the training was acquired from (not already reported) classes/seminars, supervisors, coworkers, self-study, or some other means reported by the respondent; and (3) for each training mode, the number of weeks and hours per week spent in such training and the degree to which respondents thought skills learned in each program would be useful in doing a different kind of work for the (same) employer or in doing the same kind of work for a different employer. Respondents with a CPS employer who reported that they were not able to perform 100 percent of their current job duties at the time they first started doing the job were asked the same set of training and skill transferability questions listed above. Loewenstein and Spletzer (1994) review training questions in the 1993 NLSY79 and other data sets, including the 1991 CPS, the 1986 NLS of the High School Class of '72, and the Employment Opportunity Pilot Project, and present some initial findings from the 1993 NLSY79.

Types of Training Providers: Information has been collected during all survey years on the type of organization providing the training in which NLSY79 respondents participated. Provider types for which data have been consistently gathered across survey years include company training, business school, vocational/technical institute, and apprenticeship program. Questions fielded during select survey years specified other training providers such as nurses program, barber/beauty school, flight school, seminars or training programs at work/outside of work, and vocational rehabilitation center. Table 4.38.4 lists those types of training providers that appear as coding categories in the 1979–93 "Other Training/Training" sections of the questionnaire. Users should note that names of identical and additional agencies can be found in (1) the 1979–87 government training and jobs programs questions; (2) the 1979 degrees and

certifications data collection; and (3) the 1980 time use in "other training" series. Table 4.38.5 presents, by survey and gender, the number of respondents attending programs offered by these training providers.

Type of Training Provider	Survey Years
Apprenticeship Program	1979–86, 1988–2000
Barber or Beauty School	1979–86
Business College/School	1979–86, 1988–2000
Company Training Program	1979–86
Company Training (Formal) - run by an employer or military training (excluding basic training)	1988–2000
Correspondence Course	1979–86, 1988–2000
Flight School	1979–82
Nurses Program	1979–86
Seminars or Training Programs - at work run by someone other than employer	1988–2000
Seminars or Training Programs - outside of work	1988–2000
Vocational or Technical Institute	1979–86, 1988–2000
Vocational Rehabilitation Center	1988–2000

Table 4.38.4 Types of Training Providers Identified in the "Other Training"& "Training" Sections of the NLSY79 Questionnaire: 1979–2000

Note: Excludes similar and other providers specified in the 1979–86 "Government Training," the 1979 "Degrees and Certifications," and 1980 "Time Use" sections of the NLSY79 questionnaires.

Table 4.38.5Number of Respondents Participating in Training Programs
by Survey Year, Type of Program, and Gender: NLSY79 1979–2000

	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Survey Year/ Reference Period ²	Attended One or More Training Programs ¹			Vocational or Technical Institute			Company Training			Apprenticeship Program		
Before 1/1/78	587	285	302	295	157	138	91	53	38	47	39	8
Since 1/1/78	1004	494	510	383	213	170	108	69	39	47	38	9
1980	1142	566	576	319	190	129	114	65	49	37	29	8
1981	1074	542	532	278	187	91	108	66	42	33	26	7
1982	1167	581	586	309	159	150	122	72	50	43	34	9
1983	1191	633	558	266	150	116	159	87	72	24	21	3
1984	1141	569	572	191	110	81	180	93	87	26	20	6
1985	1010	506	504	177	100	77	126	64	62	32	23	9
1986	1101	590	511	193	100	93	189	134	55	30	26	4
Since 1986/Prior Int.	1989	1049	940	335	156	179	714	432	282	74	62	12
1989	1551	815	736	140	71	69	587	341	246	83	53	30
1990	1542	800	742	168	72	96	645	368	277	38	30	8
1991	1192	626	566	104	56	48	480	285	195	22	16	6
1992	1209	614	595	117	54	63	468	258	210	17	14	3
1993	1365	656	709	111	47	64	543	286	257	17	10	7
1994	1267	605	662	120	62	58	501	260	241	19	13	6
1996	1582	773	809	126	61	65	603	304	299	20	19	1
1998	1475	721	754	117	47	69	542	288	254	13	9	4
2000	1434	685	749	109	60	49	570	276	294	3	3	—

Table 4.38.5 Number of Respondents Participating in Training Programsby Survey Year, Type of Program, and Gender:NLSY79 1979–2000 (continued)

	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Survey Year/ Reference Period ²		Busines llege/Scl		Cor	respond Course		Bar	ber or Be School	auty	Nur	ses Prog	gram
Before 1/1/78	47	9	38	27	14	13	35	3	32	47	6	41
Since 1/1/78	69	10	59	60	36	24	42	8	34	57	6	51
1980	89	18	71	76	46	30	30	3	27	47	1	46
1981	70	11	59	66	29	37	33	2	31	49	6	43
1982	66	13	53	87	55	32	33	4	29	49	3	46
1983	75	24	51	123	74	49	26	6	20	32	4	28
1984	50	15	35	87	48	39	21	4	17	37	5	32
1985	67	16	51	53	36	17	20	4	16	32	3	29
1986	75	26	49	67	38	29	34	6	28	20	2	18
Since 1986/Prior Int.	142	59	83	79	44	35	—	_	—	—	_	—
1989	61	19	42	145	84	61	_	_	_	_	_	_
1990	52	11	41	32	19	13	_	_	_	_	_	_
1991	27	5	22	33	20	13	_	_	_	_	_	_
1992	33	12	21	37	15	12	_	_	_	_	_	_
1993	26	8	18	30	22	8	_	_	_	_	_	_
1994	20	10	10	28	17	11	_	_	_	_	_	_
1996	31	13	18	22	10	12	_	_	_	_	_	_
1998	27	10	17	36	23	13	_	_	_	_	_	_
2000	22	13	0	07	0	40						
2000	22	15	9	27	8	19	—	—	_	_	_	
				Semi	inars/Tra	aining		inars/Tra			/ocation	
	FI	light Sch	ool	Semi		aining		inars/Tra ms outsi			/ocationa bilitation	
Before 1/1/78	FI 16	l ight Sch 14	ool 2	Semi	inars/Tra	aining						
Before 1/1/78 Since 1/1/78	FI 16 20	l ight Sch 14 17	ool 2 3	Semi	inars/Tra	aining Work 						
Before 1/1/78 Since 1/1/78 1980	FI 16 20 9	l ight Sch 14 17 8	ool 2 3 1	Semi	inars/Tra	aining Work 						Center — —
Before 1/1/78 Since 1/1/78 1980 1981	FI 16 20 9 11	14 17 8 9	2 3 1 2	Semi	inars/Tra	aining Work 						Center
Before 1/1/78 Since 1/1/78 1980 1981 1982	FI 16 20 9 11 12	14 14 17 8 9 10	2 3 1 2 2	Semi	inars/Tra	aining Work — — —						Center — — — —
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983	FI 16 20 9 11 12 8	light Sch 14 17 8 9 10 7	ool 2 3 1 2 2 1	Semi	inars/Tra	aining Work — — — —						Center — — — — — — — —
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984	FI 16 20 9 11 12 8 10	14 17 8 9 10 7 10	2 3 1 2 2 1 0	Semi	inars/Tra	aining Work — — — — —						Center — — — —
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	2 3 1 2 2 1 0 2	Semi	inars/Tra	aining Work — — — — — — — — —		<u>ms outsi</u> — — — — — — —				Center — — — — — — — —
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986	FI 16 20 9 11 12 8 10	14 17 8 9 10 7 10	ool 2 3 1 2 2 1 0 2 1	Semi Prog 	inars/Tra rams at 	aining Work — — — — — — — — — — — —	Progra	<u>ms outsie</u> 	de Work 	Rehab		Center — — — — — — — — — — — — — — — — — — —
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int.	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 1	Semi Prog — — — — — — — — — 306	inars/Tra rams at 	aining Work — — — — — — — — — — — — — — — — — — —	Progra	<u>ms outsid</u> 	de Work 	Rehab — — — — — — — — — 33		Center -
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 	Semi Prog — — — — — — — — 306 289	inars/Tra rams at — — — — — — — 136 142	aining Work — — — — — — — 170 147	Progra	<u>ms outsie</u> 	de Work 	Rehab — — — — — — — — 33 24		Center -
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 1	Semi Prog — — — — — — — 306 289 260	inars/Tra rams at — — — — — — 136 142 128	aining Work — — — — — — — 170 147 132	Progra — — — — — — — — — — — — 360 271 302	<u>ms outsic</u> 	de Work 	Rehab — — — — — — — — — 33 24 24		Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 	Semi Prog — — — — — — — 306 289 260 241	inars/Tra rams at — — — — — 136 142 128 124	aining Work — — — — — — 170 147 132 117	Progra	ms outsid — — — — — — — 164 126 148 123	de Work 	Rehab — — — — — — — — 33 24 15		Center 12 6 9 9
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 	Semi Prog — — — — — — 306 289 260 241 211	inars/Tra rams at — — — — — 136 142 128 124 102	aining Work — — — — — — — 170 147 132 117 109	Progra	ms outsie — — — — — — — 164 126 148 123 91	de Work 	Rehab — — — — — — — — — 33 24 15 18	silitation 21 18 15 6 11	Center 12 6 9 9 7
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992 1993	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 	Semi Prog — — — — — — — 306 289 260 241 211 223	inars/Tra rams at — — — — — — 136 142 128 124 102 98	aining Work — — — — — — — — 170 147 132 117 109 125	Progra	<u>ms outsi</u> 	de Work 	Rehab — — — — — — — — 33 24 25 18 18 18		Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992 1993 1994	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 	Semi Prog — — — — — — — — 306 289 260 241 211 223 194	inars/Tra rams at — — — — — — 136 142 128 124 102 98 93	aining Work — — — — — — — — — 170 147 132 117 109 125 101	Progra	ms outsie — — — — — — — 164 126 148 123 91 120 104	de Work 	Rehab — — — — — — — — — 33 24 25 18 18 12		Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992 1993 1994 1996	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 	Semi Prog — — — — — — — 306 289 260 241 211 223 194 312	inars/Tra rams at — — — — — — 136 142 128 124 102 98 93 154	aining Work — — — — — — — 170 147 132 117 109 125 101 158	Progra	ms outsie — — — — — — — — 164 126 148 123 91 120 104 140	de Work 	Rehab — — — — — — — — — 33 24 15 18 12 12 12		Center
Before 1/1/78 Since 1/1/78 1980 1981 1982 1983 1984 1985 1986 Since 1986/Prior Int. 1989 1990 1991 1992 1993 1994	FI 16 20 9 11 12 8 10 7	ight Sch 14 17 8 9 10 7 10 5	ool 2 3 1 2 2 1 0 2 1 	Semi Prog — — — — — — — — 306 289 260 241 211 223 194	inars/Tra rams at — — — — — — 136 142 128 124 102 98 93	aining Work — — — — — — — — — 170 147 132 117 109 125 101	Progra	ms outsie — — — — — — — 164 126 148 123 91 120 104	de Work 	Rehab — — — — — — — — — 33 24 25 18 18 12		Center

¹ Frequencies depicted here were derived from the 'Type of School of 1st Vocational/Technical Pgm Since Last Int' series.

² The reference period for all survey years except 1979 and 1988 was "since the date of last interview."

Types of Skill Training Across Questionnaire Sections: Comparable types of training data collected within various sections of the questionnaire, i.e., the "Government Training," "Jobs," "Military," "Training," or "Other Training" sections, have been grouped together in Table 4.38.6. Variables represented in the table include those that have the following types of training represented either within their variable title or as a coding category: basic skill training, occupational skill training (classroom), occupational skill training (on-the-job), or occupational skill training (apprenticeship program). Questions on employer-specific training were fielded during select survey years and are also included in Table 4.38.6. Variables dealing with participation in programs called "work experience" are excluded since the focus of such activities is the development of good work habits and not the acquisition of basic or occupational skills. Users should note that (1) universes for the various sets of training and provider variables differ and (2) there is not always a clear distinction between types of training or types of providers or services. The wording of some questions, for example, combines more specific on-the-job training with general work experience. Similarly, the training category "on-the-job training" can be a type of vocational/technical program, a service provided in conjunction with either a government job or a government training program, or a type of training for a military job.

Training Type	Survey Years	Area of interest
Basic Skill Training ¹		
'Services Provided - Classroom Training in Govt Program? Job #1–5' (Reading, Writing, or Arithmetic)	1979–87	Government Jobs
'Services Provided - GED Preparation in Govt Program? Job #1–5'	1979–87	Government Jobs
'Services Provided - Govt Program Training - English as a 2nd Language? Job #1–5'	1979–87	Government Jobs
'Services Provided - College Preparation in Govt Program? Job #1-5'	1979–87	Government Jobs
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - Class Training?' (Reading, Writing, or Arithmetic)	1979–86	Government Training
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - GED Preparation?'	1979–86	Government Training
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - English as a 2nd Language'	1979–86	Government Training
'Type of 1st/2nd/3rd/4th Vocational/Technical Pgm Since 86/Prior Int/Since Last Interview- Basic Skill' (GED, English, or Math)	1988–94	Training
'Changes in Workplace - Upgrade Employees Basic Skills', CPS Employer - Job Change Past 12 Months	1993–94	Training
Occupational Skill Training - Classroom	_	
'Services Provided - Skills Training in Govt Program Job? Job #1-5'	1979–87	Government Jobs
'Services Provided, 1st/2nd Govt Program Training Since Jan 78/Since Last Interview - Skills Training'	1979–86	Government Training
'Type of 1st/2nd/3rd/4th Vocational/Technical Pgm Since 86/Prior Int/Since Last Interview' (Job Skill)	1988–94	Training
'Formal (School) Training for Military Job Held?/for Other Military Job Held?'	1979–85	Military

Table 4.38.6 "Other Training" & "Training" Sections of the NLSY79 Surveys: 1979–2000

¹ The 1980 School Survey also collected information on whether remedial English, remedial mathematics, or English as a second language had been taken at the last secondary school attended.

Table 4.38.6 (continued) "Other Training" & "Training" Sectionsof the NLSY79 Surveys: 1979–2000

Training Type	Survey Years	Area of interest
Occupational Skill Training - On-the-Job Training		
'Services Provided - OJT in Govt Program? Job #1–5'	1979–87	Government Jobs
'Govt Program Job - Sponsor of Job #1–5' (CETA On-the-Job Training; MDTA On-the-Job Training)	1979–87	Government Jobs
'Services Provided, 1st/2nd Govt Program Training Since Jan 1978/Since Last Int - OJT?'	1979–83	Government Training
'Govt Program Job or OJT Since Jan 1978/Since Last Int'	1979–84	Jobs, Misc. 1979
'Did R Have Govt Program Part-time Job, Summer Job, or OJT Since Last Int?'	1985–87	Misc. xxxx
'Type of Experience Prior to Current Job/Most Recent Job - OJT with Current Employer/OJT with Previous Employer'	1989, 1990	Misc. xxxx
'Type of 1st/2nd/etc. Vocational/Technical Pgm Since 86/Prior Int/Since Last Int - OJT'	1988–96	Training
'Placed in a Job as Part of Govt Pgm Training Job #1–5' (Work Experience or OJT)	1984–87	Misc. xxxx
'OJT for Military Job Held? for Other Military Job Held?'	1979–85	Misc. 1979, Military
'Time Use - Working - Apprenticeship or OJT in Last Week?'	1981	Time Use
Occupational Skill Training - Apprenticeship Program		
'Type of School 1st/2nd/etc. Vocational/Technical Pgm Enrolled in At Last Int' - Apprenticeship	1979–86	Training
'Type of School 1st/2nd/3rd Vocational/Technical Pgm Enrolled in Before Jan 1978/Since Last Int' - Apprenticeship	1979–86	Training
'Type of School 1st/2nd/3rd/4th Vocational/Technical Pgm Since Last Int'	1988–2000	Training
'Type of School 1st/2nd/3rd/4th/5th/6th Vocational/Technical Pgm Since Last Int'	1993–2000	Training
'1st/2nd/3rd/4th/5th Govt Program Training Enrolled in Prior to Jan 1978' - Apprenticeship Program	1979	Government Training
'1st/2nd Govt Program Training Enrolled in Since Jan 1978/Since Last Int' - Apprenticeship Program	1979–86	Government Training
'Type of Experience Prior to Current Job/Most Recent Job - Apprenticeship'	1989, 1990	Misc. xxxx
'Time Use - Working - Apprenticeship or OJT in Last Week?'	1981	Time Use
Employer-Specific Training		
'1st/2nd Vocational/Technical Pgm Enrolled in At/Since Last Int for Job? (Unemployed)'	1982–84	Training
'1st/2nd Vocational/Technical Pgm Enrolled in At/Since Last Int for Job?/for Job with Employer? (Employed)'	1982–84	Training
'Type of Experience Prior to Current Job/Most Recent Job - OJT with Current Employer/OJT with Previous Employer'	1989–90	Misc. xxxx
'Primary Reason for Taking 1st/2nd/etc. Vocational/Technical Pgm Since Last Int?'	1991–2000	Training
'1st/2nd or 1st/2nd/3rd/4th Vocational/Technical Pgm Enrolled in At/Since Last Int Needed for Job Promotion'	1990–96	Training
'1st/2nd/3rd/4th Trng Useful in Doing Different Work for CPS Employer'	1993–96	Training
'1st/2nd/3rd/4th Trng Useful in Doing Same Work for Employer Other than CPS Employer'	1993–96	Training
'1st/2nd/3rd/4th/5th/6th Trng Useful in Doing Different Work for CPS Employer'	1993–96	Training
'1st/2nd/3rd/4th/5th/6th Trng Useful in Doing Same Work for Emp Other than CPS Employer'	1993–96	Training

Survey Instruments: These data are collected in the following sections of the NLSY79 questionnaires:

<u>Other Training/Training</u>: Section 14 (1979), Section 11 (1980), Section 10 (1981–82), Section 9 (1983–86), Section 8 (1988–2000), and the *Employer Supplements (ES)* (1984–87 and 1993).

<u>Government Training</u>: Section 13 (1979); Section 10 (1980); Section 9 (1981–82); and Section 8 (1983– 87).

<u>Government Jobs</u>: Sections 9 and 10 (1979); Section 8 (1980); Section 7 (1981–82); Section 6 (1983–87), and the *Employer Supplements (ES)* (1980–87).

<u>CPS</u>: Section 5 (1989 and 1990). <u>Military</u>: Section 7 (1979), Section 6 (1980), Section 5 (1981), and Section 4 (1982–85). <u>Time Use</u>: Sections 15 and 16 (1981).

Documentation: "Attachment 3: Industry and Occupation Codes" in the NLSY79 Codebook Supplement presents the Census Bureau codes used to classify the job for which the respondent was being trained (1979–86) and the field/trade in which a certificate, license, or journeyman's card was obtained (1979 & 1980). "Attachment 6: Other Kinds of Training" provides the two-digit codes for up to four other types of training in which the respondent had ever participated as of the 1979 interview. "Attachment 7: Other Certificate Codes" provides the 1979 coding for up to four degrees or licenses ever received. Sections G-I of the NLSY High School Transcript Survey: Overview and Documentation provide alphabetical and numeric lists of high school course codes and a copy of the "Transcript Coding Sheet."

Data Files: Core training variables are found in the area of interest "Training." The 1979 and 1980 collections of degrees and certifications are located in "Degrees & Certificate." The 1979 activities during last summer series is in "Misc. 1979." The set of remedial courses taken while in high school are located in "School Survey," and the 1981 time use questions can be found in "Time Use." The 1989 and 1990 CPS experience prior to current job variables are located in "Misc. xxxx" and the military training/OJT series are in "Military." The "Transcript Survey" area of interest contains the high school subject course code variables.

User Notes: Pollard (1981) reports, in an analysis of the 1979 "Other Training" data, that in-school vocational training was being incorrectly reported within this section. R07443., 'Employed When Began 3rd Vocational/Technical Pgm Enrolled in Since Last Interview,' has been placed in the "Misc. 1982" area of interest; comparable variables relating to the first and second program, R07429. and R07415., are located in "Training."

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NLSY79 Children

In each survey, information has been collected from the children aged 15 and older, the young adults, on their participation in training programs. Respondents were asked to identify the type of training, the duration of the program, and the source of money to pay for the training. In addition, respondents were asked if the training was useful on the current job or if it helped them to get a different job. Finally, the young adults were asked if they had acquired any kind of certificate for practicing a profession or trade. Beginning in 2000, detailed questions were asked only of the current or most recent training program.

Survey Instruments: The series of questions pertaining to training are located in the "Other Training" section of the *NLSY79 Young Adult Questionnaires*.

4.39 Wages

NLSY79

This section reviews select wage, time unit, and earnings data available for the NLSY79. Data on respondents' usual earnings (inclusive of tips, overtime, and bonuses but before deductions) have been collected during every survey year for each employer for whom the respondent worked since the last interview date. The amount of earnings, reported in dollars and cents, is coupled with information on the applicable unit of time, e.g., per day, per hour, per week, per year, etc. Between 1988 and 1993, those respondents reporting any unit of time other than "per hour" have been asked a follow-up question on whether they were paid by the hour on that job; if so, an hourly wage rate was collected.

The raw earnings data, collected in the *Employer Supplements* during 1980–2000 and in Section 10 of the 1979 questionnaire, can be found in the variable series 'Rate of Pay Job #1–5' and 'Time Unit of Rate of Pay Job #1–5.' Two sets of variables provide information based on the combined earnings and time unit data. The first set, 'Hourly Rate of Pay Job #1–5,' provides the hourly wage rate for each job as reported. The actual responses of those respondents who report wages with an hourly time unit in the initial earnings question appear in this variable. For those reporting a time unit other than "per hour" or "other" in the initial earnings question, CHRR calculates an hourly rate of pay.

Users should note that (1) the calculation procedure, which factors in each respondent's usual wage, time unit of pay, and usual hours worked per day/per week produces, at times, extremely low and extremely high pay rate values; (2) no editing of actual values reported by a respondent occurs even if the value is extreme, e.g., \$25,000 per hour; (3) no 'Hourly Rate of Pay Job #1–5' data are available for those respondents reporting a time unit of "other"; and (4) any hourly wage rate information reported in the 1988-1993 follow-up question is not included in the creation statements.

A second set of variables based on responses to the initial set of wage/time unit questions, entitled 'Hourly Rate of Pay Current/Most Recent Job,' identifies the hourly earnings for the job identified as the CPS job, i.e., the job that the respondent held most recently. Hourly wage rates for those respondents who reported a time unit other than "per hour" can be found in the 1988–93 variables series, 'Paid by the Hour (Time Unit Other than Hourly Previously Reported) Job #1–5' and 'Hourly Rate of Pay (Rate Other than Hourly Previously Reported) Job #1–5' and 'Hourly Rate of pay variables present on the NLSY79 Main Data Files and comparable variables on the NLSY79 Work History Data File.

NLSY79 I	Main Files		NLSY79 Work	History File	
Variable Title Years Area of interest		Variable Description/Each Job	Years	Variable Name	
Rate of Pay Job #1–5	1979–2000	Job Information	Usual Wage or Salary at this Job	1979–2000	PAYRATE
Time Unit of Rate of Pay Job #1–5	1979–2000	Job Information	Time Unit to Interpret Payrate	1979–2000	TIMERATE
Hourly Rate of Pay Job #1–5	1979–2000	Job Information	Usual Wage Converted to Hourly Wage	1979–2000	HOURLYWAGE
Hourly Rate of Pay Current/Most Recent Job	1979–93	CPS	Usual Wage Converted to Hourly Wage, and Is this Job the Same as the CPS Job	1979–2000	HOURLYWAGE CPSJOB

Table 4.39.1 Core Rate of Pay Variables: NLSY79 Main & Work History Files

Follow-up questions fielded during 1986–2000 asked those respondents whose earnings had changed for wage rate and time unit information at the time they first started working for a new employer. In 1986 and 1987, those who were not working for the employer at the interview date were also asked for wage information at the time they left that employer. These data can be found in the following variables: 'Wages Changed Since First Began Working Job #1–5,' 'Rate of Pay When 1st Began Working at Job #1–5,' 'Time Unit of Rate of Pay When 1st Began Working at Job #1–5,' 'Rate of Pay When Last Worked at Job #1–5,' and 'Time Unit of Rate of Pay When Last Worked at Job #1–5.'

User Notes: The HOURSWEEK variable from the NLSY79 Work History data set is used in the creation of HOURLY RATE OF PAY. The HOURSWEEK creation procedure reflects the number of hours usually worked per week for the CPS job or Job #1–5. For those who report that they performed one or more hours of work at home and that the number of hours worked at home was not included in the usual hours worked per week, the total number of hours usually worked including work at home is used. This inclusion of home hours has produced, for a small number of respondents, extreme hourly rates of pay due to the fact that both the hours worked at home and hours worked at a place of business are counted. Low numbers in total hours worked—for respondents who did not include home work in their first reported usual hours worked—produce, when combined with rate of pay, erroneous hourly rates of pay. For the most part, accurate total hours worked can be constructed from these raw data.

Survey Instruments & Documentation: Section 10, "Jobs," of the 1979 questionnaire and the *Employer Supplements* for 1980–2000 collected these raw data. Creation procedures appear in Table 4.39.2.

Data Files: The 'Rate of Pay Job #1–5,' 'Time Unit of Rate of Pay Job #1–5,' and 'Hourly Rate of Pay Job #1–5' variables for each job can be found in the "Job Information" area of interest on the main

NLSY79 data files. The 'Hourly Rate of Pay Current/Most Recent Job' (1979-1993) variables for each year are located in the "CPS" area of interest. All other main file variables discussed above have been placed in the yearly "Misc. xxxx" areas of interest. The Work History data set contains the wage rate and time unit variables listed in the table above.

Program Derivation: The PL/1 statements which create 'Hourly Rate of Pay Job #1–5' and 'Hourly Rate of Pay Current/Most Recent Job' read as follows:

IF PAYRT(NEWYR,JOB#)>0 & TIMERATE(NEWYR,JOB#)>0 THEN DO; IF PAYRT(NEWYR,JOB#)=99999995 THEN RETURN(-4); ELSE IF TIMERATE(NEWYR,JOB#)=1 THEN RETURN(PAYRATE(NEWYR,JOB#)); ELSE IF TIMERATE(NEWYR,JOB#)=2 & HOURDAY(NEWYR,JOB#)>0 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)=2 & HOURDAY(NEWYR,JOB#)>0 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)/HOURDAY(NEWYR,JOB#)))); ELSE IF TIMERATE(NEWYR,JOB#)>=3 & TIMERATE(NEWYR,JOB#)<7 & HOURSWEEK(NEWYR,JOB#)>0 THEN DO; IF TIMERATE(NEWYR,JOB#)=3 THEN RETURN((FLOOR(PAYRATE(NEWYR,JOB#)/HOURSWEEK(NEWYR,JOB#)))); ELSE IF TIMERATE(NEWYR,JOB#)=4 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)=4 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)/(HOURSWEEK(NEWYR,JOB#)*2)))); ELSE IF TIMERATE(NEWYR,JOB#)=5 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)/(HOURSWEEK(NEWYR,JOB#)*4.3)))); ELSE IF TIMERATE(NEWYR,JOB#)=5 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)/(HOURSWEEK(NEWYR,JOB#)*4.3)))); ELSE IF TIMERATE(NEWYR,JOB#)=6 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)/(HOURSWEEK(NEWYR,JOB#)*4.3)))); ELSE IF TIMERATE(NEWYR,JOB#)=8 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)=8 THEN RETURN((FLOOR(PAYRT(NEWYR,JOB#)=8 THEN RETURN((FLOOR(PAYRATE(NEWYR,JOB#)=8 THEN RETURN((FLOOR(PAYRATE(NEWYR,JOB#)=8 THEN RETURN((FLOOR(PAYRATE(NEWYR,JOB#)=8 THEN RETURN((FLOOR(PAYRATE(NEWYR,JOB#)=8 THEN
ELSE IF TIMERATE(NEWYR, JOB=6 THEN
ELSE IF TIMERATE(NEWYR, JOB#)=8 THEN
END; ELSE RETURN(-4);
END; ELSE RETURN(-4);

Table 4.39.2 Computer Code to Create Hourly Rate of Pay

NLSY79 Children

Data on the usual earnings as well as the hourly rate of pay has been collected each survey from the children aged 15 and older, the young adults, for up to the last 5 jobs held by the respondent. In addition from 1994 to 1998 respondents who were completing the young adult survey for the first time were presented with a number of hypothetical job offers. 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.

Survey Instruments: Questions pertaining to usual earnings can be found in the *Employer Supplement* sections of the *NLSY79 Young Adult Questionnaires*. The series of hypothetical job offers are contained in the "Attitudes" section of the 1994, 1996, and 1998 instrument.

4.40 Work Experience

General Work Experience

The work experience information collected in the NLSY79 is of two types. Each survey collects crosssectional information pertaining to (1) the respondent's activities during the full week preceding the week of the survey; (2) characteristics of the current or most recent employer and of any other employers for whom the respondent worked; (3) military service; and (4) any gaps in employment. This information taken together comprises a relatively complete picture of the respondent's labor force activities between the previous and current interview dates. In addition to the large core of cross-sectional information stretching from the first survey, periodic inclusion of new questions provides additional data largely specific to the time in which they were collected. Some of these questions are retained through a number of years, while others are included for one or several years and discontinued. Discussions and explanations of cross-sectional elements of NLSY79 data are presented in separate sections of this guide, e.g., "Labor Force Status," "Jobs & Employers," "Class of Worker," "Occupations," "Industries," "Time & Tenure with Employers," "Job Satisfaction," and "Wages."

From this information and other retrospective information, a longitudinal record spanning from the date of, and to some extent the time preceding, the first interview through the most current interview date can be constructed for each respondent. The longitudinal record is maintained even for respondents who are not interviewed in interim years. Each year's questionnaire incorporates retrospective questions designed to recover as completely as possible information lost (or incorrectly reported or recorded) during previous survey years. For example, a respondent interviewed in 1984 and not interviewed again until 1989 will have a complete labor force history as of the 1989 interview, as information for the intervening period will be recovered in 1989. Researchers should be alert to the possibility of gaps and discrepancies in some records over time, due to inconsistencies in actual respondent reporting and/or interviewer error. However, these have not appeared to be a major factor in the quality and completeness of the NLSY79 employment and labor force history.

The ability to link identical employers through survey years allows longitudinal examination of not only general labor force activity, but also employer-specific experience. "Appendix 9: Linking Jobs Through Survey Years," present within both the *NLSY79 Codebook Supplement* and the NLSY79 Work History documentation, provides additional information. On the Work History CD, this appendix is in a file called *EMPLINK.TXT*.

Longitudinal Work Experience Record

This section discusses information on various aspects of the longitudinal work experience record available for each respondent of the NLSY79.

Number of Employers: The most basic longitudinal information available for respondents is the total number of employers for whom a respondent worked during a given period (e.g., in the past calendar year, since the last interview, between 1979–81) and the total number of employers (part-time and full-time) ever reported by a respondent. It is possible to construct a more or less complete inventory of the number of jobs for all respondents from the age of 18 years and older; note the age effects discussion below.

"Employers" versus "Jobs": Unless explicitly noted, the NLSY79 work history data are employer-based. Therefore, any reference to "job" is a reference to a specific employer. Information about specific duties and positions and/or changes in duties or position is collected, with reference to a specific employer, only at the point of interview (with limited exceptions in specific survey years). For example, a respondent may regard himself/herself as having held a number of "jobs" or positions with employer #1 (Job #1). However, any information collected about these different positions would be included as information about the respondent's experience with that employer (#1) at the point of interview for a specific year. Based upon this characteristic of these data, researchers are cautioned that counting changes in occupations can not necessarily be equated with total job changes or employer changes. For example, it is possible for a respondent to hold more than one occupation with the same employer during the time between interviews. Yet, except in restricted survey years, the only occupation specifically reported at the point of interview would be the current/most recent occupation. Likewise, a respondent may hold the same occupation through his/her tenure with several employers.

Effect of Age of Respondent on Employment Information: For those respondents who were 18 or older at the time of the first interview (1979), information about work history is recovered retrospectively to the age of 18. Information preceding this age may be relatively limited for these respondents. However, reported employers became part of the ongoing survey record of respondents who were younger than 18 at the time of the first survey. The depth of information for all jobs but the CPS job for respondents younger than 16 is somewhat restricted during the early survey years. Despite restrictions, a good deal of information is still available for those who were 15 years of age or under at the first interview point. More information on age restrictions is available in the "Age" section of this guide.

Part-time versus Full-time Employers: Industry, occupation, and class of worker information is not collected for any part-time and/or short term employer who is not the CPS employer. This is also the case for year-specific modules, such as the 1990 promotion series. However, other basic information, such as start and stop dates, gaps within tenure with part-time and/or temporary employers, hours worked per day

and per week, and wages/salary, is available, comparable to that available for full-time employers. In the event that a part-time/short-term employer is the CPS employer, complete data, including industry, occupation, and class of worker, are collected regardless of the nature of the job. Therefore, reasonable opportunity exists for comparisons of part-time/short-term and full-time employers, particularly if the part-time/short-term employer is the CPS employer.

Double-Counting of Employers: Users should be aware that a small degree of double-counting of employers may occur when data are collected. Until 1998 employers were only tracked between contiguous interview years in which information was collected on the specific employer. It is therefore conceivable that a respondent who works for a particular employer during one year, leaves that employer, and then returns to that same employer after a year or more, would appear to be working for a new employer during the second tenure because the previous tenure with that employer would have slipped out of scope for tracking purposes. See also the "Jobs and Employers" section of this guide. Starting in 1998, the NLSY79 began keeping a roster of all employers to enable the CAPI instrument to recognize when a respondent returns to an employer that they left a number of years earlier.

Despite these limitations, NLSY79 data allow for the construction of a relatively complete and detailed employment history for respondents from January 1, 1978 (and possibly points preceding), through the most current year in which a respondent was interviewed.

Related Created Variables (Number of Employers): 'Number of Jobs Ever Reported as of Interview Date (All Interview Years).'

Related Documentation (Number of Employers): "Linking Jobs Through Survey Years" is included in the NLSY79 Work History documentation and as Appendix 9 of the *NLSY79 Codebook Supplement*. See also the "Jobs and Employers" section of this guide.

Tenure with Specific Employer

A second type of basic information that can be constructed from NLSY79 longitudinal labor force experience data is a history of tenure (in weeks) with each employer reported up to the most current survey year for a given respondent; see the "Time & Tenure with Employer" section of this guide for additional information. Tenure is cumulative through contiguous survey years, beginning on the first date the respondent reports working for the employer (the start date) and ending on the date the respondent reports leaving the employer (the stop date). If a respondent started working for an employer before or on the date of last interview, tenure since the date of last interview is added to the already existing time to reflect total tenure. If the respondent is working for the employer on the current interview date, the stop

date is set to the current date. If the respondent reports working for this employer at the next interview, tenure between interviews is added to the total tenure figure.

For example, imagine the following scenario. A respondent starts working for COMPANY A on July 7, 1989, and is interviewed on July 31, 1989. She is still working for that company on August 1, 1990, when she is interviewed again. She continues to work for the same company until May 15, 1991 when she leaves. She is interviewed again on August 15, 1991. A cumulative tenure in number of weeks would be constructed in three stages:

T1 = [Tenure from July 7, 1989 – July 31, 1989 at the 1989 interview]
T2 = T1 + [Tenure from August 1, 1989 – August 1, 1990 at 1990 interview]
T3 = T1 + T2 + [Tenure from August 2, 1990 – May 15, 1991 (time worked for COMPANY A between 1990 and 1991 interview, before respondent left)]
TENURE WITH COMPANY A (at 1989 interview) = T1
TENURE WITH COMPANY A (at 1990 interview) = T2
TENURE WITH COMPANY A (at 1991 interview) = T3

A total tenure through contiguous survey years is available for all employers, full- and part-time, for whom valid start and stop dates of employment are reported. This is accomplished by linking identical employers through contiguous survey years; see Appendix 9 in the *NLSY79 Codebook Supplement* or the NLSY79 Work History documentation for more information. The construction of employer tenure occurs within the more expansive programming structure that produces the separate NLSY79 Work History data set. For more information on the consequences of missing start and stop dates, users should refer to the "Work History" section of this guide, which is devoted to a discussion of this data set.

"Employer" Tenure versus "Job" Tenure: Researchers must be cognizant of the employer-based nature of these data (see the discussion above on "Number of Employers"). Tenure figures reflect time with a specific employer, not time performing a specific occupation with an employer. However, by using data on reported timing and nature of promotions present in two survey years for the CPS job and in 1990 for all jobs, it may be possible to impose some sense of change in occupations over certain periods of time.

Double-Counting of Employers and "Broken" Tenure: Users should be advised that the limited possibility of double-counting of employers (discussed above) allows a slight chance of tenure with a single employer being calculated as tenure with two separate employers. An employer for whom the elapsed time between stints exceeds the capacity for continuous tracking will likely appear as two separate employers with two separate (and shorter) total tenure periods.

Gaps within Tenure with Specific Employer: Total tenure with an employer extends from reported start date to stop date. In addition, respondents may report gaps of a week or more during the period of

association with an employer that fall within the period between start and stop dates. Unpaid gaps within tenure with the same employer are reported in association with a specific employer. They occur between the start and stop dates given for an employer. The respondent does not consider himself/herself completely disassociated from the relevant employer during these periods, although s/he was not actively working for that employer. Specific variables for each gap include start and stop dates; the reason that the respondent was not working during a given gap; the number of weeks that a respondent was unemployed (looking for work or on layoff) and/or out of the labor force (OLF or not looking for work) during a given gap; and, for those who were OLF at some time during a gap, the reason they were not looking for work.

Although a respondent may report himself or herself to be out of the labor force or unemployed during these gaps, these weeks are included in the calculation of total tenure with that employer because they occur before the respondent has reported an actual stop date for his or her association with that employer. Therefore, these weeks are considered part of the period for which the respondent considers himself/herself associated with that employer.

Users wishing to adjust total tenure with an employer to reflect such gaps must do so independently, by calculating the length of reported gaps and eliminating them from the total tenure value. This can be done over the total of reported gaps or selectively, depending upon the reason and/or labor force activity classification (out of the labor force versus unemployed) of individual gaps.

Related Created Variables (Tenure with Specific Employer): 'Total Tenure in Weeks with Employer (Job #1–5)' (All Interview Years).

Related Documentation (Tenure with Specific Employer): "Linking Jobs Through Survey Years," found both within the NLSY79 Work History documentation and the *NLSY79 Codebook Supplement*, as well as the "Work History Programs" and "Work History Program Description" sections of the NLSY79 Work History documentation, provide information on tenure related variables.

Cumulative Labor Force Experience

The standard set of definitions of labor force status used by the Current Population Surveys (CPS) is used for coding the employment status of NLSY79 respondents. The NLSY79 Work History programs incorporate further refinements to allow for weeks of indeterminate status, due to erroneous respondent reporting or interviewer recording (see the "Work History" section of this guide). The NLSY79 summary indicators are then constructed, using these Work History definitions for weekly labor force status. The "Labor Force Status" section of this guide includes detailed definitions of CPS and NLSY79 Work History labor force concepts. The detailed collection of dates of employment and gaps in employment over the history of the NLSY79 allows construction of a cumulative picture to be constructed of a respondent's labor force activity over the course of the survey. A large number of summary variables are created based upon the week-by-week labor force status arrays produced by the Work History program; see also the "Work History" and "Labor Force Status" sections of this guide for more information. These summary variables provide a count of the number of weeks a respondent held a given labor force status, the total number of hours worked (if any), and the total number of weeks since the respondent's last interview. Variables are also calculated indicating the percentage, if any, of weeks that are not accounted for in the summary variables discussed above, due to missing data or indeterminate status in the Work History arrays.

These variables, constructed within the Work History programs, consist of two sets. One series uses "Last Interview Date" as the reference period, and the second uses "Past Calendar Year" (the full calendar year previous to the year of current interview) for its summations. However, it is possible for researchers to construct similar cumulative figures for periods of time of particular interest to them. For instance, one may be interested in compiling a summary of work and/or labor force experience for respondents over a specific five-year period. Similarly, a summary of activities with employers having certain characteristics (part-time, temporary, full-time, CPS, certain levels of earnings, etc.), as well as the extent of such practices such as dual job holding among respondents, may be compiled. A gaps history can also be assembled using, as appropriate, gaps reported within the tenure with an employer and/or gaps where no employer affiliation is reported.

Cumulative Active Military Service: Cumulative weeks of active military service are constructed during the creation of the NLSY79 Work History data set. However, civilian employment has precedence over military activity in the week-by-week labor force status arrays. Therefore, the number of weeks in active military service in the past calendar year will not include any weeks during which the respondent also held a civilian job. The full period of active military enlistment can be verified by using data on enlistment and discharge dates from the actual military section in the main questionnaire. The number of weeks in the active military since the last interview is calculated by subtracting the starting week from the ending week so that the entire tenure is included.

Gaps between Employers (No Affiliation with an Employer): As mentioned, gaps may be reported between the start and stop dates for a given employer, reflecting periods for which a respondent considers himself or herself affiliated with an employer but not actively working. In addition, gaps in employment reflect periods when the respondent reported no affiliation with any employer. These gaps are often referred to as "between-job gaps."

Indeterminate Labor Force Status during Gaps: The exact duration of gaps in weeks (within-job gaps or between-job gaps) is available, as well as the number of those weeks the respondent was "out of the labor force [OLF] - not looking for work" as opposed to "unemployed - looking for work or on layoff." Therefore, if a respondent was OLF or unemployed for the entire period of the gap, the specific weeks for those labor force states can be determined. However, for a gap in which the respondent was OLF part of the time and unemployed part of the time, the specific weeks that the respondent occupied each status cannot be determined. Researchers should be aware that, while the number of weeks the respondent occupied each status is accurate, the precise weeks for each status may not be. The "Work History Data" section of this guide provides details on the assignment of non-employed labor force states.

Weeks with Indeterminate Activity: Users should be aware that, under some circumstances, it is not possible to determine labor force status for a given week. These indeterminations arise with incomplete and/or invalid start or stop dates for employers or gaps, e.g., an element of the date is missing or the stop date precedes the start date. Variables reflecting the percentage of weeks that were unaccounted for since the last interview and in the past calendar year are computed. Hence, users may find respondents who worked 52 weeks of the year but also have 100 percent of their weeks unaccounted for. These variables alert researchers to problem cases that may need to be examined more closely and/or eliminated from analysis. The "Work History Data" section of this guide provides additional information.

Employer Characteristic Histories: It is possible to build a limited history of certain employer-based characteristics (earnings/hourly wages, occupation, etc.). These histories will be limited in the sense that many of these characteristics are reported only at the date of each interview. Should change occur from one interview date to another, the point of actual change can not, in most instances, be precisely determined. (Information collected in select survey years may permit more definitive identification of interim changes occurring between interview dates for certain characteristics.)

Strictly speaking, it is possible that an occupational change from one interview year to the next could reflect only one of several during the period between interviews. Characteristics such as hourly wage may be of less concern in this regard, as some numeric progression or regression should be apparent. However, even for these indicators, interim and temporary cutbacks in compensation in times of economic downturn may be missed. These limitations noted, a reasonably complete history of experience with specific employers, e.g., CPS (current/most recent) employer or all employers, can be built using NLSY79 records.

CPS Employer as a Primary Focus: The CPS employer (current/or most recent at date of interview) is the focus of many researchers. These employers can be linked in much the same way as non-CPS employers, with one extra set of variables identifying the employer as CPS. However, it is important to

note that, while the CPS employer is usually the first employer, this is not always the case in survey years 1979–92.

Discrepancies in the order in which interviewers administered, or respondents reported, employers for *Employer Supplements* resulted in a relatively small number of cases in each pre-CAPI survey year for which the CPS is not the first employer, but rather Job #2 or Job #3, etc. The CPS employer can be identified in each year by a "yes or no" variable, which is present for each employer. A "1 - yes" code indicates the CPS employer. It is possible that an employer that is the CPS employer in one year and remains the CPS employer in the next year will be Job #1 in the first year and Job #2 (or higher) in the second year. In this case, the information for Job #2 in the second year would be a continuation of the information for Job #1 in the first survey year. In 1993 and after, CAPI instruments ensure that the CPS job (if one exists) will always be Job #1.

Related Created Variables (Cumulative Labor Force Experience):

Number of Weeks Worked since Last Interview Number of Weeks Worked in Past Calendar Year Number of Hours Worked in Past Calendar Year Number of Hours Worked in Past Calendar Year Number of Weeks out of Labor Force in Past Calendar Year Number of Weeks Unemployed since Last Interview Number of Weeks Unemployed in Past Calendar Year % Weeks Unaccounted for since Last Interview % Weeks Unaccounted for in Past Calendar Year Weeks since Last Interview % Weeks in Active Military Service since Last Interview Weeks in Active Military Service in Past Calendar Year

Related Documentation (Cumulative Labor Force Experience): The "Work History Programs" (*WORKHIST.PL1* on the Work History CD) and "Work History Program Description" (*DOC2000.TXT* on the Work History CD) sections of the NLSY79 Work History documentation set provide information on the creation of work-related variables.

4.41 Work History Data

The NLSY79 Work History Data File provides researchers with a week-by-week longitudinal work record of each NLSY79 respondent from January 1, 1978, through the current survey date. The nearly 12,000 work history variables include four primary types of information: (1) weekly arrays; (2) job characteristics; (3) employment gaps; and (4) summary labor force related variables.

Beginning with the release of the 2000 data, the Work History file is incorporated into the main NLSY79 data set. Researchers will be able to purchase a single CD containing both main and work history variables and to use the same search and extraction software to view all of the data. Variables previously located on the separate Work History CD can be identified by searching for the "Work History" area of interest. In addition, the reference numbers for work history variables begin with "W" instead of the standard "R."

Weekly Arrays

Week-by-week records of the respondent's labor force status and associated job(s), if employed, and the total number of hours worked each week at any job, if employed, are available. This information is contained in three week-by-week variable arrays:

STATUS Array:	Labor Force/Military Status Each Week Beginning January 1, 1978
HOUR Array:	Usual Hours Worked per Week at All Jobs Beginning January 1, 1978
DUALJOB Array:	Job Numbers for Respondents Who Worked at More Than One Job in
	Any Week Beginning January 1, 1978

Although the work history variables only contain data on up to five jobs, data are collected on all jobs. Data for the extra jobs are used to construct summary *KEY* variables. The number of jobs has exceeded ten for one case in 1991 and 1992, two cases in 1998, and one case in 2000.

Job Characteristics

Because the work history arrays are now incorporated with the rest of the NLSY79 data on one CD, there are no longer separate job characteristics variables within the work history data set. Job characteristics variables, such as dates of employment, pay, occupation, industry, and so on, that were previously included on the work history CD can be located in the main file areas of interest as described in the applicable sections of this guide.

Employment Gaps

Gaps within tenure with a specific employer are reported in association with that employer. They occur between the start and stop dates given for an employer. The respondent does not consider himself/herself completely disassociated from the relevant employer during these periods, although s/he was not actively working for that employer. Specific variables for each gap include start and stop dates; the reason that the respondent was not working; the number of weeks that a respondent was unemployed (looking for work or on layoff) and/or out of the labor force (OLF or not looking for work), and; for those who were OLF at some time during a gap, the reason they were not looking for work. See the "Work Experience" section above for a discussion of gaps with respect to job tenure.

Gaps between employers are gaps in a respondent's employment during which s/he was not associated with any employer. The specific variables collected with respect to "within job gaps" (see the discussion in the "Work Experience" section on tenure with a specific employer) are also collected with respect to gaps between employers, with the exception of the reason that the respondent was not working during the gap.

Summary Labor Force Related Variables

Variables are constructed summarizing different aspects of a respondent's labor force activity, including total number of hours worked, weeks worked, weeks unemployed, weeks out of the labor force, and weeks in active military service. There are two sets of these variables, referring to each of two time periods—the period since the last interview and the past calendar year (see the "Labor Force Status" section of this guide). Variables are also created indicating the number of weeks since the previous interview and the percent of weeks for which a definite status cannot be determined in constructing the summary variables discussed above. See the "Work Experience" section for further notes on these variables.

Survey Instruments & Work History Construction: The work history data are constructed from information gathered in the "Military History," "Current Labor Force Status or CPS," Employer Supplement, and "Periods not Working" sections of the NLSY79 survey instruments. The work history program converts dates reported in these sections (start and stop dates, employment gap dates, enlistment and discharge dates) to week numbers, using January 1, 1978, as week #1. Week-by-week histories of a respondent's labor force activity are constructed by filling in the weeks between the reported beginning and ending dates for different activities (or "inactivities") with the appropriate code. In turn, this weekly accounting makes possible the construction of the summary variables.

Work History-Specific Documentation: Prior to the release of the 2000 data, work history variables were documented in a series of text files on the CD. In 2000, this information was moved to the *Codebook Supplement*. Appendix 18 in that document provides information about the logic and procedures used to create the work history arrays, as well as additional coding information for selected variables.

Data Files: The majority of the work history variables are constructed from variables found in the "Military," "Job Information," "Periods Not Working within Job Tenure," "Jobs," "CPS," and "Between Jobs Gaps" areas of interest on the main data set. The resulting arrays are located in the "Work History" area of interest. The summary variables are included in the "Key Variables" area of interest.

User Notes: Users should be aware that the work history program constructs and consolidates in one place a great deal of employment-related information, sparing the researcher the time and effort involved in distilling these variables from the NLSY79 main data files. The following paragraphs contain a number of explanatory notes and/or cautions for users of this unique data set.

Of particular interest to many researchers have been the PREVIOUSEMP# and TENURE variables associated with each employer. The PREVIOUSEMP# allows a respondent's association with a given employer to be traced back through contiguous survey years. Using PREVIOUSEMP# and the appropriate stop and start dates, a TENURE variable is constructed for each job reported, which depicts total weeks of tenure with each employer across contiguous survey years. Users are encouraged to examine the work history documentation to determine if any such time-saving variable constructions exist with regard to their specific research interests. Work history data can also be easily employed in association with non-employment-related data from the NLSY79 main data files. A variety of employer characteristic variables can also be linked to the work history data, including:

- Job benefits
- Promotions
- Ratings of job characteristics
- Activity most of survey week versus usual activity
- Overtime/time-off
- Job search activity
- Why looking/why not looking
- Employer size (in terms of employees)
- Shift worked for CPS employer
- Pregnancy leave
- Reason not working for employer (versus reason not looking for work, which is included in the Work History data set)
- Hourly wage (if first pay rate reported not hourly)
- Pay rate when first started with employer (if pay rate has changed)
- Time use on the job
- Travel/commuting time to and from work
- Job hierarchy/authority structure

The work history is a complete retrospective up to and including the respondent's most recent date of interview. The questions in these survey sections are constructed to collect a complete history for each respondent, regardless of period of non-interview. For example, a respondent previously interviewed in 1984 and not interviewed again until 1989 will have a complete labor force history as of the 1989 interview, as information for the intervening period will be recovered in the 1989 interview. The "Work Experience" section contains a discussion of possible discrepancies or inconsistencies in these data.

Researchers should be aware that, although such possibilities exist, they have not appeared to be a major factor in the quality and/or completeness of the work history record.

Data collected for jobs with full-time/long-term employers/CPS employers are similar to those collected for jobs held on a part-time/short-term basis with non-CPS employers. Although some specific information (most notably occupation, industry, class of worker, and specific modules such as the promotion questions in 1989 and 1990) is not collected for jobs reported to be part-time and/or shortterm in nature, other job-specific data (including start and stop dates, reasons for leaving an employer, information on gaps, hours usually worked, and pay rates) are gathered for all jobs, regardless of their nature. Before 1988, information on rate of pay and government sponsorship of jobs was not gathered from those in part-time or short-term jobs. Before 1986, the exclusion for part-time work was 20 hours per week; for 1987 and later surveys, the exclusion for part-time work is 10 hours per week.

Many researchers focus on data for the CPS job. Those wishing to isolate CPS jobs only should take note that, while Job #1 is usually the CPS job, from 1979 to 1992, this is not always the case. The "Work Experience" section of this guide elaborates.

The information collected on reasons for employment gaps allows specific dates to be fixed for unemployed or OLF status only if a respondent was unemployed or OLF for the entire period of the gap. If the respondent was unemployed for part of the gap and OLF for the other part, the number of weeks unemployed and OLF is recorded, but the specific dates of periods for which the respondent was actively looking for work/on layoff and not looking for work are not collected. This prevents the Work History program from assigning specific week numbers to these states in the event of such a "split gap." Instead, the number of weeks reported as unemployed is assigned to the middle of the total gap period, with the remainder of weeks at the beginning and end of the gap period being assigned an OLF status. Users examining the week-by-week status array containing labor force states should be aware that "split gaps" will appear as a series of "5" codes, followed by a series of "4" codes, followed by another series of "5" codes (5 5 5 5 5 4 4 4 4 4 5 5 5 5 5). Although the start and stop dates for the whole gap will be those actually reported by the respondent. They represent only the number of weeks that a respondent reported having held each status, with the unemployed status being arbitrarily assigned to the middle portion of the gap.

Users should also be aware that for respondents with simultaneous active military status and civilian employment status, civilian labor force activity will take precedence over military status. For the purposes of constructing the week-by-week status array, the civilian job number will replace the military status code for weeks in which both states occur. The order of precedence for various labor force status codes is

detailed in the work history documentation (see the discussion of the work history PL/I program in appendix 18 of the *Codebook Supplement*); see also the "Work Experience" section in this guide.

Missing information on start and stop dates is contained in each series of job-specific variables exactly as it appears in the main NLSY79 data file. For purposes of constructing the status array and computing the summary labor force activity variables, the work history program requires that specific week numbers be assigned on the basis of these dates. In the event that missing data occur in these dates, the program takes one of two actions. (1) If only the day in a given date is missing, the program assigns the number "15," placing these dates in the middle of the month. This allows an approximate week number to be assigned. The possibility still exists, however, that a negative job/gap duration will result because the day is arbitrarily fixed. For example, a start date of 10/-2/90, which indicates a missing day, and a stop date of 10/6/90 would be read by the work history program as 10/15/90 and 10/6/90 respectively. Therefore, when the week numbers are assigned, the arbitrary assignment of "15" as the start day would give an erroneous impression that a job started after it stopped. The status array and computed summary variables will reflect the invalid data in the week numbers. (2) Dates missing a month and/or year cannot be estimated by the work history program and therefore have invalid missing codes for the week numbers. The status array and other computed variables cannot be calculated for activity within periods for which either or both of the dates have such missing information. These will also register invalidly missing information for any period in which specific dates and week numbers cannot be determined.

Descriptive Tables

The tables below are presented to provide information on sample sizes by race and interview year for weeks worked and not worked. The actual reference period is the full calendar year immediately preceding the survey year. "Missing" means that the respondent is a noninterview for that survey year.

Sex	Race	Potential Respondent Pool	Actual Respondent Pool	Mean Weeks Working
Male	Hispanic	1000	394	40.0
	Black	1613	689	34.0
	Non-black/non-Hispanic	3790	1251	42.1
Female	Hispanic	1002	477	30.7
	Black	1561	849	29.5
	Non-black/non-Hispanic	3720	1457	35.8

Table 4.41.1 Average Number of Weeks Working Per Year for RespondentsWho Provided Data in All Years from 1979 to 19981

Notes: The average weeks variable was calculated by summing the NLSY79 work history variable WORKCXX over 18 rounds of data and then dividing the result by 18. Only individuals who did not have missing values were used.

¹ Data for 2000 have been collected but processing was not complete at the printing of this guide. These numbers will be updated in the next edition.

	Number	r of Resp	ondents	We	eks Worl	king	N	lot Worki	ng	We	eks Miss	ing
Year	Hisp.	Black	NB/NH	Hisp.	Black	NB/NH	Hisp.	Black	NB/NH	Hisp.	Black	NB/NH
				-		Males	_					
1979	766	1277	3051	24.0	18.4	24.1	26.1	31.6	25.9	1.9	2.0	2.0
1980	707	1212	2897	28.9	22.7	28.3	22.2	28.3	22.8	0.9	1.0	0.9
1981	868	1440	3323	29.1	23.2	29.8	22.7	28.6	22.0	0.2	0.2	0.2
1982	935	1539	3614	31.5	24.5	31.5	20.3	27.3	20.3	0.2	0.2	0.2
1983	945	1545	3658	31.9	24.8	32.8	19.9	27.1	19.0	0.1	0.1	0.2
1984	943	1535	3577	33.3	27.1	34.8	18.6	24.8	17.1	0.1	0.0	0.1
1985	912	1419	3040	36.7	31.4	38.7	15.1	20.6	13.3	0.2	0.1	0.1
1986	886	1386	2965	38.7	33.9	40.4	13.2	18.0	11.5	0.1	0.1	0.1
1987	848	1362	2906	40.0	35.2	41.9	11.9	16.6	9.9	0.1	0.2	0.3
1988	850	1377	2926	40.9	36.5	43.1	10.6	15.1	8.6	0.4	0.4	0.3
1989	878	1386	2932	41.6	37.6	44.2	9.8	13.9	7.4	0.6	0.5	0.3
1990	856	1365	2891	42.2	37.8	44.6	9.3	13.6	6.9	0.5	0.6	0.6
1991	871	1345	2255	43.2	37.4	45.2	8.4	14.0	6.2	0.5	0.6	0.6
1992	876	1353	2252	42.0	36.6	44.6	9.7	15.1	7.2	0.3	0.3	0.1
1993	859	1365	2240	41.6	36.5	45.1	10.1	15.4	6.7	0.4	0.2	0.2
1994	848	1345	2218	41.5	37.0	45.5	10.1	14.6	6.3	0.4	0.4	0.2
1996	810	1312	2153	42.2	38.8	46.5	8.2	11.6	4.4	1.6	1.7	1.1
1998	837	1301	2155	40.7	38.5	45.6	11.3	13.5	6.4	0.2	0.2	0.0
_						Females						
1979	781	1244	3054	17.5	14.1	22.5	32.0	35.5	27.4	2.5	2.3	2.1
1980	744	1201	2930	22.2	17.6	26.5	28.8	33.4	24.7	1.0	1.0	0.8
1981	878	1401	3328	24.0	19.4	27.6	27.9	32.5	24.3	0.1	0.1	0.1
1982	947	1515	3573	25.9	20.3	28.9	26.0	31.6	23.0	0.1	0.1	0.1
1983	962	1519	3592	25.9	20.9	30.1	26.1	30.9	21.8	0.0	0.1	0.0
1984	954	1513	3547	27.3	23.2	31.3	24.7	28.8	20.7	0.0	0.0	0.0
1985	909	1424	3190	28.6	26.2	34.2	23.4	25.7	17.8	0.0	0.0	0.0
1986	879	1404	3135	29.8	28.7	34.6	22.2	23.3	17.3	0.0	0.1	0.0
1987	862	1388	3119	30.0	30.8	35.2	21.8	21.1	16.7	0.2	0.2	0.2
1988	848	1365	3099	31.4	31.7	36.0	20.3	20.0	15.8	0.2	0.3	0.2
1989	889	1384	3136	31.9	32.7	36.5	19.8	19.0	15.2	0.3	0.3	0.3
1990	873	1354	3097	32.8	32.8	36.3	18.7	18.6	15.2	0.5	0.6	0.5
1991	891	1354	2302	32.5	33.1	37.3	18.9	18.5	14.3	0.7	0.4	0.3
1992	896	1346	2293	32.6	33.0	37.5	19.3	18.9	14.4	0.1	0.1	0.1
1993	901	1357	2289	33.6	33.3	37.4	18.4	18.6	14.5	0.0	0.1	0.1
1994	875	1355	2250	33.8	33.0	37.7	17.9	18.7	14.1	0.3	0.3	0.2
1996	847	1330	2184	34.6	35.1	38.3	17.0	16.4	13.4	0.4	0.6	0.4
1998	864	1344	2220	36.1	37.6	38.5	15.9	14.4	13.5	0.1	0.3	0.0

Table 4.41.2 Number of Weeks Respondents Are Working, Not Working, and Unknown from NLSY79 1998 Work History CD-ROM¹

Notes: NB/NH denotes non-black non-Hispanic. The average weeks variable was taken directly from the NLSY79 Work History Variable WORKCXX. The missing weeks variable was calculated by the equation (MISSCXX /100) * 52. Weeks not working are the residual from 52 weeks (i.e. 52 - weeks working - weeks missing). Sex and race variables are taken directly from the Work History CD-ROM.

¹ Data for 2000 have been collected but processing was not complete at the printing of this guide. These numbers will be updated in the next edition.

Chapter 5: Item Nonresponse

This section examines and quantifies the extent of missing data, formally called item nonresponse, in NLSY79 surveys. To provide readers with a detailed view of this problem, four surveys are analyzed. Nonresponse rates are examined first in the 1979 survey and then in the surveys that occur at five-year intervals (1984, 1989, and 1994). These years were chosen to capture the major changes in the NLSY79 survey. Examining the 1979 survey shows the initial levels of nonresponse. Examining the 1984 survey shows the amount of nonresponse in the survey just before one part of the respondent pool was dropped for funding reasons. The 1989 data show nonresponse after the first set of NLSY79 respondents were dropped. The 1994 data are representative of what occurs after users and interviewers are switched from paper and pencil interviewing (PAPI) to computer assisted personal interviewing (CAPI).

This section focuses on the three types of missing data: refusals, invalid skips, and don't knows. Overall, the section shows that in these four NLSY79 surveys, 12.5 million questions were asked. Out of all the questions asked to respondents, about 1.6 percent do not have valid answers and are missing data. Of the three missing data categories, the majority of the missing data, comprising one percent of all questions, are invalid skips.

5.1 Introduction

Missing data, or nonresponse, happens in a number of ways in the NLSY79 survey. First, a number of respondents do not participate at all, causing all information in that particular survey to be missing. The extent of non-participation in each survey round is quantified in Chapter 2 and the particular reason by the created variable labeled "Reason for Noninterview." Readers interested in understanding how many individuals refuse to participate should look at this chapter.

A second reason missing data occurs is that respondents do not provide a valid answer to a question. When this happens, interviewers make a determination about whether to mark the answer as a refusal or don't know value. Users should be cautioned that the assignment of refusals and don't knows is likely to vary across interviewers. Moreover, some respondents may believe it is impolite to refuse a question and decline to answer by saying they do not know. Hence, whether a question is marked either a refusal or a don't know is somewhat arbitrary.

The last major way missing data occurs is when the interviewer incorrectly follows the survey instrument's flow. Incorrect flows result in some respondents being skipped over a set of questions that should be answered while others answer questions that they should not have been asked. NLS data archivists have removed from the data most of the extraneous question responses. While extra information can be removed, missing data is not imputed in the NLSY79 surveys. Missing data caused by this reason is flagged with a special "invalid skip" code. Readers should note that the number of invalid skips drops precipitously beginning in 1993 with the introduction of CAPI. Nevertheless, invalid skips are still

possible in CAPI data. If the CAPI survey contains a programming mistake, the instrument could incorrectly sequence a respondent. When these errors are found, the CAPI survey is patched in the field to prevent further invalid skips but the incorrect cases are not refielded.

All missing data are clearly flagged in the NLSY79 data set. Five negative numbers are used to indicate to user that the variable does not contain useful information. The five values are (-1) refusal, (-2) don't know, (-3) invalid skip, (-4) valid skip, and (-5) noninterview. These five numbers are reserved as missing value flags and, with a few exceptions (see appendix 5 in the *NLSY79 Codebook Supplement*), are rarely used in the NLSY79 for valid data values.

In the tables that follow, only variables in a given survey year that were filled in by either a respondent or an interviewer are analyzed. Thus all created, machine check, date and time stamp, and variables generated in data post-processing are excluded from the analysis.

This section is not the only research on the extent of missing data in the NLS. Olsen (1992) investigated the effect of switching from PAPI to CAPI interviewing. His research shows fewer interviewer errors occur from navigating the instrument as well as fewer don't knows in the CAPI survey. More importantly, CAPI respondents appeared more willing to reveal sensitive material in the alcohol use section. Mott (1985, 1984, and 1983) examines the NLSY79's fertility data. In these reports, he examines the 1982 and 1983 surveys and finds very low refusal rates for the data in general. However, by shifting to a confidential abortion reporting method, the willingness to respond greatly increases. Mott (1998) examines the amount of missing data about the children of NLSY79 females. He finds that Hispanics and, to a smaller extent blacks, have a much higher probability of not finishing the child assessments after starting the interview.

The rest of this chapter contains three parts. The next part examines which sections of the NLSY79 have high nonresponse rates. Then, responses are examined to see how many times individuals do not respond to questions. The last section examines which particular questions in sections with high nonresponse rates are causing problems.

5.2 Item Nonresponse by Section

Which parts of the NLSY79 survey have the highest rates of nonresponse? This section examines the 1979, 1984, 1989, and 1994 surveys and shows which portions have the most missing data. The extent of nonresponse is shown for each year by tables 5.2.1 to 5.2.4 and examines every survey section. The first column of the tables contains the section names within the survey. The second column shows the total number of questions that all respondents and all interviewers should have answered in that section. This number is determined by first calculating within each section the number of questions each respondent

should answer. A question is considered answerable if it does not have a valid skip (-4) or non-interview (-5) as its answer. A total for the section is obtained by summing up the answers for all NLSY79 respondents.

The third (don't know), fourth (refusal), and fifth (invalid skip) columns show the total number of nonresponses found in each section. Columns six, seven, and eight show the same information except in percentage form. The ninth column shows the total percentage of questions missed and is the sum of the previous three percentages. The last column, labeled rank, shows which sections have the most (closer to 1) and least (further from 1) amount of nonresponse.

The bottom row of each table combines the information and shows totals. For example, the bottom of the "Number Questions Asked" column in the 1979 survey shows that almost four million questions (3,975,146) were expected to be filled in by respondents or interviewers. While the 1979 survey contained the most questions, the other years are not far behind. In 1984, there were 3,067,473 questions, while in 1989 and 1994 there were 1,793,721 and 3,669,260 questions respectively. Readers are cautioned that each year of NLSY79 data contains far more variables since the tables exclude questions labeled machine checks, date and time stamp, and questions with valid skip or noninterview data flags.

The four tables show that the overall rate of missing data has dropped steadily over time. In 1979, 2.7 percent of the questions in the survey were not answered. This number drops to 1.9 percent in 1984 and then falls to 0.9 percent in 1989 and 0.7 percent in 1994. Hence, nonresponse problems are less of a concern in later rounds since it appears the most willing respondents continue to participate in the survey.

Combining the data from all sections in all four tables shows the majority of nonresponse is caused by invalid skips. The four surveys asked a total of 12.5 million questions. Of these questions, almost 125,000, or one percent, were invalid skips; 69,000, or half of one percent, were don't knows; and only 11,000 or 0.08 percent were refusals. This shows that in these four surveys the primary nonresponse problem is invalid skips, not refusals or don't knows.

Examining the four tables over time shows a steady decrease in the amount of data missing due to invalid skips. In 1979, invalid skips comprised 2.1 percent of the questions asked. This number dropped sharply to 1.2 percent by 1984 and then down to 0.25 percent by 1989. Analysis indicated that CAPI almost completely eliminated invalid skips; only 57 questions out of almost 3.7 million were incorrectly skipped.

While invalid skips fall over time, the percentage of refusals increases and the percentage of don't knows stays steady. Don't knows comprise slightly more than half of a percent of all questions asked in each of the four surveys. Specifically, don't knows comprised 0.6 percent in 1979, 0.6 percent in 1984, 0.5

percent in 1989, and 0.5 percent in 1994. Refusals steadily increase over time and comprise 0.01 percent in 1979, 0.07 percent in 1984, 0.10 percent in 1989, and 0.16 percent in 1994.

The last column, labeled rank, shows that missing data are not confined to a single section or area of the survey. Table 5.2.1 shows that in 1979 the work experience section, with 14.5 percent of the questions missing valid data, had the most problems. Fourteen percent of all questions asked in this section are labeled as invalid skips and only 0.5 percent of the questions were either refusals or don't knows. Military experience, the second most problematic section had almost half the rate of missing data (7.8 percent) as work experience. The table shows the problem of invalid skips is not related to subject matter since the section (rank 21 out of 21) with least problems, titled "on jobs," also focuses on labor market issues, like work experience.

Section Name	# Questions Asked	# Don't Knows	# Refused	# Invalid Skipped	% Don't Knows	% Refused	% Invalid Skipped	Total % Missed	Rank
Family Background	660803	6196	90	12292	0.94%	0.01%	1.86%	2.81%	7
Marital Status	32995	131	25	467	0.40%	0.08%	1.42%	1.89%	14
Fertility	82141	679	23	624	0.83%	0.03%	0.76%	1.61%	17
Schooling	402134	994	14	5592	0.25%	0.00%	1.39%	1.64%	16
Pay	211504	22	0	3482	0.01%	0.00%	1.65%	1.66%	15
World of Work	220185	2220	31	2883	1.01%	0.01%	1.31%	2.33%	10
Military	145619	491	24	10885	0.34%	0.02%	7.47%	7.83%	2
CPS	396697	862	8	10969	0.22%	0.00%	2.77%	2.98%	5
On Jobs	230982	135	2	903	0.06%	0.00%	0.39%	0.45%	21
Employer Supp.	291836	2009	69	3575	0.69%	0.02%	1.23%	1.94%	13
Last Job	44504	31	0	261	0.07%	0.00%	0.59%	0.66%	20
Work Experience	67695	288	15	9476	0.43%	0.02%	14.00%	14.45%	1
Gov. Training	36728	62	28	2124	0.17%	0.08%	5.78%	6.03%	3
Other Training	103662	52	0	2936	0.05%	0.00%	2.83%	2.88%	6
Not at Work	90768	79	7	5019	0.09%	0.01%	5.53%	5.62%	4
Health	67869	358	2	545	0.53%	0.00%	0.80%	1.33%	18
Significant Others	58816	669	0	585	1.14%	0.00%	0.99%	2.13%	12
Residences	52845	94	7	1029	0.18%	0.01%	1.95%	2.14%	11
Rotter Scale	202976	1277	15	521	0.63%	0.01%	0.26%	0.89%	19
Income & Assets	321685	1667	216	6813	0.52%	0.07%	2.12%	2.70%	8
Expectations	252702	3824	20	2092	1.51%	0.01%	0.83%	2.35%	9
Total	3975146	22140	596	83073	0.56%	0.01%	2.09%	2.66%	_

Table 5.2.1 Extent of Refusals, Don't Knows & Invalid Skips in 1979 NLSY79 Survey

While the "on jobs" section of the survey consistently has the least problems in these four surveys, the section with the most problems changes. Table 5.2.2, which examines the 1984 survey, shows the most problems in the "Fertility" section. Of the almost half-million questions asked in the fertility section, 5.6 percent contain missing data. While the majority of problems (3.4 percent) were due to invalid skips, a

surprisingly large 2 percent of the missing responses are don't knows. The second most problematic section in the 1984 survey was "Drug Use" where 2.7 percent of the questions have missing data. Like "Fertility," the major portion of the problem is invalid skips (1.8 percent), but don't knows (0.8 percent) also comprise a significant share. Interestingly, refusals comprise only 0.1 percent, a relatively small proportion for a sensitive topic, suggesting that some of the don't knows were hidden refusals.

Section Name	# Questions Asked	# Don't Knows	# Refused	# Invalid Skipped	% Don't Knows	% Refused	% Invalid Skipped	Total % Missed	Rank
Calendar	88462	8	0	4	0.01%	0.00%	0.00%	0.01%	15
Marital Status	50206	273	18	561	0.54%	0.04%	1.12%	1.70%	4
Schooling	324139	1031	469	2164	0.32%	0.14%	0.67%	1.13%	9
Military	123126	337	41	1352	0.27%	0.03%	1.10%	1.41%	7
CPS	333267	467	5	4270	0.14%	0.00%	1.28%	1.42%	6
On Jobs	140382	0	0	17	0.00%	0.00%	0.01%	0.01%	16
Gaps in Jobs	120601	15	0	175	0.01%	0.00%	0.15%	0.16%	13
Gov. Training	31226	38	0	59	0.12%	0.00%	0.19%	0.31%	12
Other Training	45002	7	0	736	0.02%	0.00%	1.64%	1.65%	5
Fertility	462288	9141	891	15739	1.98%	0.19%	3.40%	5.57%	1
Child Care	114317	201	13	1157	0.18%	0.01%	1.01%	1.20%	8
Health	52866	35	3	29	0.07%	0.01%	0.05%	0.13%	14
Alcohol	314511	33	47	2234	0.01%	0.01%	0.71%	0.74%	11
Drug Use	414007	3464	300	7454	0.84%	0.07%	1.80%	2.71%	2
Income & Assets	439646	2945	241	938	0.67%	0.05%	0.21%	0.94%	10
Attitudes	13427	214	2	29	1.59%	0.01%	0.22%	1.82%	3
Total	3067473	18209	2030	36918	0.59%	0.07%	1.20%	1.86%	—

Table 5.2.2 Extent of Refusals, Don't Knows & Invalid Skips in 1984 NLSY79 Survey

Table 5.2.3 shows the amount of nonresponse in the 1989 survey. The most problematic section is income, missing data in 1.3 percent of its questions, with the CPS's (Current Population Survey) 1.2 percent rate in a close second. Unlike earlier years, the major missing data problem in both the income (1 percent) and CPS (0.8 percent) sections are don't knows, not invalid skips (0.1 percent income and 0.4 percent CPS).

Section Name	# Questions Asked	# Don't Knows	# Refused	# Invalid Skipped	% Don't Knows	% Refused	% Invalid Skipped	Total % Missed	Rank
Intro.	14647	20	1	41	0.14%	0.01%	0.28%	0.42%	7
Marital	86563	372	121	450	0.43%	0.14%	0.52%	1.09%	3
Schooling	76999	179	39	217	0.23%	0.05%	0.28%	0.56%	6
Military	33579	1	1	40	0.00%	0.00%	0.12%	0.13%	10
CPS	406265	3320	52	1650	0.82%	0.01%	0.41%	1.24%	2
On Jobs	39749	0	0	1	0.00%	0.00%	0.00%	0.00%	12
Gaps	91565	91	1	894	0.10%	0.00%	0.98%	1.08%	4
Gov. Training	49657	118	35	233	0.24%	0.07%	0.47%	0.78%	5
Fertility	152546	6	35	92	0.00%	0.02%	0.06%	0.09%	11
Health	154024	120	74	168	0.08%	0.05%	0.11%	0.24%	9
Alcohol	217441	74	400	201	0.03%	0.18%	0.09%	0.31%	8
Income	470686	4761	1124	439	1.01%	0.24%	0.09%	1.34%	1
Total	1793721	9062	1883	4426	0.51%	0.10%	0.25%	0.86%	_

Table 5.2.3 Extent of Refusals	, Don't Knows & Invalid Sk	ips in 1989 NLSY79 Survey
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Table 5.2.4 shows that the most problematic area in the 1994 survey includes the asset questions, which are missing 2.5 percent of their answers (75 percent of those missing being don't knows). The second most problematic area includes income questions, which are missing 1.3 percent of their answers. While in the three previous surveys refusal rates were not an issue, the 1994 survey shows refusals are becoming significant. Slightly more than half a percent (0.6 percent) of the asset section questions and more than one fifth of a percent (0.2 percent) of the income section questions were refused.

Section Name	# Questions Asked	# Don't Knows	# Refused	# Invalid Skipped	% Don't Knows	% Refused	% Invalid Skipped	Total % Missed	Rank
Intro.	36251	62	14	0	0.17%	0.04%	0.00%	0.21%	12
Marital Status	137540	1522	193	0	1.11%	0.14%	0.00%	1.25%	3
School	60166	302	2	0	0.50%	0.00%	0.00%	0.51%	7
Military	27372	6	1	0	0.02%	0.00%	0.00%	0.03%	15
CPS	269452	28	9	0	0.01%	0.00%	0.00%	0.01%	17
On Jobs	79567	6	7	0	0.01%	0.01%	0.00%	0.02%	16
Employ. Suppl.	1060679	7092	1342	8	0.67%	0.13%	0.00%	0.80%	5
Training	194147	246	29	47	0.13%	0.01%	0.02%	0.17%	13
Fertility	450871	1859	763	0	0.41%	0.17%	0.00%	0.58%	6
Child Care	26453	109	12	0	0.41%	0.05%	0.00%	0.46%	9
Relationship	81477	285	113	0	0.35%	0.14%	0.00%	0.49%	8
Health	282702	623	199	0	0.22%	0.07%	0.00%	0.29%	11
Alcohol	164663	46	61	0	0.03%	0.04%	0.00%	0.06%	14
Income	305693	3176	672	1	1.04%	0.22%	0.00%	1.26%	2
Prog. Participation	118305	297	63	0	0.25%	0.05%	0.00%	0.30%	10
Assets	169301	3239	930	1	1.91%	0.55%	0.00%	2.46%	1
Drugs	204621	772	1626	0	0.38%	0.79%	0.00%	1.17%	4
Total	3669260	19670	6036	57	0.54%	0.16%	0.00%	0.70%	—

Table 5.2.4 Extent of Refusals, Don't Knows & Invalid Skips in 1994 NLSY79 Survey

5.3 Item Nonresponse by Respondents

This section provides details on the amount of missing data associated with each respondent. Each table in this section shows the number of respondents who are missing data in one of the four surveys. The tables are split into two parts. The left hand part, columns one to four, shows the total number of questions that have missing data for each group of respondents. The right hand part, columns five to nine, shows the percentage of questions that have missing data.

The top line of table 5.3.1 shows that in the 1979 survey, 12,527 respondents never refused to answer questions. While refusals are quite rare in this survey round, don't knows and incorrect skips are quite frequent. The top line shows that only 5,084 respondents had zero don't know responses and only 2,347 respondents were sent through the entire questionnaire without any sequencing errors. Subtracting these numbers from the 12,686 total respondents means that 60 percent, or 7,602 respondents, stated they did not know the answer to at least one question and 81. 5 percent, or 10,339 respondents, were incorrectly skipped somewhere in that questionnaire.

The right hand side of Table 5.3.1, which examines the percentage of questions missing data, shows a similar picture. Refusal rates are relatively low. There are 12,620 respondents who refused less than one percent of their questions, which means only 66 respondents refused one percent or more of the questions they were expected to answer. Thirty-five percent, or 8,185 respondents, answered don't know to less than one percent of their questions. Again, the largest group were respondents who were incorrectly skipped over questions. Only 4,313 respondents were incorrectly skipped over less than one percent of the respondents were illegally skipped over one percent or more of their questions and 227 were skipped over more than 10 percent.

Refusal rates have increased steadily over time even though the more difficult respondents have presumably left the survey. Table 5.3.2, which examines the 1984 survey, shows an increase over the 1979 refusal rates. While the number of respondents answering the survey is shrinking, the number refusing to answer questions is increasing. For example, while in 1979 only 10 respondents refused to answer more than 10 questions, in 1984 there were 41 respondents. This pattern of increase is evident in Table 5.3.3, which examines 1989, and Table 5.3.4, which examines 1994. By 1994, there were 138 respondents who refused to answer more than 10 questions. Increasing refusal rates are also seen in the percentage side of the table. In 1979, only 43 respondents refused to answer one percent of the questions they were asked. This increased in subsequent surveys to 207 respondents in 1984, 193 respondents in 1989, and 246 respondents in 1994.

Don't know rates have also risen over time. In the 1979 survey, 8,185 respondents had less than one percent of their questions labeled as don't knows. This number drops in 1984 to 7,003 respondents and

further drops to 6,423 in 1989 and 5,942 in 1994. While rates have risen, relatively few individuals have high levels of don't knows. In 1979, only 68 respondents didn't know the answer to more than five percent of the questions they were asked. This number falls to 19 respondents in 1984 and then rises to 66 in 1989 before falling back to 46 respondents in 1994.

While don't know and refusal rates have risen, incorrect skip problems have clearly shrunk over time. In 1979, there were only 2,347 respondents who were correctly sequenced through the entire survey. In 1984, this number rises to 7,802 respondents, followed by a rise to 9,334 respondents in 1989. In 1994, almost every respondent was correctly sequenced. Only 57 respondents were incorrectly skipped through part of the survey and each respondent was only incorrectly skipped in a single question.

	Number of Respondents				Number of Respondents		
Number of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over	Percent of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over
0	12527	5084	2347	0%	12620	8185	4313
1	91	2974	1897	1%	43	3247	3421
2	26	1723	1393	2%	7	773	1733
3	13	1016	1158	3%	5	264	989
4	5	629	838	4%	5	101	621
5	2	376	596	5%	0	48	397
6	1	228	489	6%	2	27	312
7	3	173	502	7%	1	18	278
8	3	131	420	8%	1	6	206
9	1	84	340	9%	0	7	118
10	4	57	308	10%	0	2	71
> 10	10	211	2398	> 10%	2	8	227

 Table 5.3.1 Number of Respondents with Missing Data in 1979 Survey

	Nu	mber of Res	pondents		Number of Respondents			
Number of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over	Percent of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over	
0	11222	4549	7802	0%	11749	7003	8956	
1	610	3012	1289	1%	207	3807	1267	
2	73	1901	622	2%	44	944	674	
3	44	1136	413	3%	13	213	284	
4	38	668	252	4%	15	62	133	
5	13	345	369	5%	13	21	84	
6	6	177	174	6%	10	11	139	
7	1	108	93	7%	4	2	137	
8	7	63	115	8%	5	3	107	
9	4	38	73	9%	2	0	68	
10	10	28	64	10%	2	3	36	
> 10	41	44	803	> 10%	5	0	184	

Table 5.3.2 Number of Respondents with Missing Data in 1984 Survey

Note: Not included in this table are 617 respondents who did not answer the survey.

Table 5.3.3 Number of Respondents with Missing Data in 1989 Survey

	Number of Respondents				Number of Respondents		
Number of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over	Percent of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over
0	10221	6135	9334	0%	10250	6423	9461
1	171	2517	781	1%	193	3221	843
2	59	1036	189	2%	58	561	51
3	37	395	35	3%	35	219	69
4	20	194	20	4%	13	76	86
5	21	131	16	5%	10	39	24
6	7	75	7	6%	4	24	10
7	10	34	125	7%	4	17	10
8	10	24	18	8%	3	1	5
9	4	10	9	9%	3	3	9
10	7	6	3	10%	3	8	3
> 10	38	48	68	> 10%	29	13	34

Note: Not included in this table are 2,081 respondents who did not answer the survey.

	Nu	mber of Res	pondents		Number of Respondents			
Number of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over	Percent of Questions	Refused	Didn't Know	Was Incorrectly Skipped Over	
0	7168	3559	8832	0%	8409	5942	8889	
1	1129	1780	57	1%	246	2060	0	
2	191	1082	0	2%	81	558	0	
3	87	693	0	3%	41	165	0	
4	41	443	0	4%	31	79	0	
5	28	334	0	5%	20	39	0	
6	29	232	0	6%	19	16	0	
7	22	171	0	7%	6	15	0	
8	21	115	0	8%	10	4	0	
9	17	105	0	9%	9	2	0	
10	18	72	0	10%	4	2	0	
> 10	138	303	0	> 10%	13	7	0	

 Table 5.3.4 Number of Respondents with Missing Data in 1994 Survey

Note: Not included in this table are 3,797 respondents who did not answer the survey.

5.4 Item Nonresponse within Problem Sections

How much missing data are associated with particular questions? This part of the chapter provides readers with an in-depth view of the questions within survey sections having a high amount of missing data. Like the previous parts, this section provides tables for four survey years. The first table (Table 5.4.1) examines questions from the 1979 survey's "Work Experience" section. This section has more missing data (14.5 percent) than any other 1979 survey section. The second set of tables (Tables 5.4.2 through 5.4.6) examines the most problematic section of the 1984 survey, "Fertility and Abortion." The third set of tables (Tables 5.4.7 and 5.4.8) examines the most problematic 1989 survey section, "Income and Assets." Since the 1994 "Income and Asset" section again ranked first in missing data, the last set of tables (Tables 5.4.9 and 5.4.10) substitutes the "Drug and Alcohol Use Supplements" given the high degree of research interest in understanding nonresponse in these sections.

To ensure the sets of tables are not overwhelming, all sections, like fertility, that could be naturally divided are split. Additionally, only the most important question or questions with high rates of nonresponse are shown.

Table 5.4.1, which examines the amount of missing data in the 1979 survey, shows the highest amount of missing data are associated with a pair of retrospective questions that asked respondents to remember what happened two years earlier. Interviewers incorrectly skipped slightly less than 1,750 respondents over R01150., weeks worked in 1977, and R01153., hours worked per week in 1977. Examining the 1979 questionnaire shows that these questions appear at the bottom of a page. Prior to these questions is a fairly

complicated half page of instructions and questions that the interviewer must read, understand, and partially speak. It seems likely that many interviewers did not understand the instructions and skipped to the next page.

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R01150.	Weeks Work in 1977	1735	11	1
R01151.	Weeks Work in 1976	418	18	1
R01152.	Weeks Work in 1975	240	11	0
R01153.	Hours/Week Work in 1977	1749	13	0
R01154.	Hours/Week Work in 1976	459	16	0
R01165.	Industry of 1 st Job after School	628	4	1
R01166.	Occupation at 1 st Job after School	627	3	1
R01167.	Hours/Week Work at 1st Job after School	631	6	1
R01168.	Hours/Day at 1 st Job after School	632	6	1
R01169.	Rate of Pay at 1 st Job after School	632	32	2

Table 5.4.1 Amount of Missing Data Per Question in the Work Experience Section,1979 Survey

Tables 5.4.2–5.4.6, which examine the "Fertility" section, show a much lower number of invalid skips in all parts except in the abortion questions. While invalid skips do not reach the level seen in table 5.4.1, on average 190 female respondents were not asked each abortion question (190 is an average from all abortion questions, not just those shown in the tables). The table also shows a number of other trends. First, respondents have higher levels of don't know answers the more precise the question being asked. For example, in Table 5.4.2, when males were asked the date of birth of their first child, only one did not know the year, three did not know the month and 10 did not know the day. This phenomena is most clearly seen in table 5.4.5, which shows the year and month of the respondent's first sexual encounter. Only 43 respondents did not know the year, but 1,410 respondents did not know the month. This problem with dates is also seen in the abortion data where only four respondents did not know the year when they had their first abortion, but 13 did not know the month.

Refusal rates in the "Fertility" section are quite low except for a number of key questions. Asking the number of times they had sex in the last month elicited high rates of refusal for males and females. This question elicited 167 male and 135 female refusals. Interestingly, most individuals were willing to answer if they ever had sex since only 45 males and 54 females refused to answer these questions. Birth control questions did not have exceptionally high rates of refusal. Seventeen female respondents and no males refused to answer the birth control questions. Table 5.4.6 shows that 28 females refused to answer if they ever had an abortion and 28 more refused to state if they dropped out of school before they terminated the pregnancy.

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R13017.	Ever Had Any Children	0	3	0
R13019.	Month Birth Child#1 Born	41	3	0
R13020.	Day Birth Child#1 Born	45	10	0
R13021.	Year Birth Child#1 Born	39	1	0
R13022.	Sex of Child#1 Born	3	0	0
R13115.	Total #Children Expect to Have	12	45	3
R13117.	#Years Expect Have 1st/Next Child	22	120	0
R13118.	Had Any Children/Expecting	0	7	0
R13119.	Current Pregnancy Planned	131	0	0
R13121.	Ever Had Sexual Intercourse	12	0	45
R13122.	Age @First Sexual Intercourse	28	19	23
R13123.	#Times Sexual Intercourse Past Month	11	68	167
R13124.	Is Partner Now Pregnant	0	1	0
R13125.	Use Any Birth Control During Last Month	15	2	0
R13126.	#Times Try Prevent Pregnancy	65	0	0
R13127.–R13141.	Method of Birth Control	16	0	0
R13142.	Ever Have a Sex Education Course	10	0	12
R13148.	Month Took Sex-Ed Course	73	564	0
R13149.	Year Took Sex-Ed Course	36	58	0
R13150.	Time When Pregnancy Most Likely	19	1480	20

Table 5.4.2 Amount of Missing Data Per Question in Male Fertility Section,1984 Survey

Table 5.4.3 Amount of Missing Data Per Question in Female Fertility Section,1984 Survey

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R13191.	#Pregnancies	8	0	0
R13251.	Use Any Birth Control before Preg#1	18	0	1
R13254.	Want Be Pregnant before Preg#1	20	0	0
R13255.	Husband/Partner Want Preg#1	19	20	0
R13283.	Get Prenatal Care Preg#1	57	0	0
R13286.	Frequency Alcohol Use Preg#1	58	0	0
R13288.	#Cigarettes Smoked Preg#1	56	0	0
R13297.	X-Rays Taken Preg#1	57	0	0
R13302.	Sonogram Preg#1	57	6	0
R13358.	Amniocentesis Preg#1	57	0	0
R13411.	Took Vitamins Preg#1	57	0	0
R13443.	C-Section Child#1 Born	52	0	0
R13445.	Weight at Delivery, Preg#1	53	5	1
R13446.	Weight before Preg#1	51	5	1
R13449.	Length Child#1 Born at Birth	53	20	0
R13667.	Weight of Child#1 @Birth Lbs	25	6	0

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R13670.	Child#1 Breastfed	27	0	0
R13672.	Month Age Child#1 Breast Fed Ended	27	1	0
R13674.	Month Age Child#1 Formula Fed	38	3	0
R13693.	Wk Age Child#1 Formula Fed Ended	57	0	0
R13694.	Month Age Child#1 Formula Fed Ended	57	6	0
R13696.	Months Age Child#1 – Cow's Milk	81	10	0
R13698.	Months Age Child#1 – Solid Food	86	10	0

Table 5.4.4 Amount of Missing Data Per Question in Feeding Part of Fertility Section,1984 Survey

Table 5.4.5 Amount of Missing Data Per Question in Child Part of Fertility Section,1984 Survey

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R13791.	Age Had 1 st Menstrual Period	8	14	22
R13792.	Year 1 st Menstrual Period	0	7	0
R13793.	Month Had 1 st Menstrual Period	17	2207	1
R13794.	R Ever Been Pregnant	0	1	0
R13795.	Ever Had Sexual Intercourse	4	0	54
R13796.	Age First Sexual Intercourse	5	26	78
R13797.	Year 1 st Sexual Intercourse	0	43	66
R13798.	Month Sexual Intercourse 1st Time	19	1410	75
R13799.	#Times Sexual Intercourse Past Month	9	104	135
R13802.	#Times Try Prevent Pregnant Past Month	17	0	2

Table 5.4.6 Amount of Missing Data Per Question in Abortion Questions of FertilitySection, 1984 Survey

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R13827.	Ever Had An Abortion	135	0	28
R13828.	# of Abortions	143	0	0
R13830.	Year of 1 st Reported Abortion	196	4	0
R13837.	Drop out School #1 Pregnant	155	0	28
R13839.	Year Left School 1 st Time Pregnant	164	0	0
R13841.	Year Return School Time#1 after Pregnant	258	0	0

Tables 5.4.7 and 5.4.8 examine the "Income & Assets" section of the 1989 survey. While invalid skips are relatively rare in this section, refusals and don't know answers are fairly prevalent. The question with the highest amount of missing income data is R29822., which asks how much income was earned by other adults living in the household who were related to the respondent. While the previous questions showed that most respondents knew the type of income received by these family members, 958 could not come up with a specific amount. The second most problematic question with 11 invalid skips, 155 don't knows,

and 113 refusals was R29714., which asked the respondent how much they earned from wages, salary, and tips. Other questions with high numbers of don't knows are R29813., which asked about the amount of money received from other sources like interest and dividends, R29825., which asks about a partner's income, and R29827., which asks the number of exemptions used when filing a federal tax return.

The asset table (Table 5.4.8) also shows invalid skips are rare but don't know and refusal rates are not. Surprisingly, one of the questions with the highest amount of missing data (315 missing answers) asks, "how much is your car worth (R29852.)?" Another question missing many observations asks the amount of the respondent's savings (R29835.). While the car worth question primarily elicits don't knows, the savings question resulted in 160 refusals. Three other questions elicited high numbers of don't knows: value of stocks and bonds (R29837.) – 219 don't knows; amount taken out of savings last year (R29842.) – 222 don't knows; and the market value of other items such as jewelry (R29854.) – 151 don't knows.

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R29714.	Amount Rec from Wages/Salary/Tips	11	155	113
R29715.	In 1988 Receive Income from Own Business	1	0	11
R29717.	How Much Did R Receive after Expenses	6	49	23
R29732.	Amount Rec'd Per Week from Unemployment	0	5	1
R29736.	Amount Sp Rec'd 1988 from Wages	16	17	70
R29754.	How Much Did Sp Receive from Unemployment	8	12	0
R29758.	R/Spouse Rec'd Money for Child Support	1	1	10
R29759.	Amount R/Spouse Rec'd Child Support	2	14	2
R29760.	R/Spouse Rec'd AFDC Payments	0	4	9
R29774.	R/Spouse Rec'd Food Stamps	0	2	10
R29788.	R/Spouse Rec'd SSI/Public Assistance	0	4	9
R29808.	Rec'd Veteran Benefits	1	1	10
R29812.	R/Spouse Rec'd Money from Oth So	0	2	16
R29822.	Income Rec'd by Adults Related T	7	958	8
R29825.	Total Income Rec'd before Deduct	2	200	4
R29826.	Sp File Federal Income Tax R	0	2	13
R29827.	R'S Filing Status on Federal Ret	11	8	2
R29828.	Exemptions Filed on 1988 Federal Tax	62	92	3

Table 5.4.7 Amount of Missing Data Per Question in Income Section, 1989 Survey

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R29831.	Amount Property Selling for on Today	5	53	10
R29832.	Amount R Owes on Property	4	85	25
R29833.	Amount Other Debt R Owes on Property	12	26	27
R29835.	Amount of Savings	7	166	160
R29837.	Current Market Value of Stocks	2	219	23
R29838.	R/Spouse Have Rights to Estate	2	3	18
R29839.	Total Value of Estate	3	90	6
R29840.	Put Money in/out of Savings	1	3	28
R29841.	How Much More Money Put in	6	110	53
R29842.	How Much More Money Take out	5	222	21
R29843.	R Have Business Investment	0	1	12
R29844.	R Have Investment in a Farm	4	0	0
R29847.	Total Market Value of Business	4	75	10
R29848.	Total Amount of Business Debt	1	55	8
R29851.	How Much Does R Owe on Vehicle	0	56	17
R29852.	Amount Vehicle Sells for Today	11	293	11
R29854.	Market Value of Other Items	5	151	25
R29856.	Total Amount R Owes	1	73	13

Table 5.4.8 Amount of Missing Data Per Question in Asset Section, 1989 Survey

Table 5.4.9 and 5.4.10 examine the drug and alcohol use supplements in the 1994 survey. In these CAPI modules, there are no invalid skips. Interestingly, there are extremely low refusal and don't know rates within the "Alcohol" section (Table 5.4.9). The question with the highest refusals (nine respondents) asks if the individual had a drink since the 1989 interview. The typical question in the "Alcohol" section received only two refusals. Don't know rates are also low. The maximum number of don't knows at nine occurs in R49803., which asks if the respondent needs to drink more alcohol now in order to get drunk. On average, the "Alcohol" section records only 1.5 don't knows per question.

These low numbers of refusals and don't knows are not seen in Table 5.4.10, which examines the "Drug Use" section. On average, the typical question in this supplement elicited 23 don't knows and 48 refusals. Readers should understand that this supplement was generally filled in directly by the respondent, not by the interviewer. To provide respondents with practice using a CAPI computer, the questionnaire asked them two non-drug use practice questions. Refusal rates are even high for these two test questions, which ask how many more children the respondent expects to have and what type of entertainment, such as movies, concerts, or plays, the respondent went to last year.

The highest number of refusals (119) occurs in R50532., which asks the age the respondent first used marijuana. The second largest number of refusals occurs in a similar question, R50536., which asks the age of first cocaine use. These same questions have very high don't know responses (113 marijuana and

48 cocaine). One other question with a very high don't know rate is R50525., which asks if the respondent ever smoked cigarettes daily. Almost 80 individuals did not know the answer to this question. Given that the question wording is straightforward, it is likely a number of respondents are using don't know as a polite way of refusing to answer the question.

Table 5.4.9	Amount of Missing Data Per Question in Alcohol Use Section,
	1994 Survey

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R49791.	R Had Drink of Alcohol since 1989	0	3	9
R49792.	Had Alcoholic Beverage in Last 30	0	0	5
R49793.	Times Had 6/More Drinks Last	0	0	1
R49794.	4. How Many of Last 30 Days Drank A 0 6		2	
R49795.	No. of Drinks on Avg. Day When R 0 8		8	3
R49803.	Need More to Get Drunk Than Before	0	9	0
R49808.	Arrested, in Police Trouble	0	0	3
R49809.	Drink More Than Before 0 4		3	

Reference #	Variable Title	Invalid Skip	Don't Know	Refusal
R50524.	R Smoked at Least 100 Cigrtts in Life?	0	24	38
R50525.	R Ever Smoked Daily?	0	79	49
R50526.	Age When R 1 st Started Smoking Daily?	0	33	12
R50531.	Total Occasion R Use Marijuana	0	33	89
R50532.	Age 1 st Time Used Marijuana	0	113	119
R50533.	Most Recent Time Used Marijuana	0	35	89
R50535.	How Many Occasions Used Cocaine	0	19	86
R50536.	Age 1 st Time Used Cocaine	0	48	103
R50537.	Most Recent Time Used Cocaine	0	15	78
R50539.	How Many Occasions Used Crack	0	15	77
R50540.	Age 1 st Time Used Crack	0	33	82
R50541.	Most Recent Time Used Crack	0	16	74
R50553.	R Used Heroin w/o Doctor's Instr	0	9	53

References

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- Mott, Frank L. "Evaluation of Fertility Data and Preliminary Analytical Results from the 1983 (5th round) Survey of the National Longitudinal Survey of Work Experience of Youth." CHRR, The Ohio State University, 1985.
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- Mott, Frank L. "Fertility-Related Data in the 1982 National Longitudinal Surveys of Work Experience of Youth: An Evaluation of Data Quality and Some Preliminary Analytical Results." CHRR, The Ohio State University, 1983.
- Olsen, Randall J. "The Effects of Computer Assisted Interviewing on Data Quality." CHRR, The Ohio State University, 1992.

Appendices

Appendix A: Quick Reference Guide

This appendix provides helpful hints on how to most effectively use the *NLSY79 User's Guide*, access the NLSY79 data, and get additional help when necessary.

A.1 NLS Documentation

The *NLSY79 User's Guide* provides in-depth information about the NLSY79 data. For more general information about the history, administration, or other cohorts of the NLS project, or more technical information about topics such as sampling, users should consult Table A.1.1 for the most appropriate NLS document.

NLS Handbook	This comprehensive introduction to the NLS gives readers general information about all NLS cohorts and the main topics of investigation for each (available at http://www.bls.gov/nls under publications link).
NLS Internet Bibliography http://www.nlsbibliography.org	This on-line searchable database provides citations for research using NLS data.
User's Guides	These cohort-specific guides help researchers understand NLS variables, survey instruments, documentation techniques, and other technical issues.
Questionnaires	A complete set of survey instruments from each survey year that allows researchers to view questions, supplemental information, and household interview forms.
Flowcharts	Schematic diagrams depict universe information and skip patterns for the survey instrument (1979-1992).
Codebook Supplements	Supplementary attachments and appendices contain variable creation, description, and coding information not present in the questionnaire.
Technical Sampling Report	This manual and addenda describe the sampling procedure used to select the initial survey participants, including information about weights and standard errors.
Compact Disc User's Guide	This guide provides installation and usage instructions for the CD-ROMs.
NLS Web Homepage http://www.bls.gov/nls	This internet site offers an overview of the NLS programs.
NLS News http://www.bls.gov/nls/nlsnews.htm	<i>NLS News</i> , a quarterly newsletter, is distributed at no charge to all data users and other interested persons. The newsletter contains informative articles about the NLS data, announces the release of new data CDs, and reports any errors discovered in the data or documentation. Past issues of the <i>NLS News</i> are available on the NLS internet site.

Table A.1.1 List of NLS Documentation

With the exception of the bibliography and homepage, which are provided on-line, users may order any of the documents listed in Table A.1.1 by contacting NLS User Services. Contact information for NLS User Services is provided under "Additional Support" at the end of this chapter.

A.2 The NLSY79 CD-ROM

This section provides users with a brief introduction to the NLSY79 variables. Users are strongly urged to read the complete description of NLSY79 variables in chapters 3 and 4 of this *User's Guide* and to consult each year's questionnaire. A cursory introduction to the types of NLSY79 variables available is offered below.

Topics Covered

The NLSY79 survey collects information every year (or every two years, beginning with the 1994 survey) about family, income, work experience, education, marriage, lifestyle, military experience, and fertility. Occasionally, other topics are covered, including drug/alcohol use and sexual activity. Figure A.2.1 lists general topic areas covered by the data collection; more detailed discussions of specific topic areas are provided in chapter 4.

Figure A.2.1 General Topics of the NLSY79 Main Data Collection

Work & Non-Work Experiences	Attitudes & Aspirations
Training Investments	Geographic Residence Information
Schooling, School Records & Aptitude Information	Family Background & Demographic Characteristics
Military Experience	Household Composition
Income & Assets	Marital & Fertility Histories
Health Conditions, Injuries & Insurance Coverage	Child Care
Alcohol & Substance Use, Criminal Activities	

Organization of Data

The NLSY79 is a panel data collection—specifically, the same persons are interviewed in multiple survey years. The NLSY79 often asks the same questions in each interview to gauge the change in behavior and life circumstances over time. Therefore, respondents have often answered the same or similar questions at numerous interview points since 1979.

The database is organized by respondent. Users are provided with data extraction software on each CD-ROM to search this large database and extract the specific variables needed.

User Notes: Each respondent has a unique identification number (see variable R00001) ranging from 1 to 12686. This unique number was assigned to each respondent in 1979 and **does not** change with each survey round. It is good practice to include the identification code in every data extraction.

Search Strategies

Variables can be selected for extraction either using a Search List (variable name, reference number, or question number) or Search Index (any word in context, year, or area of interest). Below is a brief description of each of the search options.

Reference Number: Each variable is assigned a reference number that determines its relative chronological position in the database. That reference number never changes in the main and geocode youth files—even when waves of data are added and the database is revised. The reference number is the equivalent of a unique variable name. For the child files, the reference number assigned to a given child variable is specific to a given data release and will change in subsequent releases.

Question Number: Each year, a separate set of survey instruments is used to collect data. A question number (or questionnaire item) refers to the specific data item on the printed (or electronic) questionnaire for a given variable.

Any Word: The database retrieval software allows users to search for and select variables whose titles contain any single word or combination of words.

Year: The user can select a specific survey year and select variables collected in that specific year. Within each year, the variables are assigned to areas of interest.

Area of interest: Variables sharing a common factor, such as topic, research use, or source, or variables which have been asked identically over time are stored in organizational units called "areas of interest." Each variable is assigned to an area of interest.

Hardware Requirements

The minimum computer standards required to access the NLSY79 data are an IBM-compatible personal computer (PC) running Microsoft Windows 95, 98, 2000, ME, or NT; a CD-ROM drive connected to the PC; and a writable disk drive connected to the PC.

Users can extract data for specific subsamples and in various formats. Step-by-step instructions for extracting data and detailed information about examining the codebook can be found in the *CD-ROM* User's Guide.

A.3 How to Get Help

Sometimes users have questions about the NLSY79 data, database retrieval software, or documentation. The following are strategies for finding answers to these questions.

On-line and Paper Documentation Help: CHRR provides both on-line and paper documentation help sources for users. The on-line help is present in the database retrieval software program. Press the F1 function key at any time in the CHRRDBA data retrieval system to receive on-line help.

Paper documentation includes the *NLSY79 User's Guide*, the *NLS Handbook*, the *NLSY79 Compact Disc User's Guide*, and assorted supplemental hard copy documentation (see Table A.1.1). The NLSY79 paper documentation contains the answers to most questions. Researchers should note that Appendix D in this guide defines a number of commonly used NLSY79 terms. If the problem is confusion over the use of a specific term, this appendix is the best source of information. The NLS Handbook, User's Guides, and other publications are available online at http://www.bls.gov/nls/.

Frequently Asked Questions: Table A.3.1 provides answers to commonly asked questions about the NLSY79 data and accessing the NLSY79 data.

Additional Support: If questions arise which are not answered in the documentation, contact NLS User Services at:

NLS User Services Center for Human Resource Research 921 Chatham Lane, Suite 100 Columbus, Ohio 43221-2418 614-442-7366

E-mail: usersvc@postoffice.chrr.ohio-state.edu

Question	Answer
There are many variables that indicate the respondent's race and sex. Which are the correct ones to use?	For respondent's race and sex use R02147. and R02148. respectively. For more information, see the "Race, Ethnicity & Nationality" and "Gender" sections of this guide.
How does one calculate the respondent's age at interview?	Respondent's age at interview has already been calculated for each year and is in area of interest "Key Variables." Area of interest "Key Variables" has many created variables that the researcher will find useful.
Within the data, how are the respondents identified?	See variable R00001., Identification Code. Each respondent has a unique identification number ranging from 1 to 12686. It is good practice to include the identification code in every data extraction.
The highest grade completed variables have too many valid skips to be useful. Is there something wrong?	Questions on highest grade completed are asked only of respondents who have been enrolled since the last interview. This explains the large number of valid skips. However, CHRR provides created cumulative highest grade completed variables correct for all interviewed respondents. See, for example, 'Highest Grade Completed as of May Survey Year (Revised)' in area of interest "Key Variables."
Is there an income measure for the respondent's family?	Yes, see variables with the title 'Total Net Family Income' in area of interest "Key Variables." Consult the "Income" section of this guide for additional information on the creation of this variable.
What are areas of interest?	All variables have been assigned to at least one of several areas of interest or groups of variables sharing a common factor. For example, income variables are in area of interest "Income," and marital history is in "Marriage." One way to search the data is by area of interest.
There seem to be several variables in the same year that have the same or nearly the same title but the frequencies are different.	This would mean that the same question has been asked to different universes of respondents depending on the skip patterns of the questions. The questionnaires provide the skip patterns to tell you the universe of respondents who answered each question.
The codebook for the industry codes says to "see attachment 3." What is attachment 3?	Attachment 3 lists the individual industry or occupation codes that are too numerous to list in the codebook. Attachment 3 is part of the <i>Codebook Supplement</i> , which includes most of the attachments and appendices that are listed in the codebook.
When the next year's data become available, can I just get that one year?	No, the CD-ROMs are re-pressed for each new release of data to include all years. Single year data sets are not released.
What's the difference between reference numbers and question numbers?	Reference numbers are unique variable names that have been assigned sequentially beginning with R00001. through to the end. Question numbers are unique only to each particular year, and they are used to find the question within each year's questionnaire.

Table A.3.1	Frequently	Asked	Questions
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Appendix B: Standard Errors and Design Effects

This appendix contains information on standard errors and design effects for the NLSY79 sample, briefly discussing how to use these two statistical factors. It then has tables for the first round (1979) and the latest available data, Round 19 (2000). Intervening years have not been included for space reasons; users interested in the intervening years should contact NLS User Services to obtain the *NLSY79 Technical Sampling Report and Appendices*.

Standard errors have been explicitly computed for a number of statistics based upon the entire NLSY79 sample (total, civilian, and military) and a number of sex and/or race subclasses. Standard errors for other statistics (defined over the entire sample or the subclasses) may be approximated with use of the DEFT factors given in the tables below. Users who examine Tables B.3 and B.4 will note that CHRR has calculated standard errors for different variables over time.

Approximate Standard Errors: Percentages

The following formula approximates a standard error of a percentage:

$$se(P) \cong \frac{DEFT\sqrt{P(100-P)}}{\sqrt{n}}$$

where:

- se(P) = the approximate standard error for the percentage P
 - P = the sample percentage (ranging from 0 to 100)
 - n = the actual unweighted sample size for the demographic subclass from which the percentage was developed
- DEFT = the appropriate DEFT factor for the particular demographic subclass and sample type from which the percentage was developed

For example, for 1996 the appropriate DEFT factor for estimating a standard error of the percentage of Hispanic males who were high school dropouts is 1.17744 (see proportion column, row seven of Table B.2). Assuming the calculated sample (P) equals 22.19 percent and the unweighted sample estimate size is 946, then:

$$se(P) \cong \frac{1.17744 * \sqrt{22.19 * (100 - 22.19)}}{\sqrt{946}}$$
$$\cong 1.5907$$

To approximate the standard error of the corresponding projected population total (NP/100), calculate:

$$se(NP/100) \cong N[se(P)/100]$$

where:

- the approximate standard error of the projected population total se(NP/100) =corresponding to a percentage P within a particular demographic subclass and sample type.
 - N = the appropriate projected total population base for the particular demographic subclass and sample type.

For example, if the projected total population base for Hispanic males is 1,030,861, the projected number of civilian Hispanic male high school dropouts is equal to NP/100 or 1,030,861 * 22.19/100 = 228,748. Thus, the approximate standard error for the total number of Hispanic male high school dropouts is:

$$se(NP/100) \cong (1,030,861) (1.5907/100)$$
$$\cong 16,397.9$$

Note that the 1.5907 came from the previous calculation.

Approximate Standard Errors: Means

One can compute approximate standard errors for means as follows:

$$se(X) \cong DEFT\sqrt{(s^2 / n)}$$

where:

se(X)	=	the approximate standard error of the mean
DEFT	=	the appropriate DEFT factor for the particular demographic subclass and sample type from which the mean was developed
S^2	=	the weighted element variance computed for the demographic subclass and

- the weighted element variance computed for the demographic subclass and sample type from which the mean was developed
- the unweighted sample size for the particular mean. n =

For example, for 1979 the DEFT factor for all Hispanics is 1.45699 (see means column, row four of Table B.1). To approximate the standard error of the mean number of years of education completed by this subclass, where the weighted element variance is .72955 and the sample size is 77, compute:

$$se(X) \cong 1.45699 * \sqrt{(.72955 / 77)}$$

 $\cong .1418$

	Proportions	Means
All Youth	1.72547	1.71282
Males	1.46605	1.56808
Females	1.58029	1.49720
Hispanics	1.44342	1.45699
Blacks	1.35303	1.43730
Non-black/non-Hispanics	1.58686	1.56996
Hispanic Males	1.24321	1.22329
Hispanic Females	1.40353	1.25095
Black Males	1.19457	1.21378
Black Females	1.24877	1.25243
Non-black/non-Hispanic Males	1.33775	1.45962
Non-black/non-Hispanic Females	1.46889	1.37581

Table B.1 Deft Factors for Round 1 (1979)

Table B.2 Deft Factors for Round 17 (1996)

	Proportions	Means
All Youth	1.35848	1.967232
Males	1.28523	1.667333
Females	1.24536	1.621727
Hispanics	1.28275	1.584298
Blacks	1.19735	1.423025
Non-black/non-Hispanics	1.19087	1.713184
Hispanic Males	1.17744	1.407125
Hispanic Females	1.13217	1.264911
Black Males	1.16541	1.174734
Black Females	1.13258	1.319091
Non-black/non-Hispanic Males	1.13217	1.456022
Non-black/non-Hispanic Females	1.09545	1.405347

Note: Deft factors for 1998 and 2000 were not available at the printing of this guide. However, the numbers will be available soon. For availability contact NLS User Services.

	All	Male	Female	Hispanic	Black	Non-black, non-Hisp.	Male Hisp.	Female Hisp.	Male Black	Female Black	Male NB/NH	Female NB/NH
Prop. HS dropout	0.00471	0.00627	0.00545	0.01385	0.00835	0.00527	0.01744	0.01814	0.01232	0.00928	0.00710	0.00619
Prop. attending HS	0.00735	0.00893	0.01006	0.01554	0.01151	0.00904	0.02176	0.02146	0.01460	0.01628	0.01085	0.01233
Prop attending college	0.00597	0.00729	0.00778	0.01037	0.00784	0.00710	0.01230	0.01460	0.00919	0.01119	0.00862	0.00947
Prop. HS graduate	0.00658	0.00776	0.00905	0.01277	0.01033	0.00785	0.01440	0.01957	0.01217	0.01448	0.00926	0.01094
Mean yrs. of school completed	0.02900	0.04000	0.03800	0.08200	0.05700	0.03400	0.10000	0.10500	0.06100	0.07400	0.04600	0.04400
Mean yrs. of school expected	0.04600	0.05900	0.04700	0.10800	0.06400	0.05500	0.12500	0.11700	0.07900	0.07900	0.07100	0.05500
Prop. living in South	0.02286	0.02353	0.02324	0.05641	0.04264	0.02544	0.04973	0.06060	0.04555	0.04084	0.02610	0.02601
Mean #'s of children expected	0.02400	0.02700	0.03200	0.05800	0.04600	0.02800	0.06500	0.07000	0.05600	0.05500	0.03100	0.03700
Prop. married	0.00454	0.00365	0.00686	0.01023	0.00533	0.00570	0.00923	0.01646	0.00440	0.00884	0.00448	0.00855

Table B.3 Standard Errors for Round 1 (1979)

Table B.4 Standard Errors for Round 17 (1996)

	All	Male	Female	Hispanic	Black	Non-black, non-Hisp.	Male Hisp.	Female Hisp.	Male Black	Female Black	Male NB/NH	Female NB/NH
Prop. not on active duty	0.001	0.003	0.001	0.005	0.004	0.002	0.009	0.001	0.007	0.003	0.003	0.001
Prop. high school dropouts	0.006	0.008	0.006	0.014	0.009	0.007	0.018	0.016	0.012	0.010	0.009	0.007
Prop. in high school or less	0.000	0.001	0.001	0.002	0.001	0.001	0.002	0.002	0.001	0.002	0.001	0.000
Prop. attending college	0.003	0.003	0.005	0.006	0.005	0.004	0.008	0.009	0.005	0.007	0.004	0.005
Prop. high school graduate	0.006	0.007	0.006	0.015	0.009	0.007	0.018	0.016	0.012	0.010	0.009	0.007
Prop. living in South	0.034	0.034	0.036	0.052	0.046	0.039	0.049	0.059	0.046	0.048	0.038	0.041
Prop. currently married	0.007	0.010	0.010	0.016	0.013	0.008	0.020	0.021	0.018	0.017	0.011	0.011
Prop. employed at present	0.006	0.007	0.009	0.015	0.009	0.007	0.017	0.020	0.014	0.013	0.007	0.010
Prop. unemployed	0.002	0.003	0.003	0.006	0.005	0.003	0.007	0.009	0.008	0.008	0.004	0.004
Prop. in labor force	0.005	0.005	0.008	0.013	0.008	0.006	0.015	0.018	0.012	0.012	0.006	0.010
Prop. gov. training	0.001	0.001	0.001	0.003	0.002	0.001	0.003	0.003	0.002	0.004	0.001	0.001
Average number of children	0.023	0.027	0.030	0.054	0.035	0.028	0.067	0.065	0.040	0.050	0.033	0.036
Average highest grade completed	0.060	0.074	0.063	0.109	0.065	0.073	0.137	0.119	0.074	0.081	0.091	0.077
Prop. currently enrolled	0.003	0.004	0.005	0.006	0.005	0.004	0.008	0.008	0.005	0.007	0.004	0.006

Note: Standard errors for 1998 and 2000 were not available at the printing of this guide. However, the numbers will be available soon. For availability contact NLS User Services.

Appendix C: NLSY79 Areas of Interest

Note that some area of interest names were changed in 2000 to make them more understandable. If the name of an area changed, the old name appears in parenthesis; if no change occurred, only one name is listed.

Name: Alcohol

Description: This area of interest contains the variables relating to each respondent's consumption of alcohol in the last month, how frequently it was used, quantity consumed, and whether such consumption has impacted school work or job performance. The 1988 survey included questions on relatives of the respondent who were problem drinkers, including length of time the respondent resided with such relatives. The 1989 survey collected information on the extent to which the use of alcohol interfered, during the past year, with various aspects of the respondent's life. Exception: alcohol questions fielded during 1992 can be found in the "Drugs" area of interest.

Sources of Data: The "Alcohol Use" sections of the 1982-85, 1988, 1989, and 1994 questionnaires.

Related Areas of Interest: See also the "Drugs," "Illegal," and "Family Background" files for data on alcohol use and the various birth record files for drug and alcohol use during pregnancy information.

Name: Assets

Description: This area of interest identifies the asset information collected during the 1985–90 and 1992–2000 surveys, e.g., types of and total market value of property owned by the respondent (e.g., real estate, farm, business); the value of other assets, including vehicles and savings accounts; and the total amount of debts owed, including mortgages, back taxes, and debts over \$500.

Sources of Data: The "Assets" & "Income" sections of the 1985–90 and 1992–2000 questionnaires.

Related Areas of Interest: Income

Name: Attitudes & Influence (ATTINFLN)

Description: This area of interest contains the discrete set of nine variables dealing with the attitude of the most influential person in each respondent's life toward certain key career, occupational, residence, and childbearing decisions.

Sources of Data: The "On Significant Others" section of the 1979 questionnaire.

Related Areas of Interest: See the "Attitude" area of interest for self-esteem, Rotter's locus of control variables, the Pearlin mastery series, etc.

Name: Attitude

Description: This area of interest contains an assortment of variables from the various survey years dealing with each respondent's knowledge of the world of work; perceived problems in getting a good job; the Rotter Internal-External Locus of Control Scale; the Pearlin Mastery Scale; the Rosenberg Self-Esteem Scale, the CES-D questions; respondent's attitudes toward women and work; occupational aspirations, work commitment; future expectations about marriage, education and employment; and knowledge of AIDS.

Sources of Data: The "World of Work," "Rotter Scale," "Family Attitudes," "Aspirations & Expectations," and "AIDS Knowledge" sections of the 1979–84 and 1987–88 questionnaires, and the "Health" section of the 1992 and 1994 questionnaires.

Related Areas of Interest: See also the "Attitudes toward Job Offer" and "Attitudes & Influence" files. The CES-D questions in the special health module administered as respondents turn age 40 are in the "Health Module 40 & Over" area of interest.

Name: Attitudes toward Job Offer (ATTJBOFR)

Description: This area of interest contains a select number of questions dealing with whether respondents would accept various hypothetical job offers to work at certain jobs at varying pay rates, e.g., would the respondent accept a full-time job making hamburgers at \$2.50 or \$3.50 or \$5.00 an hour.

Sources of Data: The "On Jobs/Pay" section of the 1979 questionnaire.

Name: Birth Record xxxx (BIRTHRXX)

Description: Beginning in 1985, these areas of interest contain an update to the pregnancy/live birth record, contraceptive use in past month, expected next birth, wantedness information, a menarche and first intercourse update, residence of biological and non-biological children, prenatal care, illnesses and well baby care, infant feeding practices, and child visitation practices of the absent parent.

Sources of Data: The "Fertility" section of the questionnaire from 1985 through the latest available year.

Related Areas of Interest: Children, Birth Record, Fertility and Relationship History/Created

Name: Birth Record (BIRTHREC)

Description: This area of interest contains a complete retrospective on all pregnancies for female respondents and all live births for male respondents, including ideal/expected number of children; dates of birth and death, sex, and current residence for all live births; dates of all pregnancy losses; and current and retrospective contraceptive use. In addition, data for 1983 and 1984 contain information on age at first intercourse, prenatal health care, and infant feeding practices, while the 1984 survey data includes a confidential abortion report, visitation practices of the parent not living in the same household with child, and information on sex education courses attended by respondent.

Sources of Data: The "Fertility" sections of the 1982, 1983, and 1984 questionnaires; the 1984 confidential abortion card; and the 1983 *Fertility Supplement*.

Related Areas of Interest: "Children," the 1985–2000 "Birth Record xxxx" files, and "Fertility and Relationship History/Created."

Name: Between Jobs Gaps (BTWNJOBS)

Description: This area of interest contains information on what the respondent was doing during the time periods when s/he was not employed or in the military, e.g., information on weeks not working, weeks spent looking for work, and reason not looking for work. This information is available for up to six periods for each survey year.

Sources of Data: The various questionnaire sections entitled "On Periods When R Not Working or in Military" or "Gaps."

Name: Child Care (CHILDCAR)

Description: This area of interest contains, for the 1982–85 survey years, information on location and types of child care used and types of child care expenses incurred over the past four weeks for certain children whose mothers were employed, in school, or in training. The 1986 and 1988 questionnaires collected similar information from all mothers, including a first-three-years-of-life retrospective for all biological children. The 1992 information is gathered on child care arrangements used during the first three years of life. The 1994–2000 information updates child care from previous years for children's' first three years of life, if not complete. The 1989 survey contained one question, asked of employed respondents, regarding the impact of child care problems on their employment situation.

Sources of Data: The "Child Care" sections of the 1982–86, 1988, 1992, 1994, and 2000 questionnaires and the "Fertility" section of the 1987 and 1989 questionnaires.

Related Areas of Interest: Child Record Form/Biological, Child Record Form/Nonbiological, Misc. xxxx, Government Jobs, Government Training, and Time Use.

Name: Children

Description: This area of interest contains the limited number of fertility questions that were asked during the 1979–81 surveys. Included are data on dates of birth for each live birth, number of children wanted/expected, ideal family size, and when the next child is expected.

Sources of Data: The "Fertility" sections of the 1979–81 questionnaires.

Related Areas of Interest: "Birth Record," the 1985–2000 "Birth Record xxxx" files, and "Fertility and Relationship History/Created."

Name: Common

Description: This area of interest contains commonly used variables from several survey years. Included are (1) each respondent's identification number, sample type, race, sex, and date of birth; (2) identification numbers/relationship codes of other youth in the same household who were interviewed in 1979; (3) the household identification number; (4) interview-specific information including reason for non-interview, week numbers of interview date and of last interview, etc.; and (5) various employment status variables.

Sources of Data: The variables listed in "Common" are a composite of assigned codes, created variables, and information from the 1978 screener and/or the regularly administered questionnaires.

Name: CPS

Description: This area of interest contains *Current Population Survey* variables that establish current labor force status, i.e., activity during most of survey week (employed, unemployed, out of the labor force). Included are job characteristics, global job satisfaction, and hours worked per week for current/most recent job, job search behavior for those unemployed, and plans to seek employment for those out of the labor force. The 1993 commuting time and transportation method variables are located in this area of interest. The CPS section was not included in the 2000 survey.

Sources of Data: The "Current Labor Force Status - CPS Questions" section of each survey instrument with the exception of the 2000 survey.

Related Areas of Interest: See also the "Key Variables" and "Job Information" files for created employment variables and the "Misc. xxxx" files for additional CPS variables.

Name: CPS 2nd Self-Correct 1994 (CPSBK294), CPS 1994 (CPS94), CPS 1996 (CPS96), CPS 2nd Self-Correct 1996 (CPSBCK296), CPS 1st Self-Correct 1994 (CPSBCK94), CPS 1st Self-Correct 1996 (CPSBCK96)

Description: These areas of interest contain variables from the revised CPS section beginning in 1994.

Sources of Data: The "Current Labor Force Status - CPS Questions" section of each survey instrument.

Related Areas of Interest: See also the "Key Variables" and "Job Information" files for created employment variables and the "Misc. xxxx" files for additional CPS variables.

Name: Child Record Form/Biological (CRFBIO)

Description: This area of interest contains information from the *Children's Record Form*, an interviewing aid used in the 1985–1998 surveys to (1) enumerate all biological children; (2) provide identifying information on each child, e.g., an identification number, date of birth, sex, deceased or adopted status; and (3) identify missing health care and feeding practice information, which needed to be gathered during select surveys.

Sources of Data: The Children's Record Forms (CRF).

Related Areas of Interest: Birth Record xxxx, Child Record Form/Nonbiological, Child Care

Name: Child Record Form/Nonbiological (CRFNBIO)

Description: This area of interest contains information from the *Children's Record Form*, an interviewing aid which was used in the 1985–1998 surveys to (1) enumerate all nonbiological children and (2) provide identifying information on each child, e.g., an identification number, date of birth, sex, deceased/adopted status.

Sources of Data: The Children's Record Forms (CRF).

Related Areas of Interest: Birth Record xxxx, Child Record Form/Biological

Name: Degrees & Certificate (DGRECERT)

Description: This area of interest contains various types of information from the 1979–84 and 1988–2000 surveys including the types of college degrees, other certificates, and licenses (including driver's license) that respondents received prior to the first interview and since last interview.

Sources of Data: The "Other Training" and "Regular Schooling" sections of the 1979–84, 1988–2000 questionnaires.

Related Areas of Interest: School

Name: Drugs

Description: This area of interest contains responses to the special sets of drug questions that were asked in the 1984, 1988, 1992, 1994, and 1998 surveys. Included is information on age at first use and extent of use of such substances as cigarettes, marijuana/hashish, amphetamines, barbiturates, cocaine, heroin, and other drugs; a monthly retrospective look at respondents' use of marijuana/hashish during 1979–84; and use of such substances on the job. The 1992 variables relating to alcohol use are located in the "Drugs" area of interest.

Sources of Data: The "Drugs" section of the 1984 and 1988 questionnaires and the 1988, 1992, 1994, and 1998 *Drug Use Supplements*.

Related Areas of Interest: See also the "Alcohol" and "Illegal" areas of interest for questions on alcohol and marijuana use as well as drug dealing. The various birth record files contain variables on cigarette, alcohol, and other drug use during pregnancy.

Name: Family Background (FAMBKGN, FAMBKGD)

Description: These areas of interest contain the extensive family background information gathered in the 1979 survey: country/state of respondent's birth; identification of persons with whom the respondent lived at age 14; birthplace, education, and work experience of respondent's mother and father; racial/ethnic origin; periods of time residing with parents; etc. Also included in this file are the religious affiliation and attendance questions asked in 1979 and 1982; the 1979, 1980, and 1982 residential mobility questions; identification of the language used in the administration of the household interview forms for each survey year; the detailed set of childhood residence questions asked during the 1988 survey; the special set of immigration questions collected during 1990 on aspects of the respondent's first and most recent entry into the U.S.; and the 1993 sibling roster series. This area of interest also contains family background information on twins and triplets that was gathered in the 1994 survey. The questions were designed to verify these special sibling pairings.

Sources of Data: Various sections from the 1979–87 questionnaires including the "Family Background" and "Residence" sections, as well as the *Household Interview Forms*. The 1988 data were collected from the "Childhood Residence" section of the survey instrument and the accompanying *Childhood Residence Calendar*. The 1990 immigration information was collected using the "Immigration" section of the questionnaire. The 1993 sibling questions can be found in "Marital Status."

Name: Fertility and Relationship History/Created (FERTILE)

Description: This area of interest contains constructed and edited fertility variables including (1) revisions to dates of birth, gender, and usual living arrangements for all respondents' children; (2) other constructed variables commonly used in fertility research, i.e., beginning and ending dates of marriages, age at first marriage, at first birth, spacing between births, and between marriage and first birth, etc.; and (3) a variable evaluating the consistency of the longitudinal fertility record.

Sources of Data: Entirely created variables based on the 1982–2000 fertility data and 1979–2000 marriage data.

Related Areas of Interest: "Children," "Child Record Form/Biological," "Birth Record," and the 1985–2000 "Birth Record xxxx" files.

Name: Geocode xxxx (GEOXX)

Description: This area of interest contains information on residential-geographic variables and environmental characteristics of each respondent's county and SMSA of current residence.

Sources of Data: County & City Data Book, City Reference File, Appendix 10 in the NLSY79 Codebook Supplement

Related Areas of Interest: Family Background, Key Variables, Misc. xxxx

Name: Government Training (GOVTRAIN)

Description: This area of interest contains information on up to two government training programs in which a respondent was enrolled since the last interview. Included is information on the name of the government training sponsor, current enrollment status, dates/hours of participation, periods of nonparticipation, whether the program was part of a CETA/JTPA or WIN affiliated program, type of occupational/OJT training received, types of training services provided (job counseling, GED preparation, classroom training, skills training, etc.), various supportive services received, and income/rate of pay received during participation.

Sources of Data: The "On Government Training" sections of each questionnaire.

Related Areas of Interest: Training, Government Jobs

Name: Health

Description: This area of interest contains information on the presence of health conditions preventing or limiting labor market activity including, for select survey years, the specific types of health conditions, their causes, and parts of the body affected. The 1988–90 and 1992–2000 questions on work-related injuries, including the type of injury and its impact on employment and the 1989, 1990, and 1992–2000 source of health/hospitalization insurance variables are located in this area of interest.

Sources of Data: The "On Health" sections of each questionnaire.

Related Areas of Interest: See also "Alcohol" and "Drugs," as well as the several birth record files for prenatal, neonatal, and infant health and health-related issues. The special questions asked as respondents reach age 40 are located in the "Health Module 40 & Over" area of interest.

Name: Household Record (HHRECORD)

Description: This area of interest contains information for up to 15 household members currently living in the respondent's household, including each person's sex, relationship to respondent, age, highest grade completed, and work experience in past year. The household enumeration is completed during the household interview each survey year.

Sources of Data: The various versions of the Household Interview Forms.

Related Areas of Interest: The specific version of the household record form administered to a given respondent can be found in the "Misc. xxxx" files for 1979-1986; the language in which the household record form was administered is in the "Interviewer Remarks" file; and income variables from the household record form are found in "Income."

Name: Health Module 40 & Over (HLTHMOD40)

Description: The goal of this area of interest is to gather a complete health inventory to help researchers understand a respondent's work conditions, limitations and highlight relationships between health and retirement decisions. The age of 40 was selected so that NLSY79 researchers have a baseline report on a respondent's health conditions before more serious problems develop in older age.

Sources of Data: Contains the SF-12 scale, questions on parental health modified from the NLS of Mature Women survey, and questions primarily taken from the HRS (Health and Retirement Survey).

Related Areas of Interest: Health, Drugs, Alcohol, Jobs

Name: Illegal

Description: This area of interest contains information on respondents' participation in and income from various delinquent and criminal activities such as skipping school, alcohol/marijuana use, vandalism, shoplifting, drug dealing and robbery as well as reported contacts with the criminal justice system.

Sources of Data: The "Delinquency and Drugs" and "Reported Police Contacts" sections of the 1980 questionnaire as well as the confidential questionnaire supplement *Form J*.

Related Areas of Interest: Alcohol, Drugs

Name: Income

Description: This area of interest contains information on income received in the past calendar year from various sources including (1) earned income of the respondent and spouse from such sources as military service, wages and salary, and farm or own business; (2) monthly income amounts received by the respondent and spouse from Unemployment Compensation, AFDC, food stamps, and other public assistance; (3) sources of income for other family members; and (4) other components of the computed variable 'Total Net Family Income'.

Sources of Data: The "Income" section of each questionnaire and the income questions of the various *Household Interview Forms.*

Related Areas of Interest: Assets, Key Variables

Name: Interviewer Remarks (INTRMK)

Description: This area of interest contains interview-specific and interviewer comment information, including the dates and length of each interview; type of interview (personal or telephone); whether the interview was conducted with a proxy; a record of the attempts made to locate each respondent; language used to conduct the interview; various interviewer remarks on respondent's race, attitude, understanding of the questions, and presence of anyone else during the interview; and interviewer identification codes.

Sources of Data: The "Interviewer Remarks" section of each questionnaire.

Related Areas of Interest: Misc. xxxx

Name: Job Search (JOBFIND)

Description: This area of interest contains information on (1) the job search methods (state or private employment offices, classified ads, friends and relatives, labor unions, etc.) used by unemployed

respondents to find employment; (2) the success of the various methods; (3) reason for nonacceptance of any job offers obtained; (4) rate of pay for the job offer; and (5) questions on methods used to find specific jobs reported in 1994–2000. The reference period differs across survey years, with the 1981 questions directed towards job search methods used in the past four weeks, the 1982 questions towards the most recent job obtained, the 1986 questions detailing the methods used in each of the past 12 months, and the 1987 series gathering information on the methods used each month (for up to six months) during the least recent period not employed. There are no questions in the "Job Search" area of interest from 1988 to 1993. In 1994, 1996, and 2000, this area of interest contains questions that state the job search methods that lead to the current job plus a record of all methods used while searching. Additionally, information is available on the pay rates of rejected job offers.

Source of Data: The "Job Search" section of the 1981 questionnaire; the "Job Finding" section of the 1982 questionnaire; and the "On Periods When R Not Working or in Military" section of the 1986 and 1987 questionnaires.

Related Areas of Interest: "Misc. xxxx" for methods of seeking employment in past four weeks (CPS series); "CPS 1994," "CPS 1st Self-Correct 1994," "CPS 1996," "CPS 1st Self Correct 1996," and "CPS 1998" for job search methods in the last four weeks; "CPS 1996" for questions on job search while employed.

Name: Job Information (JOBINFO)

Description: This area of interest contains information on the jobs each respondent held since the date of last interview, including start-stop dates of employment, hours worked, reason left job, and job characteristics (e.g., occupation, class of worker, rate of pay, wages set by collective bargaining for up to five jobs held). A series of tenure variables reflecting the total tenure in weeks accumulated for each of up to five employers was added for each year to the NLSY79 data release beginning in 1991.

Sources of Data: The "Jobs" section of the 1979 questionnaire and from 1980 onward the *Employer* Supplements.

Related Areas of Interest: CPS (some years), Jobs

Name: Jobs

Description: This area of interest contains select variables relating to (1) jobs held since last interview and (2) whether those jobs were part of a cooperative work study program, college work study program, or some type of government-sponsored job held since the last interview.

Sources of Data: The "On Jobs" section of each questionnaire.

Name: Jobs before 1978 (JOBSB478)

Description: This area of interest contains the 12 variables asked in the 1979 survey dealing with characteristics of the job in which the respondent last worked for two or more consecutive weeks. Included is information on date last worked, occupation and industry codes of job, class of worker, and whether the job was a government job or in private business.

Sources of Data: The "On Last Job Lasting Two Weeks or More" section of the 1979 questionnaire.

Name: Jobs after School (JOBSCHL)

Description: This area of interest contains a limited number of variables on respondent's work experience prior to the 1979 interview. Information on weeks and hours worked in 1975, 1976, and 1977, as well as characteristics of the first job a respondent held after s/he left school including dates of employment, industry/occupation, pay rate, hours worked, and reason left first job, is provided.

Sources of Data: The "On Work Experience Prior to January 1, 1978" section of the 1979 questionnaire.

Name: Key Variables (KEYVARS)

Description: This area of interest contains the *KEY* variables as well as other summary variables created by the Center for Human Resource Research from raw data. They encompass a wide range of employment, military, education, income, poverty status, local labor market unemployment rate, and various other geographic-related variables.

Sources of Data: The variables on this file are all created with the exception of the 'Type of Residence' variables, which are derived from the *Household Interview Forms*.

Related Areas of Interest: This area of interest contains the primary longitudinal (all main file) created variables. Other constructed variables can be found in "Job Information," the supplemental "Fertility and Relationship History/Created" area of interest, and the special NLSY79 geocode, work history, and child data files.

Name: Last Interview Information (LASTINFO)

Description: This area of interest contains key information on the respondent that was collected at the last interview (e.g., dates of last interview, marital status, number of children, high school completion status, names of previous employers, etc.). These data appear on the *Information Sheet*, which is used by the interviewers or the CAPI software to route the respondent through the survey.

Sources of Data: The *Information Sheet* for each survey year. Note: Data that appear on the interviewer's *Information Sheet* are found in the codebook following the main survey variables.

Name: Machine Check (MACHCHK)

Description: This area of interest contains miscellaneous machine checks/functions from various sections in CAPI surveys.

Name: Marriage

Description: This area of interest contains (1) the respondent's marital status at each survey date, changes in marital status since last interview, and dates of each marital status change and (2) information on respondent's spouse such as birth/death dates, occupation, educational attainment, labor force status, religious affiliation, and health limitations. The 1988, 1992, and 1994–2000 interviews included questions on marital attitudes and dating experiences of those not currently married.

Sources of Data: The "Marital History" and "Fertility" sections of the questionnaires.

Related Areas of Interest: Additional marital history variables can be found in the "Fertility and Relationship History/Created," "Key Variables," and "Attitude" areas of interest.

Name: Military

Description: This area of interest contains information on respondents' enlistment intentions, attitudes toward the military, dates of military service/reserve duty, branch of service, military occupation, pay grade and income, education and training received, and reasons left military or reenlisted.

Sources of Data: The "Military" sections of the 1980 to most recent questionnaire.

Related Areas of Interest: See "Key Variables" and the "Misc. 1979" file for additional 1979 military variables.

Name: Misc. xxxx (MXXVAR)

Description: This area of interest contains miscellaneous variables not grouped elsewhere. These variables are collected in various topical areas from different years.

Name: Periods Not Working within Job Tenure (PERIODNW)

Description: This area of interest contains detailed information on the time periods a respondent was with a job but not working (up to four periods) and reasons for not working for each of five jobs held during the survey year.

Sources of Data: The "Jobs" section of the 1979 questionnaire and the 1980 to most recent *Employer* Supplements.

Related Areas of Interest: Job Information

Name: Profiles - Armed Services Vocational Aptitude Battery (ASVAB) 1980

Description: This area of interest contains all of the variables from the 1980 administration of the *ASVAB*, including individual respondent scores, scale scores, and standard errors for each of the ten *ASVAB* test sections. Also provided are respondent sampling weight, high school graduate status, characteristics of the test administration for each respondent, and two AFQT percentile scores.

Sources of Data: The Armed Services Vocational Aptitude Battery (ASVAB).

Related Areas of Interest: All *ASVAB* administration variables are located within the "Profiles" file. See also the "School Survey" area of interest for aptitude and intelligence scores and the "School" area of interest for other education-specific variables.

Name: School Survey (SCHLSURV)

Description: This area of interest contains all data generated from the 1980 survey of non-foreign schools attended by civilian NLSY79 respondents who had completed a school release form during the 1979 interview. It includes: (1) respondent-specific information on school enrollment status, highest grade attended, remedial classes taken, and scores/percentiles/grade levels for various intelligence and aptitude tests and (2) school-specific information including data on the school's total enrollment, grading system, types of curricula offered, dropout rate, student body composition, and staffing characteristics.

Sources of Data: Data were collected with the "School Questionnaire" and the "Student's School Record Information" form, copies of which can be found in the *NLSY High School Transcript Survey: Overview and Documentation*.

Related Areas of Interest: The "Transcript Survey" area of interest contains respondent-specific information on high school coursework.

Name: School

Description: This area of interest contains information on each respondent's school enrollment status, i.e., whether s/he is currently enrolled in school, the highest grade attended or completed, type of high school curriculum, attainment of a high school diploma or GED, major field of study in college, and a variety of other college-related variables.

Sources of Data: The "Regular Schooling" section of each survey instrument.

Related Areas of Interest: The "Income" area of interest contains the total amount of educational benefits received in the past calendar year.

Name: Timings

Description: This area of interest contains select timings from beginning and end of surveys of various CAPI years.

Name: Time Use (TIMEUSE)

Description: This area of interest contains responses to the special set of questions asked in the 1981 survey about each respondent's use of time during the past seven days, e.g., how much time was spent working, commuting, attending school or various training programs, sleeping, watching TV, caring for children, or completing household chores.

Sources of Data: The six "Time Spent" sections of the 1981 questionnaire.

Name: Training

Description: This area of interest contains information on multiple types of vocational/technical training in which a respondent was enrolled since the last interview. Included is information on dates of enrollment and completion, type of school, completion status, and any subsequent training received. Recent surveys have collected data on the usefulness of the training acquired for the respondent's job, whether participation was necessary to obtain a promotion, the benefits of each training program in terms of actually getting a promotion or obtaining a different job, and the transferability of skills (1993–94 series).

Sources of Data: The "Other Training" sections of each questionnaire.

Related Areas of Interest: See also the "Government Training" area of interest. Also see the *Employer Supplements* in 1993 and 1994 for informal training and learning the job information.

Name: Transcript Survey (TRANSURV)

Description: This area of interest contains information collected during 1980, 1982, and 1983 from the school transcripts of civilian NLSY79 respondents. Data are available for up to 64 courses taken by each surveyed respondent including information on high school subject, final grade, source of the final grade, and credit received.

Sources of Data: The separate "Transcript Coding Sheet," a copy of which can be found in *NLSY High School Transcript Survey: Overview and Documentation*.

Related Areas of Interest: The "Misc. 1981" area of interest contains additional transcript survey variables. The "School Survey" area of interest contains additional school-specific information on enrollment, grading system, and type of curricula offered.

Appendix D: NLSY79 Glossary of Terms

Active Force

An umbrella term used to refer to the regular Army, Navy, Marines, and Air Force branches of the Armed Forces as a group. The Reserve and Guard components are not included.

AFDC

Aid to Families with Dependent Children. See also TANF

AFQT

See Armed Forces Qualification Test

AFSC

See Air Force Specialty Codes

Air Force Specialty Codes

An alphanumeric jobs/skills classification system for the Air Force and Air Force Reserves that describes the specific job a person is trained for or assigned to in those branches of the military. (See also DOD-3-Digit.)

Annuities

See Pensions

Armed Forces Qualifications Test

The AFQT determines general aptitude for enlistment in the Armed Forces. Two methodologies of calculating AFQT, developed by the U.S. Department of Defense, have been used to produce two AFQT variables in the NLSY79: R06182. (AFQT80) and R06183. (AFQT89). R06182. is the AFQT percentile score created from the procedures in use in 1980 and consists of the sum of the number of correct scores for the following sections of the *ASVAB*: arithmetic reasoning + word knowledge + paragraph comprehension + 1/2 (numerical operations). R06183. is the AFQT percentile score based on new procedures established in 1989 and is created in the following manner: (1) compute a verbal composite score by summing the word knowledge and paragraph comprehension raw scores; (2) convert subtest raw scores to standard scores for verbal, math knowledge, and arithmetic reasoning; (3) multiply verbal by 2; (4) sum the standard scores for verbal, math knowledge, and arithmetic reasoning; and (5)

convert the summed standard score to a percentile. See the Addendum to Attachment 106 for tables used to convert raw scores to standard scores and percentiles.

Armed Services Vocational Aptitude Battery

The *ASVAB* is a vocational aptitude test that determines areas of competency in the following 10 areas: general science, arithmetic reasoning, word knowledge, paragraph comprehension, numerical operations, coding speed, auto and shop information, mathematics knowledge, mechanical comprehension, and electronics information. The *ASVAB* was administered to more than 94 percent of the NLSY79 in order to establish new norms for the population of potential enlistees. The *ASVAB* is used by Department of Defense (DOD) researchers to improve the ways training and duty assignments are made for those who enter the Armed Forces. It is also used by vocational guidance counselors to assess vocational interest and preparation of students. Standardized scale scores and standard errors are available for each section.

ASVAB

See Armed Services Vocational Aptitude Battery

Bonus

See Tips

BPI

Behavior Problems Index.

CETA

See Comprehensive Employment and Training Act

CES-D

Center for Epidemiologic Studies Depression Scale. This scale is designed to measure symptoms of depression in the general population.

Cohort

A cohort is a group sharing similar characteristics at a particular point. The cohort selected for the NLSY79 includes 12,686 youth who were age 14–21 on December 31, 1978 (born between January 1957 and December 1964), either civilians residing in the 50 United States (11,406 sample members) or non-civilians on active duty in the U.S. Armed Forces in September 1978 and born between January 1957 and December 1961 (1,280 sample members).

Commissions

See Tips

Comprehensive Employment and Training Act

Originally enacted in 1973, CETA superseded the Manpower Development and Training Act of the 1960s. CETA was administered by the U.S. Department of Labor and was designed to provide employment and training opportunities for the economically disadvantaged, under-employed, and unemployed. Under its several titles, CETA provided a variety of services including classroom and on-the-job training, work experience, subsidized jobs with public and private sectors, basic education, and support services such as counseling. The various programs were planned and operated by state and local governments with Federal funding and oversight. CETA legislation expired in the fall of 1982 and was replaced by the Job Training Partnership Act (JTPA.)

CPS

See Current Population Survey

Current Population Survey

Monthly interviews conducted by the Census Bureau with a scientifically selected sample of households in several hundred sample areas throughout the U.S. The primary purpose of the CPS is to collect up-todate information about the number of persons in the country who are employed, unemployed, or not in the labor force in a specific survey week. The CPS is the source of the monthly official unemployment rate figures. CPS questions included in the NLSY79 surveys are the same as the CPS questions used to determine employment status and are administered as closely as possible to the method used by the Census Bureau so that findings are comparable.

Delayed Entry Program

A program that allows a person to enlist in the military and then report for active duty at a later time (as many as 365 days later). Individuals enlisting through this program are sworn into their military branch on two occasions: once at the time that they enlist through DEP and a second time when they actually begin active duty. DEP enlistees do not always report for active duty and can be guaranteed, in writing, the type of training and the location that they want.

DEP

See Delayed Entry Program

Dictionary of Occupational Titles

This occupational directory was developed by the Department of Labor as a comprehensive classification system for occupations. It was used to code NLSY79 respondents' 1979 current occupation only. The individual occupations are identified by the 1970 9-digit DOT codes.

DOD-3-Digit

An occupation code using the 1977 Department of Defense 3-Digit Enlisted Occupational Classification System. This numeric coding scheme standardizes the occupational coding across all branches of the military.

DOT

See Dictionary of Occupational Titles

DU

See Dwelling Unit

Duncan Index

An ordinal measure of socioeconomic status that assigns a two-digit prestige score to the Census occupation codes. The index scores are based on education and income distribution ratings and range from 0 to 97. (See Otis Dudley Duncan. "A Socioeconomic Index for all Occupations." In *Occupations and Social Status*, Reiss, Jr., A.J., et. al., New York: The Free Press of Glencoe, 1961).

Dwelling Unit

A single room, or group of rooms, that is intended for separate living quarters. To be considered a separate dwelling unit, it must have either a separate entrance or complete kitchen facilities (stove, sink with piped water, and refrigerator) for the sole use of the household.

ED

See Enumeration Districts

Educational Tuition Assistance Program

The educational benefit package for the Armed Forces Reserves. It is comparable to VEAP.

Employed

See Labor Force and Employment Status

Employer Flap

A cover page for the *Employer Supplement* listing employer name and codes to signify that the job for this employer was government sponsored. Used for the 1979 interview only, it is the same as the first page of the *Employer Supplement* in later years.

Employer Supplement

The *Employer Supplement* is an addition to the youth cohort survey instrument. One supplement is completed for each employer a respondent has had since the date of the last interview. The 1979 interview incorporated five columns in Section 10 of the survey instrument; each column is equivalent to one *Employer Supplement*.

Employment Status Recode

ESR is a variable created from information collected on employment status and provides a standardized employment status code for the sample for each survey year except 2000.

Enumeration Districts

Enumeration districts (ED) are areas used in the geographic control of enumeration activities by the Census Bureau. An ED is the territory assigned to a single enumerator to cover during a census count.

Environmental Variables

County and state codes are assigned for all geographic locations according to the *Federal Information Processing Standards (FIPS-5.)* The codes for the respondent's current residence at each interview date are then matched with the 1972, 1977, 1983, 1988, and 1994 *City and County Data Books* (depending on survey year) to obtain characteristics of the county such as population size, crime statistics, industrial diversification, etc. (see specific survey year). These data are available on the Geocode CD to researchers willing to insure their confidentiality.

ESR

See Employment Status Recode

Estates

Regular or periodic income received from estates or trusts.

ETAP

See Educational Tuition Assistance Program

GED

See General Educational Development Test

General Educational Development Test, General Equivalency Diploma

A certificate that is considered by some to be an equivalent to a high school diploma obtained as a result of taking the General Educational Development Test or GED. The test provides a valid means of measuring the educational proficiency of individuals taking the test in comparison with high school graduates.

Geocode

Geographic codes established by the *Federal Information Processing Standards (FIPS)* of the National Bureau of Standards. They provide a standardized code for matching the NLS data with the *City and County Data Books* used. The state codes are a two-digit numeric code ranging from 01 (Alabama) to 56 (Wyoming) inclusive of a code for Washington, D.C.; there are some gaps for possible later additions. The SMSA geocode is a four-digit numeric code identifying each SMSA. They are arranged in alphabetical order beginning with 0040 (Abilene, Texas) and ending with 9360 (Yuma, Arizona.) The counties within each state are listed in alphabetical order, with some gaps, beginning with 001 and using almost exclusively odd numbers to allow for additions.

Gross Income

Gross income for all non-farm businesses and professions is defined as all monies received from the sale of goods or for services rendered, as well as the amount of net inventory increase. It does not include proceeds from the sale of capital items such as land, buildings, and machinery. For farms, it is defined as all monies received from the sale of farm products, government subsidies on crops and soil conservation, and income from rental of equipment. It does not include the value of any farm products (such as food and fuel) used by the family or proceeds from the sale of land, buildings, or machinery.

Household Screener

The survey administered in late 1978 to the initial sample of households to locate eligible respondents for the NLSY79 civilian sample. Approximately 75,000 households were screened to identify eligible respondents based on age, sex, ethnicity, and poverty status.

I

An abbreviation for interviewer.

ICD

See International Classification of Diseases

Individual Quarters (IQ)

A term used to describe non-dwelling unit, noninstitutional living quarters.

Industry Census Code

A 3-digit numeric code from the Industrial Classification System used by the Census Bureau to assign codes to industries. The 1970 system consists of 215 industry categories arranged into 12 major groups. It was developed within the framework of the Standard Industrial Classification (SIC). All industries in all years for the youth cohort were coded using the 1970 codes. Beginning with the 1982 interview, the industry of the respondent's current or last job was also coded using the 1980 codes.

Information Sheet

An *Information Sheet*, which lists pertinent informational items about the respondent that were collected during the previous interview is provided to NORC interviewers. *Info sheet* items include date of birth, marital status, date of last interview, etc. In PAPI surveys, the interviewers referred to the information sheet during the course of the interview in order to ascertain possible updates. The automated CAPI instruments access it automatically to drive the survey.

Int

An abbreviation for interview.

Int Check

Interviewer check questions are used during the course of the interview to check the sample universe and denote the skip pattern for a particular set of questions. The interviewer codes the question based on previous responses or direct observation, without asking the respondent.

Interest on Savings and U.S. Savings Bonds

Includes interest accrued from savings accounts even if the money has been withdrawn. It does not include interest on unredeemed U.S. Savings Bonds; if the bonds were cashed, only the difference between the amount received and the original cost is considered.

International Classification of Diseases

The ICD is a coding system for diseases, injuries, and causes of deaths as adopted by the World Health Assembly. The coding system used is defined in the *International Classification of Diseases*, 9th Revision, 1975, with some minor modifications.

JCI

Job Characteristics Index.

Job Corps

Established by the Economic Opportunity Act of 1964 and continued under Title IV of CETA in 1973, Job Corps is a skills/training program designed to assist economically disadvantaged youth who need and can benefit from an intensive educational and vocational training program in order to become more responsible, employable, and productive citizens. The program is operated in a residential group setting.

Job Training Partnership Act

Legislation enacted in the fall of 1982 (Public Law 97-300—October 13, 1982), which authorized federal funds for employment and training. It superseded CETA and placed administrative control with the state in cooperation with local governments. The emphasis is on private sector participation in training, without subsidies for the training of participants.

JTPA

See Job Training Partnership Act

"Knowledge of the World of Work"

The nine multiple-choice items that test the respondent's ability to determine the duties associated with selected occupations.

Labor Force and Employment Status

All respondents who were either employed or unemployed during the survey are defined as being in the labor force. Employed, unemployed, and out of the labor force are defined as follows:

<u>Employed</u> - All respondents who during the survey week were either (1) at work—those who did any work for pay or profit or worked without pay for 15 hours or more on a family farm or business—or (2) with a job but not at work—those who did not work and were not looking for work, but had a job or business from which they were temporarily absent because they were taking time off for various reasons.

<u>Unemployed</u> - All respondents who did not work at all during the survey week and (1) either were looking or had looked for a job in the four-week period prior to the survey; (2) were waiting to be recalled to a job from which they had been laid off; or (3) were waiting to report to a new job within 30 days.

Out of the Labor Force (OLF) - All respondents who were neither employed or unemployed during the survey week.

Longitudinal Study

The NLSY79 is a longitudinal study that follows the same age cohort of youth (age 14–21 on December 31, 1978) over an extended period of time. The study began in 1979, and personal interviews have been conducted with respondents on a regular basis (annually until 1994 and then biennially); The 1987 survey was administered by telephone.

Manpower Development and Training Act

Legislation initially enacted in 1962 and amended in 1963, 1965, 1966, and 1968 to combat poverty by providing various employment assistance and employment training programs for the unemployed and the under-employed. It was subsequently replaced by CETA.

MDTA

See Manpower Development and Training Act

Military Occupational Specialties

An alphanumeric jobs/skills classification system for Army, Army Reserves, Army National Guard, Marine Corps, and Marine Reserves that describes the specific job a person is trained for or assigned to in those branches of the military.

Military Pay Grades

A pay level classification system for military personnel, used by all branches of the military, that is associated with ranks. The ranks are enlisted (E), officer (O), and warrant officer (W). There are nine enlisted grades, ten officer grades, and four warrant officer grades, with 1 being the lowest grade within each rank. For example, an E-2 is the second lowest rank for enlisted personnel.

MOS

See Military Occupational Specialties

Net Income

For farms and non-farm businesses, the amount of income remaining after operating expenses are subtracted from the total or gross income. For individuals who do not own a business, net income is the same as gross income.

Net Rental Income

Payments received from the rental of room(s), apartment(s), house(s), or any other real estate, after operating expenses are deducted.

Occupation Census Code

A 3-digit numeric code from the 1970 Occupational Classification System used by the Census Bureau to assign codes to occupations. It has 417 separate categories and is divided into 12 major groups. All occupations in all years for NLSY79 respondents were coded using the 1970 codes. Beginning with the 1982 interview, the occupation of respondents' current or last job was also coded using the 1980 codes.

OJT

See On-the-Job Training Program

OLF

See Labor Force and Employment Status—Out of the Labor Force.

On-the-Job Training Program

Includes institutional instruction in a work setting intended to enable an individual to learn a skill and/or qualify for a particular occupation through demonstration and practice. On-the-job training programs conducted under CETA refer to programs in which the government pays a portion of the employee's wages for a certain period of time, and the employer agrees to keep the employee after the training is completed. The subsidy pays the employer for the increased costs of hiring workers whose skill levels are lower than those of regular entry-level employees.

Operating Expenses

Operating expenses for all non-farm businesses are defined as the cost of utilities, annual depreciation of machinery and other business property, amount of net inventory decrease, wages and salaries paid to employees, cost of supplies and raw materials, business taxes, and interest on debts. For farms, they are defined as the cost of feed, tools, livestock purchases, wages to farm workers, and depreciation of equipment or buildings. They do not include capital expenditures such as purchase of land or machinery.

Opportunities Industrialization Centers of America, Inc. (OICA)

Community-based programs designed to motivate, train, develop, and use the technical skills of community residents in a variety of vocational areas. The activities are aimed at easing local unemployment problems; they work with so-called "unemployables" to enable them to become productive participants in industry.

Out of the Labor Force

See Labor Force and Employment Status

Pensions and Annuities

These include pension and retirement benefits such as federal employee, private employee, self-employed, and military retirement pensions. Benefits paid to survivors of the primary recipient of a pension are also included.

PIAT

Peabody Individual Achievement Test. This test is given to the children of the NLSY79 mothers. See *NLSY79 Child Handbook* for a detailed discussion.

PPVT

Peabody Picture Vocabulary Test. This test is given to the children of the NLSY79 mothers. See *NLSY79 Child Handbook* for a detailed discussion.

Primary Sampling Unit

A primary sampling unit (PSU) of the Census Bureau is composed of either a single county, a group of counties, or an SMSA and is based on population and area constraints. In certain special situations, state-defined units are termed "independent cities" or "parishes." In these instances, such units are used in the definition of PSU.

Profiles, Profiles of American Youth

The name given to describe the ASVAB test that was administered to 94 percent of the NLSY79 in the summer of 1980.

PSE See Public Service Employment

PSU See Primary Sampling Unit

Public Assistance

Commonly referred to as "welfare," public assistance refers principally to Aid to Families with Dependent Children (AFDC or ADC). Other programs include General Assistance (local titles include Outdoor Relief, Direct Relief, and General Relief) and Emergency Assistance. Food stamps, clothing, free or reduced rent, public housing, or other non-monetary assistance are not included. With the Welfare Reform Act passed in August 1996, these types of programs were reconstituted as "Temporary Assistance to Needy Families" (TANF) and returned to state control, with some federal guidelines.

Public Service Employment

Authorized under Titles II and VI of CETA, PSE provides public service jobs, either through CETA or WIN, in areas where substantial or temporary service unemployment exists. PSE placements are in government positions or in jobs with private, non-profit service organizations.

R

Abbreviation for Respondent

Ratings

An alphanumeric jobs/skills classification system for the Navy, Naval Reserves, Coast Guard, and Coast Guard Reserves that describes the specific job to which a person in those branches of the military is trained or assigned.

Regular Job

A full-time or part-time civilian job with a definite arrangement to work for pay (or profit) for a specific number of hours or days a month. It includes unpaid work on a family farm or for a family business.

Regular School

A school that provides credit toward an academic diploma or degree, such as an elementary school, junior high school, high school, college, or university, as contrasted with special schools that offer certificates rather than diplomas or degrees. Some courses at special schools or programs (such as technical schools, nursing programs, etc.) do provide credits that can be applied toward a regular academic diploma or degree. These programs are considered regular school.

Rosenberg Self-Esteem Scale

A ten-item scale using four-point Likert forced-choice response to measure feelings of self-worth and competence taken from Rosenberg, M., *Society and the Adolescent Self-Image*. Princeton, N.J.: Princeton University Press, 1965.

Rotter Scale or Internal-External Locus of Control Scale (Rotter 1966)

A set of statements designed to measure the attitudes of respondents about the degree to which they have control over their own lives.

Royalties

Income received from a percentage of gross sales from books, music, etc.

Sampling Weights

A numeric value calculated on the basis of each respondent's characteristics (sex, ethnicity, year of birth, sample type, and location). The value is adjusted for differential probabilities of selection and attrition and allows for population estimates.

School Survey

A supplemental survey of the non-foreign high schools attended by civilian NLSY79 respondents. The school survey collected information about the characteristics of the school (enrollment, library size, vocational programs, ethnic diversity of students and teachers, etc.), as well as individual respondent characteristics (participation in remedial courses, aptitude and ability test scores, date last enrolled, etc.).

School to Work Transition Program

Authorized under Title III of CETA, the School to Work Transition Program includes a number of pilot projects designed to prepare youth to move smoothly from an educational setting to the work force. Specific goals of the program include helping dropouts obtain a GED while providing them with intensive vocational counseling and a job.

Selected Reserves

Umbrella term used to refer to both the Reserves and the Guard branches of the military service.

SER—Jobs for Progress

SER (Service, Employment, and Redevelopment) is a private, non-profit, community-based manpower organization, headquartered in Los Angeles, which seeks to provide education and skills training and employment placement for the economically disadvantaged, with primary emphasis on Hispanic Americans.

SMSA

See Standard Metropolitan Statistical Area

Social Security

Social Security benefits include disability, retirement, and survivors benefits, as well as Black Lung payments made to coal miners and payments made to retired railroad workers under the Railroad Retirement Act.

Special Pay Enlistment Bonus

A bonus of up to \$3,000 (\$2,500 for the Army) paid to encourage enlistment for a 4-year term of service in designated skills of the Armed Forces.

Special Pay Selective Re-Enlistment Bonus

A bonus paid for re-enlistment in critical military specialties that is available only during a problem reenlistment period between 21 months and 10 years of service. The maximum bonus is \$12,000 (\$15,000 for Navy nuclear power personnel) and is available only for the first re-enlistment in the Army.

SSI

See Supplemental Security Income

Standard Metropolitan Statistical Area

An SMSA of the Census Bureau consists of one or more entire counties containing at least one city (or twin cities) having a population of 50,000 or more plus adjacent counties that are metropolitan and are economically and socially integrated with the central city. In New England, towns and cities rather than counties are the basis for defining an SMSA. SMSA boundaries may cross state lines as in the case of Washington, D.C.

Supplemental Security Income

A federal assistance program for aged, disabled, or blind persons whose income falls below a certain level. The program is administered through the Social Security Administration and replaced state welfare programs such as Old Age Assistance, Aid to the Aged, Aid to the Blind, and Aid to the Permanently and Totally Disabled.

SWTP

See School to Work Transition Program

TANF

With the Welfare Reform Act passed in August 1996, public assistance programs such as AFDC were reconstituted as "Temporary Assistance to Needy Families" (TANF) and returned to state control, with some federal guidelines.

Tips, Commissions, Bonus

Any payments in addition to base wage or salary received as income. It does not include allowances or other monies received from other household member(s) for chores, etc., done around the home.

Transcript Survey

Sponsored by the National Center for Research in Vocational Education at The Ohio State University, the Transcript Survey was conducted during 1980–83. Information collected includes courses, grades, credits, days absent, and rank in class.

UC Benefits

See Unemployment Compensation Benefits

Unemployed

See Labor Force and Employment Status

Unemployment Compensation Benefits

Payments made by state or local governments to help replace wages lost by a worker who was laid off from her/his job. It also includes payments from a union strike fund to union members for wages lost because of a strike.

Urban League

A non-profit community service organization that works to secure equal opportunities in all sectors of society for Black Americans and other minorities. It uses the disciplines of social work, economics, law, and business management to achieve its goals.

VEAP

See Veteran's Educational Assistance Program

Veteran Benefits

Benefits paid by the Veteran's Administration to former members of the Armed Forces for service or nonservice related disabilities. It also includes educational benefits paid to veterans and any payments made to survivors of deceased veterans.

Veteran's Educational Assistance Program

Education assistance program for veterans whose active military service was contracted or began on or after January 1, 1977. VEAP replaced the GI Bill and provides that for every \$1 contributed by the veteran while on active duty, the government will provide \$2, up to a maximum of \$8,100, for educational costs.

Vocational Rehabilitation Programs

Federal/state programs authorized under the Vocational Rehabilitation Act of 1973 that provide a wide range of rehabilitation services for persons with physical and mental disabilities causing a substantial handicap to employment. The programs focus on the individuals' abilities, interests, and needs in order to enable them to pursue gainful employment.

Welfare

See Public Assistance

WIN

See Work Incentive Program

Work Experience Program

Generally operated through CETA or WIN, the Work Experience Program provides subsidized employment in the public sector and in private, non-profit agencies. The work situations are temporary and not expected to lead to more permanent employment. The program is intended to provide experience on a job, to develop occupational skills, to improve work habits, and to allow exposure to various occupational opportunities

Work Incentive Program

Program authorized by the 1968 amendments to Title IV of the Social Security Act, WIN that was designed to help recipients of AFDC (Aid to Families with Dependent Children) find jobs. This was the only government-sponsored training and employment program that served welfare recipients exclusively. It also provided support services such as vocational counseling and child care.

Work-Study Programs

Government-sponsored programs designed to help eligible students finance their college education by providing part-time jobs, generally on campus.

Worker's Compensation or Worker's Comp

Payments made by private insurance companies, self-insured employers, or state funds financed under federal and state worker's compensation laws to persons injured in work-related accidents. It includes payments from insurance companies only when the premiums were paid by the employer, not the employee.

Young Adult Conservation Corps (YACC)

Authorized under YEDPA, YACC is a government-sponsored program administered by the Departments of Labor, Agriculture, and the Interior. It recruits unemployed youth 16–23 years old to work for up to one year on conservation projects in parks, national forests, and recreation areas.

Youth Community Conservation and Improvement Projects (YCCIP)

A government-sponsored program authorized by YEDPA as a part of CETA, YCCIP is designed to provide highly supervised employment, work experience, and skills training for unemployed youth 16–19 years old. The youth are employed on community-planned projects that produce tangible benefits for the community.

Youth Employment and Demonstration Projects Act of 1977 (YEDPA)

A major effort to employ youth and increase their future employability through coordination of existing employment and training projects and development of new and innovative approaches.

Youth Employment and Training Program (YETP)

Government-sponsored projects that provide a variety of year-round training activities intended to enhance job prospects and career opportunities that will lead to unsubsidized employment. In order to participate in the program, youth must be aged 14–21 and in school or unemployed. Most participants are economically disadvantaged, but 10 percent may be from diverse economic backgrounds.

Youth Incentive Entitlement Pilot Projects (YIEPP)

Authorized under YEDPA, YIEPP is a part of CETA and is designed to demonstrate or test various approaches that will guarantee jobs and training for economically disadvantaged youth 16–19 years old in school or willing to return to school to complete their education.

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