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Young Women

User's Guide

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NLS OF YOUNG WOMEN
USER'S GUIDE

A Guide to the 1968–1999
National Longitudinal Survey of Young Women Data

Prepared for the
U.S. Department of Labor by

Center for Human Resource Research
The Ohio State University
Columbus, Ohio
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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 experience of American men and women could provide a basis for policies fostering more efficient and equitable labor markets. Additional thanks are given to the NLS of Young Women cohort's current Principal Investigator, Randall Olsen.

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Amanda McClain
Jennifer Hering
Editors

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 NLS and the Young Women cohort. Persons needing more information on the NLS in general or the NLS cohort groups are encouraged to obtain copies of the *NLS Handbook*. Summaries of research completed on the NLS over the past several decades are presented 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*, the *NLSY79 User's Guide*, the *NLSY97 User's Guide*, and the *NLSY79 Child and Young Adult Data Users Guide;* contact User Services for more information on the men's cohorts. Ordering information for NLS documentation 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 by e-mail at <usersvc@postoffice.chrr.ohio-state.edu>.

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Chapter 1: Introduction

1.1 The NLS of Young Women Cohort

Comprising 5,159 women ages 14–24 in 1968, the NLS of Young Women cohort is one of four original groups first interviewed when the National Longitudinal Surveys (NLS) program began in the mid-1960s. The U.S. Department of Labor selected this cohort to enable research on a cohort of women who were finishing school, making initial career and job decisions, and starting families.

In the three decades since the original survey, Young Women respondents have answered questions about a wide variety of topics. Various interviews have collected information not only about the respondents' labor force behavior but also regarding education, training, marriage, children, income and assets, attitudes about work and family, and the labor force attachment of spouses and partners. A number of topics specific to the life stage of respondents have also been addressed. For example, the earliest surveys included detailed questions about educational experiences and plans, while those a few years later asked about childcare issues and fertility expectations. More recent interviews have gathered data about health, pensions, retirement plans, and transfers of time and money between respondents, their parents, and their children. The variety of questions and the long time span of the interviews allow researchers to track the experiences of a large group of women from the school-to-work transition through the beginning of their retirement years, permitting examination of many different research topics in a number of disciplines.

This detailed guide is designed for researchers who are either working or planning to work with the NLS of Young Women. Users who need general information about the NLS surveys should refer to the *NLS Handbook*. For those not familiar with the NLS, a brief overview of all the 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 U.S. who were 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 18 times.

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. Beginning in 1994, children age 15 and older, the "Young Adults," replied to a separate survey with questions similar to those asked of their mothers.

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 youth's educational experiences, along with his or her 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.

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

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	1967/1999	19	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	1968/1999	20	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

[1] The 1990 interview surveyed both 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 older than age 20 were not 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 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 program 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 within the Office of Employment and Unemployment Statistics at BLS.

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. Collection of data for the Mature and Young Women cohorts is undertaken by the Census Bureau 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 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 utilizing 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, DC 20212-0001
(202) 691-7410; fax: (202) 691-6425
e-mail: NLS_info@bls.gov
www: http://stats.bls.gov/nlshome.htm

This detailed guide is designed for researchers who are either working or planning to work with the National Longitudinal Survey of Young Women cohort. Users who are interested in a general overview should refer instead to the *NLS Handbook*. Users may also wish to read recent issues of *NLS News*, a quarterly newsletter, available on-line at <http://stats.bls.gov/nlsnews.htm>.

1.3 Surveys of the Young Women

In 1968, 5,533 women ages 14 to 24 as of December 31, 1967, were designated to be interviewed for the Young Women cohort. Blacks were oversampled to ensure that they would be represented in sufficient numbers for analyses. In the same year, initial interviews were conducted with 5,159 (93.2 percent) of the designated women.

Including the first interview in 1968, the cohort has been interviewed 20 times. In the initial survey plan, respondents were to be interviewed yearly over a five-year period. Because of the usefulness of these data and the relatively small sample attrition, a decision was made at the end of the first five-year period to continue the interviews for another five years. At this point, the interviewing pattern changed from a yearly personal interview to a 2-2-1 schedule; each respondent was contacted by phone approximately every two years, then again in person one year after the second phone interview. The 2-2-1 schedule was continued through 1988, when the decision was made to conduct a personal interview every other year. (No interview was conducted in 1990 to avoid a conflict with the decennial census.) In total, 14 of the 20 interviews were conducted in person and 6 were administered by telephone. Further information is provided in the “Interview Schedule & Fielding Periods” section in chapter 2 of this guide.

The 1995 survey marked the departure from a paper-and-pencil interview (PAPI) to a computer-assisted personal interview (CAPI). Beginning in this year, the NLS Mature Women and Young Women cohorts have been administered the same survey instrument during the same fielding period. Even though they are collected together, the data for the two cohorts are still presented separately on the CD-ROM. This CAPI survey is administered on a biennial basis.

The surveys have collected three basic types of information: (1) data on the respondent's work and non-work experiences, training investments, schooling, family income and assets, physical well-being, and geographic residence; (2) background information on the respondent's family and household composition, and her marital and fertility history; and (3) supplementary data specific to the age, sex, stage of life, and/or labor market attachment of this cohort (e.g., household responsibilities, child care arrangements, care of ill or disabled persons, retirement plans and experiences, volunteer work).

Data elements for the NLS of Young Women are briefly described in the following paragraphs:

Alcohol and cigarette use. Data are available on consumption of alcohol, frequency of use, and quantity consumed, as well as age at first/last use of cigarettes.

Attitudes and aspirations. The surveys include questions on the respondent's attitude toward her current job, women's roles, satisfaction with life, and frequency of depressive symptoms during the past week.

Child care. Collected were extent of responsibility for providing regular child care, attitude toward child care, types of child care utilized, cost of these arrangements, and amount of time per week child care services were necessary.

Demographic and family background characteristics. Information has been collected on each respondent's race, date of birth, and nationality; her residence and family structure at age 14; and her parents' birthplaces, life/health status, living arrangements, occupations, and education.

Discrimination. During select survey years, respondents have been asked varying questions on whether they have experienced discrimination at work because of their sex, age, or race.

Educational status and attainment. Data are available on current school enrollment status, highest grade attended or completed, attainment of a high school diploma or GED, type of high school curriculum, field of study at college, amount of college tuition, types of financial aid, and highest degree received.

Geographic and environmental characteristics. Data include the region of residence; whether current residence is in a Standard Metropolitan Statistical Area (SMSA); geographic mobility comparison codes for current residence versus residence during the initial survey year; and, for the early survey years, size of the local labor market and local area unemployment rate.

Health status and health insurance. Information is collected on the presence and duration of health conditions of both the respondent and other family members that limit the respondent's labor market participation, presence of physical problems such as vision and hearing difficulties, and the need for and frequency of need for assistance in personal care, transportation, bill paying, and getting about. Recent surveys collected information on health insurance sources for the respondent and her family.

Household composition. For each family member (early survey years) or household member (later survey years) living in the respondent's household at the time of the survey, information such as relationship to the respondent, sex, marital status, birth date or age, school enrollment status, highest grade completed, and work experience is collected.

Household responsibilities and elder care. Questions have been asked on the extent of responsibility for various household tasks, elder care required by either respondent's parents or husband's parents, and care of chronically ill/disabled household members.

Income and assets. Income data include the amount of income received by the respondent, spouse, and other family members in the past calendar year or past 12 months. Asset information includes the total market value of property and/or business owned, savings and retirement accounts, stocks, bonds, and debts such as mortgages.

Labor market status and transitions. Data include current labor force status, i.e., activity during most of the survey week, as well as, for those employed, information on occupation, industry, class of worker, rate of pay, hours worked per week, and attitude toward current job.

Leisure activities and volunteer work. The surveys have collected information on the types and amount of time spent on leisure activities, as well as the extent of unpaid volunteer work.

Marital and fertility histories. Information is available on the respondent's marital status at each survey date and changes in her marital status over time. Fertility information includes the respondent's age at the birth of her first child and the birth dates, sex, and life status of her children.

Retirement plans and experiences. This includes questions on retirement plans and experiences of respondents; presence of compulsory retirement plan at current job; expected age at retirement;

eligibility for retirement benefits and number of years covered under Social Security, Railroad Retirement, or other pension plans; age respondent becomes eligible for full/reduced benefits; and amount of monthly benefits.

Training. Questions have been asked regarding participation in, type of, and usefulness of occupational training programs, including types of certificates and diplomas received.

Transfers. In 1997, data were collected on transfers of time and money from the Young Women to their parents. In 1999, the focus of this section shifted to transfers of time and money to and from the women's children.

1.4 The Data on CD

NLS of Young Women data are available to the public on CD-ROM at a nominal charge. Each disc contains the cumulative longitudinal record of each respondent from 1968 to the most recent interview. The current data release is the *NLS Original Cohort Databases: Mature and Young Women* CD-ROM, which includes information on the Mature and Young Women from the initial survey of each cohort through 1999. This disc also contains information from the 1989 Mature Women pension plan data collection (see the *Mature Women User's Guide* for details). Subsequent releases will be announced in *NLS News*, the quarterly NLS newsletter; users can also contact NLS User Services for more information.

Data for the other two Original Cohorts, the Older and Young Men, are available on a separate CD-ROM. Interested researchers should contact NLS User Services for more information.

1.5 Organization of the Guide

The remainder of the guide is organized as follows:

Chapter 2 contains the technical information on the Young Women sample. It includes information on sample sizes and retention rates, sampling design and fielding periods, sample representativeness and attrition, and weighting.

Chapter 3 provides the user with practical information on Young Women data. This section describes how the data are collected and created, arranged on the CD-ROM, and presented in the documentation.

Chapter 4 presents summary discussions of sets of variables, 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 turn to the respective topical section with that name. Each topical section includes variable summaries, references to relevant survey instruments or documentation items, and cautionary notes to users about inconsistencies in the data.

Appendices are the fifth section of this guide. The appendices present a quick reference guide to the data, a dictionary of key words used in variable titles, and SAS and SPSS programs for separating responses to multiple-answer questions.

Chapter 2: Sample Design and Attrition

2.1 Sample Design

The original NLS of Young Women sample was designed to represent the civilian noninstitutionalized population of the United States ages 14–24 as of December 31, 1967, at the time of the initial survey. The cohort is represented by a multi-stage probability sample drawn by the Census Bureau from 1,900 primary sampling units (PSUs) that had originally been selected from the nation's counties and cities for the experimental *Monthly Labor Survey* conducted between early 1964 and late 1966. A primary sampling unit consists of Standard Metropolitan Statistical Areas (SMSAs), counties (or parishes in some states), parts of counties, and independent cities. A total of 235 sample areas, comprising 485 counties and independent cities, were chosen to represent every state and the District of Columbia. From the sample areas, 235 strata were created of one or more PSUs that were relatively homogeneous according to socioeconomic characteristics. Within each stratum, a single PSU was selected to represent the stratum. Finally, within each PSU, a probability sample of housing units was selected to represent the civilian noninstitutionalized population. Because the addresses for the sample frame came from the 1960 Census, respondents are covered by Title 13 confidentiality restrictions. Therefore, variables that link respondents to PSUs are not available to public users, making it impossible to identify respondents by city or state.

2.2 Screening Process

As dictated by the above requirements, the initial sample of about 42,000 housing units for all four NLS Original Cohorts was selected and screening interviews took place in March and April of 1966. Of this number, about 7,500 units were found to be either vacant, occupied by persons whose usual residence was elsewhere, changed from residential use, or demolished. On the other hand, about 900 additional units were found created within existing living space or changed from what had been nonresidential space. A total of 35,360 housing units were available for interview, from which usable information was collected for 34,662 households, for a completion rate of 98.0 percent.

The original plan called for using the initial screening to select all four NLS Original Cohorts. However, after the sample members for the Older Men were chosen, the sample was rescreened in September 1966 before the initial interview of the Young Men. This decision was made because a seven-month delay between the screening and first interview seemed inordinate due to the mobility of Young Men in their late teens and early twenties. To increase efficiency, it was decided to stratify the sample for the rescreening by the presence or absence of a 14- to 24-year-old male in the household. The probability was high that a household that contained a 14- to 24-year-old in March would also have such a member in September. However, to insure that the sample also represented persons who had moved into sample households in the intervening period, a sample of addresses that previously had no 14- to 24-year-old males was also included in the rescreening operation. Since a telephone number had been recorded for most households at the time of the initial screening interview, every attempt was made to complete the short screening interview by telephone. The sample of households from the initial screening, supplemented with information from the rescreening, was subsequently used to obtain the two samples of women ages 30–44 and 14–24 for the Mature Women and Young Women cohorts (Parnes et al. 1970; Shea et al. 1971).

User Notes: During the screening process a large number of multiple respondent households were designated for interview; more than half of respondents in the Mature Women, Young Women, and Young Men cohorts and one-third of respondents in the Older Men cohort originated from multiple respondent households (i.e., a household with at least one other NLS respondent). For more information on multiple respondent households and on the types of relationships that existed between respondent pairs (e.g., spouse, sibling, etc.), see the "Household Composition" section of this guide.

2.3 Sampling Process

Following the initial household interview and rescreening operation, 5,533 women ages 14-24 as of December 31, 1967, were designated to be interviewed for the Young Women cohort. The sample was designed to provide approximately 5,000 respondents—about 1,500 nonwhites and 3,500 whites. The women were sampled differentially within four strata: whites in predominantly white enumeration districts (EDs), non-whites in predominantly non-white EDs, whites in predominantly non-white EDs, and non-whites in predominantly white EDs. An enumeration district is a geographical area considered to be an appropriate size for an interviewer to complete all necessary interviews within a prescribed time frame. To provide separate reliable statistics for black respondents, the sample design called for oversampling of blacks at twice the expected rate in the total population. The sampling rate of households in predominantly non-white EDs was between three and four times that for households in predominantly white EDs in order to meet this survey requirement. During the first survey in 1968, 5,159 (93.2 percent) of the designated women were interviewed.

2.4 Interview Schedule & Fielding Periods

In the initial survey plan, respondents from each of the four Original Cohorts were to be interviewed yearly over a five-year period. However, due to cost considerations, it was decided after the second survey of the Older Men to survey the two older groups (Older Men and Mature Women) biennially rather than annually. Due to their greater mobility, the Young Women and Young Men were interviewed annually. A decision was made at the end of the first five-year period to continue the interviews for another five years because of the usefulness of these data and the relatively small sample attrition. At this point, the interviewing pattern changed from a yearly personal interview to a

2-2-1 schedule; each respondent was contacted by phone approximately every two years, then again in person one year after the second phone interview. The 2-2-1 schedule was continued through 1988, when the decision was made to conduct a personal interview every other year. However, the implementation of the biennial schedule was interrupted by the 1990 decennial Census. The scheduled 1990 Young Women survey was pushed back to 1991. Table 2.4.1 depicts the years in which the cohort was surveyed, the fielding period, the percent of the cohort interviewed, and the type of interview utilized.

Table 2.4.1 Sample Sizes, Retention Rates, and Fielding Periods

Year	Type of interview	Fielding period	Total interviewed	Retention rate[1]	Retention rate among living respondents[2]
1968	Personal	January–March	5159	100.0%	100.0%
1969	Personal	January–March	4930	95.6	95.6
1970	Personal	January–March	4766	92.4	92.5
1971	Personal	January–March	4714	91.4	91.6
1972	Personal	January–March	4625	89.6	90.0
1973	Personal	January–March	4424	85.8	86.1
1975	Telephone	January–March	4243	82.2	82.7
1977	Telephone	January–March	4108	79.6	80.1
1978	Personal	January–March	3902	75.6	76.1
1980	Telephone	January–March	3801	73.7	74.2
1982	Telephone	January–March	3650	70.8	71.4
1983	Personal	January–March	3547	68.8	69.4
1985	Telephone	January–March	3720	72.1	72.9
1987	Telephone	January–March	3639	70.5	71.5
1988	Personal	May–July	3508	68.0	69.0
1991	Personal	May–August	3400	65.9	67.1
1993	Personal	September–November	3187	61.8	63.1
1995	Personal	June–September	3019	58.5	60.0
1997	Personal	June–September	3049	59.1	61.1
1999	Personal	June–August	2900	56.2	58.4

1 Retention rate is defined as the percent of base-year respondents who were interviewed in any given survey year. Included in the calculations are deceased and institutionalized respondents, as well as those serving in the military.
2 This retention rate excludes respondents known to be deceased in each survey year. This rate may be underestimated, as it is likely that some respondents classified as "refused" or "unable to locate" are actually deceased.

User Notes: Although each of the personal interviews contains data of roughly the same degree of completeness, data gathered during the telephone interviews were not meant to update the longitudinal record of a respondent. Rather, the telephone interviews were intended to obtain a brief update of information on each respondent and to maintain sufficient contact so that the lengthier personal interview could be completed. The combination of fluctuating fielding periods and type of interview (i.e., personal or phone) may affect not only the probability of reinterview but also the reference periods of time-related questions.

There is another source of inconsistency with respect to time references. A given year's survey instrument may use the previous calendar year as a reference period for some questions, while other questions will collect data for the year since last interview. Income data, for example, may be collected for the calendar year, corresponding to the time frame for a respondent's tax records; employment data are usually collected for the period since the last interview.

2.5 Interview Methods

Before each survey period begins, the Census Bureau generates lists of respondents to be interviewed and distributes them to 12 regional offices. Current addresses and contact information are generated from data collected during the last interview and through a postal check conducted by Census, and cases are assigned to interviewers who live in the same geographic area as the respondent. Interviewers then receive copies of the questionnaire (or a laptop computer for CAPI interviews), respondents' *Household Record Cards*, and flashcard and information booklets.

In each survey round, interviewers are responsible for contacting each respondent in their caseload and for using additional local level resources to locate those respondents who have moved since the last interview. Respondents who have moved outside the geographic district of their original interviewer are assigned to another unless there are no personnel nearby. In the latter event, an effort is made to interview the respondent by telephone.

Each respondent to be interviewed is sent various materials to encourage continued participation. Advance letters thanking respondents for taking part in the interviews and informing them of the coming survey are mailed prior to each interview period. Fact sheets highlighting recent research findings from each cohort's survey data are also provided. Respondents who initially refuse to participate in a survey are sent letters and some additional materials by the regional offices designed to encourage their participation and are once again contacted by local level interviewers to secure the interview.

While the type of survey, personal or telephone, determines the chief mode of contact, an alternate contact method is used for certain respondents. During a personal survey, for example, those respondents who live long distances from the Census interviewer's base of operation or those for whom the Census supervisor has decided that another contact method is warranted are contacted by telephone. Although survey instruments are written in English only, multilingual interpreters are made available by the regional offices to interviewers who need them.

In 1995, respondents in the two women's cohorts were interviewed during the same time period; a single computer-assisted personal interview (CAPI) replaced the paper-and-pencil interview (PAPI) instruments used during the previous interviews. While data were collected simultaneously for the two cohorts, they were released separately by cohort. This CAPI interview has continued on a biennial basis.

The average length of an interview varies depending on the type conducted, with personal PAPI interviews lasting 50–60 minutes, CAPI interviews lasting about 70 minutes, and telephone interviews averaging 20–25 minutes. No stipends have been paid to Original Cohort respondents for their participation.

2.6 Eligible Sample & Reasons for Noninterview

In general, respondents selected for interviewing each year are those who participated in the initial survey and who are alive, residing within the United States at the interview date, noninstitutionalized, and not members of the Armed Forces. However, the criteria used to select the eligible sample—respondents whom the Census Bureau attempts to interview in a given round—have varied somewhat over the years.

Beginning in 1969, any respondent who had refused to be interviewed during a previous round was dropped from the eligible sample. Beginning in 1971, respondents were also dropped from the eligible sample if they had not been interviewed in two consecutive surveys for reasons other than death or refusal (for example, respondents who could not be located or contacted during the field period—those with 'Reason for Noninterview' codes of 1, 2, 3, 4, 5, 6, 8, or 11). The User Notes after Table 2.6.3 describe how dropped respondents can be identified. In 1983, the Census Bureau ceased dropping individuals for these two reasons, and in 1985 attempts were made to reinterview some of the dropped individuals. The following selection criteria determined which respondents would be reinterviewed (see Table 2.6.1 for examples of each case):

1) If the respondent refused to be interviewed in 1972 or earlier, she was not eligible to be reinterviewed. See example respondent 1 in the table below.
2) If the respondent refused an interview in 1973 or later, survey staff attempted to reinterview her in 1985. If the respondent was interviewed in 1985, she rejoined the eligible sample for all subsequent surveys. If she was not interviewed in 1985, she remained ineligible for all subsequent surveys. See example respondent 3.
3) If the respondent first refused to participate in 1982, she was not eligible to participate in 1983 but rejoined the eligible sample in 1985. She remained in the eligible sample regardless of her interview status in 1985. See example respondent 5 in the table.
4) If the respondent missed her second consecutive survey in 1972 or earlier, she was not eligible to be reinterviewed. See example respondent 2.

5) If the respondent was interviewed in 1971 and subsequently dropped due to two consecutive noninterviews, she was eligible for reinterview in 1985. If the respondent was interviewed in 1985, she rejoined the eligible sample for all subsequent surveys. If she was not interviewed in 1985, she remained ineligible for all subsequent surveys. See example respondent 4.

6) If the respondent was not interviewed in 1981 and 1982 for reasons other than death or refusal, she was never dropped from the sample. She remained eligible for all subsequent rounds regardless of prior participation. See example respondent 6.

Table 2.6.1 Selection of Respondents Eligible for 1985 Survey

Example resp.	Status 1972 or previous	Status 1973–82	Status 1983	Status 1985	Status 1986 and subsequent
1	Refused any 1 survey (rni=9[1])	Not eligible (rni=9)	Not eligible (rni=9)	Not eligible (rni=9)	Not eligible (rni=9)
2	Missed 2 consec. surveys (rni=1, 2, 3, 4, 5, 6, 8, 11)	Not eligible (rni=12)	Not eligible (rni=12)	Not eligible (rni=12)	Not eligible (rni=12)
3	Had not refused or missed 2 consec. surveys	Eligible until refused, then not eligible (rni=9)	Eligible until refused, then not eligible (rni=9)	Eligible; if not interviewed, then rni=applicable code	Eligible if interviewed in 1985 Not eligible if not interviewed in 1985, rni=9
4	Had not refused or missed 2 consec. surveys	Eligible until missed 2 consec. surveys, then not eligible (rni=12)	Eligible until missed 2 consec. surveys, then not eligible (rni=12)	Eligible; if not interviewed, then rni=applicable code	Eligible if interviewed in 1985 Not eligible if not interviewed in 1985, rni=12
5	Had not refused or missed 2 consec. surveys	Refused for first time in 1982	Not eligible (rni=9)	Eligible; if not interviewed, then rni=applicable code	Eligible regardless of participation in 1985; if not interviewed, then rni=applicable code
6	Had not refused or missed 2 consec. surveys	Missed 2nd consec. survey in 1982	Eligible (never dropped)	Eligible regardless of prior participation	Eligible regardless of prior participation

[1] The reason for noninterview (rni) codes are defined in Table 2.6.3 below.

Table 2.6.2 below depicts reasons for exclusion from the eligible sample and the years each applied; Tables 2.6.4 and 2.6.5 later in this section present reasons for noninterview across survey years.

Table 2.6.2 Reasons for Exclusion from the Eligible Samples

Out-of-Scope Reason	Years Exclusion Reason in Effect
Institutionalized	All years
In the Armed Forces	All years
Residing outside the U.S.	All years
Deceased	All years
Refusal during any one previous interview	1968–83. Some respondents rejoined the eligible sample in 1985 (see Table 2.6.1).
Dropped due to two consecutive noninterviews for reasons other than refusal, death, or membership in the Armed Forces	1971–83. Some respondents rejoined the eligible sample in 1985 (see Table 2.6.1)
Congressional Refusal[1]	1985–present

[1] Congressional Refusal refers to a congressional representative requesting a respondent not be contacted again for an NLS survey after a respondent has completed one or more survey rounds.

Each survey year, CHRR creates a cumulative ‘Reason for Noninterview’ variable for the full sample of respondents. Variable reference numbers for this series from 1969 to 1999 are: R00854., R01453., R02525., R03353., R04171., R05195., R05483., R05874., R07099., R07564.10, R08032.10, R09473.10, R10628.10, R11092.10, R12327.10, R13652.10, R16012., R34981., and R42670. This created variable is a combination of (1) the noninterview reasons provided by Census for the subset of respondents designated as eligible for interview in that survey year and (2) the reason for noninterview assigned during a previous survey to out-of-scope respondents. In 1982, CHRR began releasing an additional variable reflecting the reasons for noninterview for only those respondents with whom interviews were attempted that year (e.g., R07564.). The number of respondents that Census designates as eligible for interviewing fluctuates by survey year.

Instructions to interviewers on how to code a respondent’s reason for noninterview appear within the *Interviewer’s Reference Manuals (*or *Field Representative’s Manuals)*. The set of noninterview coding categories present during the initial survey years has been supplemented over the years with additional reasons for noninterview, and the meanings of existing categories have been refined. Table 2.6.3 presents the raw coding categories present on the public data files and specifies the survey years during which each category was utilized.

Table 2.6.3 Conceptual & Raw Coding Categories for the Reason for Noninterview Variables

Conceptual Category	Raw Coding Category [1]	Code	Survey Years
CAN'T LOCATE	Unable to locate [contact] R - reason not specified	[1]	All (1968–present)
	[Unable to locate R] - mover - no good address	[4]	All
INTERVIEW IMPOSSIBLE	[Unable to locate R] - mover - good address given but interview impossible to obtain (e.g., "moved to Germany" or "lives too far from PSU - distance too great")[2]	[2]	All
	[Unable to locate R] - mover - good address given but unable to obtain interview after repeated attempts, etc.	[3]	All
	[Unable to locate R] - nonmover - unable to obtain interview after repeated attempts, etc.	[5]	All
	Temporarily absent	[6]	All
	Other	[11]	All
REFUSAL	Refusal	[9]	All
	Congressional refusal[3]	[14]	1985–present
OUT OF SCOPE	In Armed Forces	[7]	All
	Institutionalized	[8]	All
	Moved outside U.S. (other than Armed Forces)	[13]	1978–present
DECEASED	Deceased	[10]	All
DROPPED	Non-interview for two years, R dropped from sample	[12]	1971–present

[1] Specific instructions to Census interviewers on the use of these coding categories can be found in the cohort-specific *Interviewer's Reference Manuals*.
[2] Beginning in the 1978 survey year, the separate "moved outside the U.S." coding category was added as a reason for noninterview and the "unable to locate" coding category no longer included those respondents who had moved outside the United States.
[3] "Congressional Refusal" refers to a congressional representative requesting a respondent not be contacted again for an NLS survey after a respondent has completed one or more survey rounds.

User Notes: Researchers can use the 'Reason for Noninterview' variables to identify respondents who were dropped from the eligible sample. Respondents with a code of 12 were dropped due to missing two consecutive interviews for reasons other than death or refusal. It is more difficult to determine which respondents were dropped because they refused an interview in 1982 or earlier, because they are assigned the same code as respondents refusing an interview in later years. To identify these respondents, researchers must examine the 'Reason for Noninterview' variables for the patterns outlined in Table 2.6.1 above.

The reason for noninterview coding categories depicted in Tables 2.6.4 and 2.6.5 below were constructed from the raw coding categories as shown in Table 2.6.3. For example, the conceptual category "can't locate" is the sum of codes "1" and "4." Tables 2.6.4 and 2.6.5 depict the number of respondents not interviewed by survey year, reason, and race.

Table 2.6.4 Reasons for Noninterview: 1969–99

Survey Year	Total Interviewed	Total Not Interviewed	Reason for Noninterview					
			Can't Locate	Interview Impossible	Refusal	Out of Scope[1]	Deceased	Dropped[2]
1969	4930	229	52	68	98	9	2	–
1970	4766	393	93	113	172	7	8	–
1971	4714	445	73	78	226	8	12	48
1972	4625	534	51	67	300	5	18	93
1973	4424	735	92	69	416	4	22	132
1975	4243	916	109	77	530	2	27	171
1977	4108	1051	95	61	643	2	30	220
1978	3902	1257	69	40	823	27	33	265
1980	3801	1358	45	26	911	25	39	312
1982	3650	1509	54	18	1032	28	44	333
1983	3547	1612	37	12	1154	30	46	333
1985	3720	1439	359	115	727	49	57	132
1987	3639	1520	100	47	1017	29	69	258
1988	3508	1651	111	60	1123	22	77	258
1991	3400	1759	180	39	1157	31	94	258
1993	3187	1972	216	108	1255	28	107	258
1995	3019	2140	211	170	1357	18	126	258
1997	3049	2110	277	103	1278	29	165	258
1999	2900	2259	300	89	1388	27	197	258

Note: This table is based on R00854., R01453., R02525., R03353., R04171., R05195., R05483., R05874., R07099., R07564.10, R08032.10, R09473.10, R10628.10, R11092.10, R12327.10, R13652.10, R16012., R34981., and R42670.

1 Beginning in 1978, "moved outside the U.S." became a separate out-of-scope coding category. Respondents who could not be interviewed during the 1969–77 interviews because their residence– either within or outside of the U.S.– was too far away were coded within the "interview impossible" category. Out-of-scope counts for pre-1978 survey years may thus be understated.

2 Respondents who had been noninterviews for two consecutive survey years due to reasons other than refusal or death were eliminated from the eligible sample beginning with the 1970 interview. After 1982, no additional respondents were dropped based on this rule; in 1985, an attempt was made to reinterview some dropped individuals. Some individuals previously coded as "dropped from sample" were coded differently in later surveys.

Table 2.6.5 Reasons for Noninterview by Race: 1969–99

	Total Interviewed		Total Not Interviewed		Reason for Noninterview											
					Can't Locate		Interview Impossible		Refusal		Out of Scope[1]		Deceased		Dropped[2]	
Survey Year	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black	Non-black	Black
1969	3530	1400	170	59	33	19	51	17	78	20	7	2	1	1	–	–
1970	3435	1331	265	128	45	48	75	38	137	35	4	3	4	4	–	–
1971	3385	1329	315	130	41	32	57	21	181	45	4	4	6	6	26	22
1972	3328	1297	372	162	21	30	44	23	239	61	1	4	8	10	59	34
1973	3194	1230	506	229	44	48	44	25	325	91	3	1	11	11	79	53
1975	3068	1175	632	284	54	55	48	29	417	113	0	2	15	12	98	73
1977	2974	1134	726	325	48	47	41	20	494	149	0	2	17	13	126	94
1978	2838	1064	862	395	29	40	25	15	617	206	19	8	19	14	153	112
1980	2769	1032	931	427	22	23	11	15	681	230	16	9	21	18	180	132
1982	2659	991	1041	468	31	23	10	8	765	267	19	9	25	19	191	142
1983	2585	962	1115	497	23	14	8	4	849	305	19	11	25	21	191	142
1985	2767	953	933	506	185	174	62	53	544	183	33	16	30	27	79	53
1987	2719	920	981	539	43	57	20	27	724	293	17	12	37	32	140	118
1988	2628	880	1072	579	50	61	28	32	800	323	13	9	41	36	140	118
1991	2552	848	1148	611	82	98	25	14	840	317	17	14	44	50	140	118
1993	2417	770	1283	689	82	134	63	45	927	328	20	8	51	56	140	118
1995	2268	751	1432	708	100	111	112	58	1007	350	11	7	62	64	140	118
1997	2287	762	1413	697	148	129	63	40	957	321	20	9	85	80	140	118
1999	2189	711	1511	748	160	140	60	29	1029	359	19	8	103	94	140	118

Note: This table is based on R00032. (race), R00854., R01453., R02525., R03353., R04171., R05195., R05483., R05874., R07099., R07564.10, R08032.10, R09473.10, R10628.10, R11092.10, R12327.10, R13652.10, R16012., R34981., and R42670.

[1] Beginning in 1978 survey, "moved outside the U.S." became a separate out-of-scope coding category. Respondents who could not be interviewed during the 1969–77 interviews because their residence– either within or outside of the U.S.– was too far away were coded within the "interview impossible" category. Out-of-scope counts for pre-1978 survey years thus may be understated.

[2] Respondents who had been noninterviews for two consecutive survey years due to reasons other than refusal or death were eliminated from the eligible sample beginning with the 1971 interview. After 1982, no additional respondents were dropped based on this rule; in 1985, an attempt was made to reinterview some dropped individuals. Some individuals previously coded as "dropped from sample" were coded differently in later surveys.

2.7 Sample Representativeness and Attrition

The retention rate for the Young Women as of the 1999 interview was 56.2 percent, or 2,900 of the original 5,159 respondents. Retention rate is defined as the percent of base-year respondents who were interviewed in any given survey year; included in the calculations are deceased and other out-of-scope respondents (see Table 2.6.1 for definitions). An analysis of selected characteristics of respondents interviewed in the tenth year samples of the Original Cohorts found that noninterviews had not seriously distorted the sample representativeness of any of the cohorts for the characteristics studied (Rhoton 1984). A second analysis of differential attrition among wealthy and non-wealthy subsamples of each of the four Original Cohorts found that non-wealthy respondents of each cohort showed a consistent tendency toward greater attrition (Rhoton and Nagi 1991). Among the three younger cohorts, almost all of the difference between wealthy and non-wealthy subsamples is accounted for by attrition reasons other than the death of the respondent. In a more recent analysis, Zagorsky and Rhoton (1998) concluded that respondents with lower socio-economic status attrited at a higher rate than those with higher income and educational attainment. Further, the authors found that white respondents were more likely to remain in the survey than blacks and those of other races. For year-by-year retention rates, consult Table 2.4.1 in the "Interview Schedule & Fielding Periods" section of this chapter.

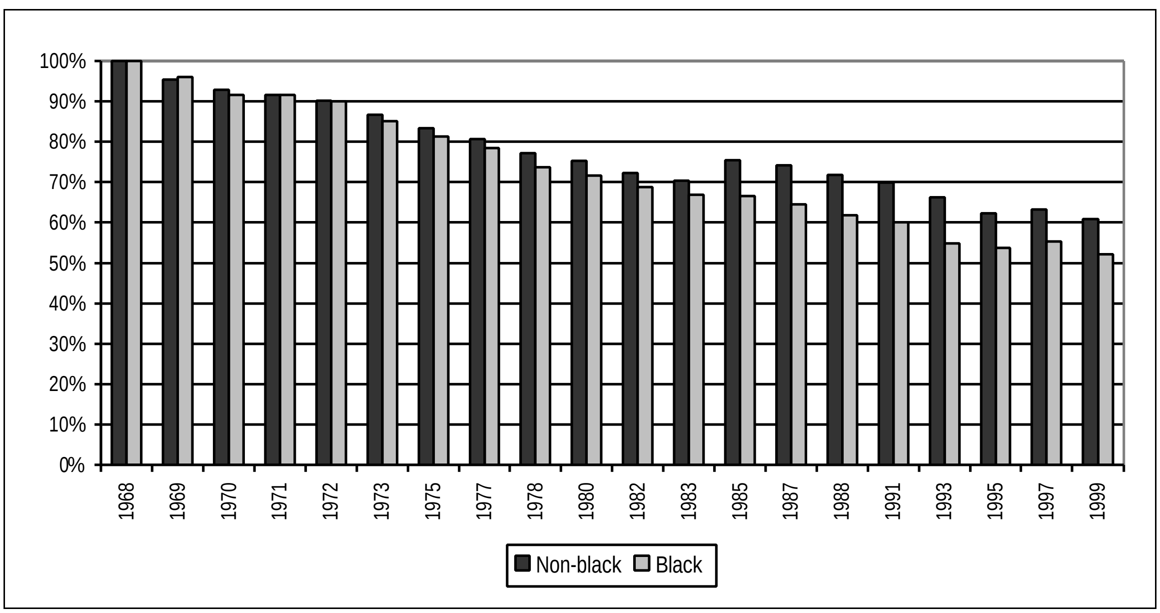
In Table 2.7.1, the percentage of sampled respondents of each race is presented for the base survey year (1968) and the most recent interview year for which data are available. This table also provides information on numbers of deceased respondents by race. Figure 2.7.1 characterizes the percentage of the original sample, by race, who have been interviewed at each survey point.

Table 2.7.1 Sample Characteristics by Race: 1968 and 1999

Race[1]	Number of Interviewed Respondents		Retention (1999 as % of 1968)	Number of Deaths as of 1999[2]
	1968	1999		
Non-black	3700 (71.7 %)	2189 (75.5%)	59.2%	103
Black	1459 (28.3 %)	711 (24.5%)	48.7%	94

[1] See section on 'Race, Ethnicity & Nationality" in this guide for details on race classifications. Respondent totals in this table are based on R00032.
[2] Numbers are derived from R42670.

Figure 2.7.1 Interview Completion Rates among Living Respondents by Race and Survey Year



Finally, Table 2.7.2 presents the number of interviews completed by respondents, broken down by race. In this table, the "number who completed" columns show how many respondents completed **exactly** that number of surveys. The "cumulative %" columns show 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.

Table 2.7.2 Number of Interviews Respondents Completed out of 20 Surveys, by Race: 1968–99

Number of Surveys[1]	All Respondents		Non-black Respondents		Black Respondents	
	Number who completed	Cumulative %	Number who completed	Cumulative %	Number who completed	Cumulative %
20	1912	37.1%	1533	41.4%	379	26.0%
19	573	48.2	401	52.3	172	37.8
18	341	54.8	217	58.1	124	46.3
17	238	59.4	158	62.4	80	51.7
16	204	63.3	141	66.2	63	56.1
15	185	66.9	115	69.3	70	60.9
14	161	70.1	94	71.9	67	65.5
13	135	72.7	93	74.4	42	68.3
12	124	75.1	89	76.8	35	70.7
11	85	76.7	51	78.2	34	73.1
10	131	79.3	88	80.5	43	76.0
9	112	81.4	76	82.6	36	78.5
8	118	83.7	71	84.5	47	81.7
7	125	86.1	78	86.6	47	84.9
6	116	88.4	78	88.7	38	87.5
5	108	90.5	70	90.6	38	90.1
4	105	92.5	70	92.5	35	92.5
3	97	94.4	64	94.2	33	94.8
2	136	97.0	105	97.1	31	96.9
1	153	100.0	108	100.0	45	100.0
Total	**5159**	**100.0**	**3700**	**100.0**	**1459**	**100.0**

Note: This table is based on R00032. (race), R00002., R00854.10, R1453.10, R02525.10, R03353.10, R04171.10, R05195.10, R05483.10, R05874.10, R07099.10, R07564.50, R08032.50, R09473.20, R10628.20, R11092.20, R12327.20, R13652.20, R16014., R34985., and R42671.

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

2.8 Sample Weights

This section is divided into a description of the procedures used to develop sample weights and a discussion of the practical application of these weights. Before using NLS data in an analysis, the user should consult the practical usage discussion below to determine when weighting of data is appropriate. Sample-based weights are designed to reflect the underlying population in the year in which the cohort was initially surveyed. Individual weights are assigned after each interview; these weights produce group estimates that are demographically representative of each cohort's base-year population when used in tabulations. Sampling weights for each respondent can be found on the corresponding public data release.

Base-Year Sampling Weights

Population data derived from the NLS are based on multi-stage ratio estimates. The first step was to assign each sample case a basic weight consisting of the reciprocal of the final probability of selection. This probability reflects the differential sampling by race within each stratum. The base-year weights for all those interviewed were adjusted to account for the overrepresentation of blacks in the sample as well as for persons selected after screening who were not interviewed in the initial survey. This adjustment was made separately for each of 24 groupings for the Young Women, based on the four Census regions (Northeast, North Central, South, and West), race (non-black/black), and three place of residence groupings (urban, rural farm, and rural non-farm).

In the first stage of ratio weight adjustment, differences at the time of the 1960 Census between the distribution by race and residence of the population as estimated from the sample PSUs and that of total population in each of the four major regions of the country were taken into account. Using 1960 Census data, estimated population totals by race and residence for each region were computed by appropriately weighting the Census counts for PSUs in the sample. Ratios were then computed between these estimates (based on sample PSUs) and the actual population totals for the region as shown by the 1960 Census.

In the second stage ratio adjustment, sample proportions were adjusted to independent current estimates of the civilian noninstitutionalized population by age, sex, and race. These estimates were prepared by carrying forward the most recent Census data (1960) to take account of subsequent aging of the population, mortality, and migration between the United States and other countries (Census Bureau 1966). The adjustment was made by race within five age groups.

Sampling Weight Nonresponse Adjustment

Since the initial interview, reductions in sample size have occurred due to noninterviews. To compensate for these losses, the sampling weights of the individuals who were interviewed are revised. The Young Women cohort is a panel of individuals into which no new individuals were added after the base year. As a result, all reweighting after the initial survey is calibrated to base-year population parameters. This revision is done in two stages. First, out-of-scope noninterviews in each year are identified by the Census Bureau and eliminated from the sample of noninterviews. This group consists of individuals who are institutionalized, have died, are members of the armed services, or have moved outside the United States—that is, individuals who are no longer members of the U.S. noninstitutionalized civilian population.

The second stage in the adjustment acknowledges the possible nonrepresentative characteristics of the in-scope interviews. For each survey year, those who are eligible but not interviewed, as well as those who are interviewed, are distributed into 30 nonresponse adjustment cells based on race (black and non-black), length of residence in the United States at first interview (nine or fewer years, ten or more years, N/A) and father's occupation (white collar, service, blue collar, farm, N/A) reported in 1968. Within each of the cells, the base-year sampling weights of those interviewed are increased by a factor equal to the reciprocal of the reinterview rate (using base-year weights) in that year.

In 1991, CHRR began investigating the effects of differential nonresponse on sampling weights as then calculated. The original weighting routine was designed to minimize an increase in variance caused by large weights for individuals with certain characteristics. One effect of this procedure was that certain subsegments of the sample were assigned identical sampling weights. CHRR adjusted the weights to avoid this problem.

Practical Usage

The Young Women sample is based upon stratified, multi-stage random samples with an oversample of blacks. Each case in each interview year is assigned a weight specific to that year. This weight can be interpreted as an estimate of the number of people in the corresponding population that the individual in the sample represents. This section discusses some ramifications of the weights when used for data analysis.

To tabulate characteristics of the sample (i.e., sample means, totals, or proportions) for a single interview year in order to describe the population being represented, it is necessary to weight the observations using the weights provided. For example, to estimate the average hours worked in 1987 by women age 14–24 as of December 31, 1967, researchers would 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 produce the intended result, include:

Samples Generated by Dropping Observations with Item Nonresponses: Often users confine their analysis to subsamples of respondents who 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 a small proportion of the 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.

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, the weights for a respondent in different years may occasionally be quite dissimilar, leaving the user uncertain about 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. If the sample is limited to respondents interviewed in a terminal or end point year, the weight for that year can be used. Users with a more complex sample selection often can obtain reasonably accurate results by using the base-year weights.

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 lead to incorrect 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. If one wishes to compute the population average effect of, for example, education upon earnings, one may 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, 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.

Researchers unsure of the appropriate grouping may wish to 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.

References

Census Bureau. *Current Population Reports.* Series P-25, No. 352, November 18, 1966.

Census Bureau. "Noninterview Rates for the National Longitudinal Surveys Mature Women and Young Women Cohorts." Internal Memo. Washington, DC: U.S. Department of Commerce, May 18, 1992.

Parnes, Herbert S.; Shea, John R.; Spitz, Ruth S.; and Zeller, Frederick A. *Dual Careers, Volume 1: A Longitudinal Study of Labor Market Experience of Women*. Manpower Research Monograph 21, vol. 1. Washington, DC: U.S. Government Printing Office, 1970.

Rhoton, Patricia. "Attrition and the National Longitudinal Surveys of Labor Market Experience: Avoidance, Control and Correction." Columbus, OH: CHRR, The Ohio State University, 1984.

Rhoton, Patricia and Nagi, Karima. "Attrition by Wealth in the Original NLS Cohorts." Columbus, OH: CHRR, The Ohio State University, 1991.

Shea, John R.; Roderick, Roger D.; Zeller, Frederick A.; and Kohen, Andrew I. *Years for Decision, Volume 1: A Longitudinal Study of the Educational and Labor Market Experience of Young Women.* Manpower Research Monograph 24, vol. 1. Washington, DC: U.S. Government Printing Office, 1971.

Zagorsky, Jay and Rhoton, Pat. "Attrition and the National Longitudinal Surveys' Mature Women Cohort." Columbus, OH: CHRR, The Ohio State University, 1998.

Chapter 3: Guide to the Young Women Data

This chapter provides some practical information about how NLS variables are collected, created, and arranged on the CD-ROM. An explanation of the hard copy and electronic documentation items available is also included. The first section will describe the different survey instruments used to collect the raw Young Women data during the field period and explains how question numbers have been assigned during the various survey years. Next, the guide 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—that is, 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.

3.1 Survey Instruments and Related Documentation

The primary variables found within the main data set of each NLS cohort are derived directly from one or more survey instruments (e.g., questionnaires, household interview forms, etc.). This section provides information on the conventions utilized within the NLS documentation system to identify questionnaire items from the primary survey instruments.

Certain other documents, namely *Interviewer Reference Manuals* and flowcharts, provide background information on how specific survey instruments were administered or offer the researcher additional tools for working with a questionnaire. While not actually survey instruments, these additional documents are described within this section.

Survey Instruments

A unique set of survey instruments is used during each survey year to collect information from respondents. The term "survey instrument" refers to: (1) the questionnaires, which serve as the primary source of data on a given respondent, and (2) documents such as the household interview forms or household record cards that collect information on members of the respondent's household.

Note that while the source of the majority of variables in the main NLS data sets is the questionnaire or one of the other survey instruments, certain NLS variables are created either from other NLS variables or from information found in an external data source.

Household Record Cards

NLS surveys include the collection, during each interview, of information on the members of each respondent's household. These data were collected primarily through the "Household Roster" section of the questionnaire, which in turn relies upon information provided by Census personnel and found on the separate *Household Record Cards.* Respondents were selected on the basis of a screening of sample households. Both the instruments used for the household data collection and the household screening instruments that were used to draw the samples of respondents are described below. Starting with the 1995 survey, the information traditionally collected in the *Household Record Cards* became a part of the CAPI survey instrument.

Household Screener* & *Household Record Cards: Prior to most interviews, Census interviewers complete or update information found on a *Household Record Card*. Part of this information is transferred during the main interview to the "Household Roster" section of the questionnaire. The first *Household Record Card* (LGT-1, dated 2/23/1966) is the screening instrument used to select the Young Women respondents for interview. Information for this first card was gathered from any available household member, while respondents provided comparable information in subsequent surveys. Each *Household Record Card* (1) enumerates all persons currently living in the household; (2) records for each person: name, relationship to respondent, whether this person is considered a household member (*Current Population Survey* definition), marital status, birth date, and sex; (3) summarizes changes since the last survey in household composition; and (4) provides information on the respondent's current and/or permanent address and telephone number at the time of interview, as well as the names of people who will know how to contact the respondent at the time of the next interview.

Five versions of the paper *Household Record Cards,* each covering approximately three surveys, have been used. While information from these cards does not, in general, appear as variables within any of the data files, certain information present on the cards detailing each respondent's current household composition is transferred to the "Household Roster" section of the questionnaires. In addition, certain demographic variables as of the initial survey year, notably age, birth date, race, and sex, were derived from the 1966 household screenings. Users should consult each survey's *Interviewer's Reference Manual* for the specific instructions and definitions used to complete each card.

Questionnaires

There are separate and distinctly different questionnaires for each survey year. 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 page headers.

> ***User Notes:*** The questionnaires are critical elements of the NLS documentation system and should be utilized by each researcher to ascertain the wording of questions, coding categories, and the universe of respondents asked to respond to a given question.

Each questionnaire collects two general types of information: (1) information on the actual interview (e.g., interview dates, times, and contact methods) and (2) information supplied by the respondents on various topics related to their work and life experiences. Each survey instrument is organized around core sets of questions: current labor force status, retrospective work history, attitudes, health, marital history, household composition, assets, and income. In addition, the interview schedules contain special sets of questions on a variety of topics specific to the particular stage of life: child care and fertility questions were asked in the early survey years, while recent surveys have emphasized retirement and pension plans.

Information Sheet

Information Sheets (or flap items), located within the questionnaires, were usually designed in such a way that the interviewers could fold the sheet out to the side of the actual questionnaire and refer to the items on the flap during the interview. Various information items from previous interviews were clerically entered by Census and used by the interviewer during the survey. These included information such as name of previous employer, date of previous interview, and marital status and place of residence at the time of previous interview.

The interviewer also transcribed information recorded in the questionnaire during the current survey onto the *Information Sheet*. The only current survey year item that a user would need from the flap was "current marital status," transcribed from the *Household Record Card* in certain survey years. Items referenced frequently during the interview were more conveniently located when transferred to the flap.

With the advent of CAPI in 1995, *Information Sheet* items are inserted directly into the appropriate questions by the computer. During the interview, the computer prompts the interviewer with, for example, the name of an employer inserted as part of the question. The hard copy flap is therefore no longer used.

Questionnaire Item or Question Number: The questionnaire item or question number is the generic term referring 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 to help the user link each variable to its location in a survey instrument. In general, questionnaire items found in the NLS documentation reflect the printed question numbers in the questionnaire.

Four different designations were used within the documentation system to identify varying types of questionnaire items in PAPI interview years (1968–93), as depicted in Table 3.1.1. The question number appears to the right of each variable description within the codebook. CD-ROM users can access variable titles and codebook information via the "Accessing Data by Question Number" function.

Table 3.1.1 Question Numbering Conventions in PAPI Surveys

Question:	Question Number	112E; 59E
Interview Check:	Check Item (CH)	CH J3; CH AA
Interviewer Reference Item:	Interviewer Reference (R)	123R; R4
Unnumbered Questions:	Page Number	PG1

In the vast majority of cases, the reference is to a specific question item found in the survey (e.g., 22F or 3B). The convention "CH" is used to identify interviewer check items that occur within the survey (e.g., CH B). Their purpose is to direct the interviewer to the next appropriate question. The convention "R" denotes a reference item (e.g., R2 or 12R). Typically, reference items are grouped in a section of the survey instrument called the *Information Sheet,* which contains information that interviewers frequently refer to during the course of an interview. Items designated "R" in the survey instruments are also designated "R" in the documentation. Finally, when an item does not include a question number, only the page number ("PG") of the questionnaire on which a particular item appears is identified (e.g., PG 1). The first page of most questionnaires contains unnumbered interview status information and transcribed *Household Record Card* information.

Beginning with the first CAPI survey in 1995, questions are numbered using a different system. In general, all questions asked of respondents during each section of the questionnaire begin with a unique three-letter code. This letter code is followed by one or more numbers and letters indicating the placement of the question within that section. For example, HEA-11, a question on cigarette use, is followed by HEA-12A through HEA-12D, four questions on alcohol use. Questions that are part of a loop—that are asked about each different employer, for example—contain the additional letter group "ARR." Check items begin with "CK" followed by the three-letter code for that questionnaire section and a single letter (or letter and number) indicating the order in which the check was performed during the interview—for example, CK-HEA-A precedes CK-HEA-B. Table 3.1.2 lists the questionnaire sections and the corresponding codes. There are a few questions and check items within each section that may not follow this general pattern; users will be able to identify these questions by looking at the numbers assigned in the printed questionnaire.

Table 3.1.2 Questionnaire Sections and Sample Question Numbers in CAPI Surveys

Questionnaire Section	Abbreviation	Question Number	Check Item
Introduction and Household Record	HRC	HRC-3A, HRC-15	–
Respondent's Work History (CPS)	RWH	RWH-20, RWH-22B	CK-RWH-A, CK-RWH-K2
Respondent's On Jobs Supplement	OJS	OJS-1-ARR, OJS-5C-ARR	CK-OJS-E-ARR
Respondent's Employer Sort	RES	RES-1-ARR-01, RES-3B	CK-ES-C
Respondent's Employer Supplement	RSP	RSP-38-ARR, RSP-148B-ARR	CK-RSP-H-ARR
Respondent's Gaps in Employment	GAP	GAP-2-ARR, GAP-1B	CK-GAP-B-ARR
Husband's/Partner's Work History (CPS)	HWH	HWH-1, HWH-27A	CK-HWH-C, CK-HWH-L3
Husband's/Partner's On Jobs Supplement	HOJ	HOJ-3-ARR, HOJ-7	CK-HOJ-B, CK-HOJ-F-ARR
Husband's/Partner's Employer Sort	HES	HES-2-ARR, HES-3B	CK-HES-C
Husband's/Partner's Employer Supplement	HSP	HSP-34A-ARR, HSP-53-ARR	CK-HSP-G-ARR
Husband's/Partner's Gaps in Employment	HGP	HGP-1-ARR	CK-HGP-A
Health	HEA	HEA-2, HEA-19C	CK-HEA-H
Income	INC	INC-19E, INC-21	CK-INC-C
Other Family Background	OFB	OFB-8, OFB-20F-ARR	CK-OFB-P
Education and Training	EAT	EAT-29	CK-EAT-E
Parents and Transfers (1997)	PAR	PAR-12	CK-PAR-C
Interfamily Transfers (1999)	IFT	IFT-1B, IFT-36-ARR	IFT_CK_L
Mobility	MOB	MOB-4, MOB-5B	–
Attitudes and Contact Persons	ACP	ACP-4E, ACP-5	–
Interviewer Remarks	ASG	ASG-8, ASG-10A	–

User Notes: Most question numbers remain constant across CAPI surveys, so users can easily find the same question in different survey years. However, the order in which the questions are asked may vary for a number of reasons. Therefore, questions may appear in the CAPI questionnaire out of numerical order. Users should be able to locate them by following the skip pattern information provided in both the printed questionnaire and the codebook, or by using the reference numbers, which are assigned in numerical order.

In PAPI interviews, there is no question number for created variables. In CAPI surveys, however, created variables are identified using assigned question numbers similar to those included in the questionnaire. Each created variable is given a question number that indicates the content of the variable. For example, the constructed hourly rate of pay variables are assigned the question numbers HROP-ARR-01 through HROP-ARR-07, indicating the rates for jobs one through seven. Created variables in CAPI survey years usually include the letters CV in the question name; in addition, all variables that have the word *KEY* in their title are created.

School Survey

A supplemental survey of the last secondary school attended by respondents within the Young Women and Young Men cohorts was conducted in 1968. This special survey was mailed to the designated high schools and was designed to collect academic performance information and intelligence scores for respondents, as well as information on the programs and facilities of each high school. The instrument was called the *Survey of Work Experience of Young Men and Women School Survey*.

Interviewer's Reference Manual/Field Representative's Manual

Each survey instrument that goes into the field is accompanied by an *Interviewer's Reference Manual* (or *Field Representative's Manual),* which provides Census interviewers with background information on the NLS, respondent location instructions, and detailed question-by-question instructions for coding/ completing the questionnaire and *Household Record Cards*. Note that *Interviewer's Reference Manuals* do not always include all the actual questions.

Flowcharts

The questionnaires are lengthy and often present the researcher with the complex task of determining the universe of respondents asked a specific question. To assist in this task, flowcharts have been developed that graphically depict the skip patterns for some questionnaires. Hard copy flowcharts are available for some post-1977 surveys; comparable information for earlier questionnaires appears within the codebook under the heading "Universe Information." Starting with the 1995 CAPI surveys, skip patterns are part of the codebook documentation.

3.2 Types of Variables

Four types of variables are present in Young Women data files. The type of variable affects the title or variable description which names each variable and the physical placement of the variable within the codebook. Types of variables include:

1. Direct 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.

4. Variables provided by the Census Bureau or another outside organization based on sources not directly available to the user (e.g., characteristics of respondents' geographical areas).

> ***User Notes:*** In general, CHRR does not impute missing values or perform internal consistency checks across waves. Data quality checks most often occur in the process of constructing cumulative and current status variables such as 'Highest Grade Completed.'

Reference Numbers

Every variable within the main NLS data set has been assigned an identifying number that determines its relative position within the data file and 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.**

Reference numbers, once assigned, remain constant through subsequent revisions of the files. Reference numbers are assigned sequentially, with variables from the first survey year having a lower reference number than those variables specific to the second year, and so forth. Occasionally, variables are created sometime after the year in which the data were actually collected. These variables are frequently given a reference number that reflects the year in which the actual data were gathered rather than the year the created variable was constructed.

Table 3.2.1 lists reference numbers for each survey year since 1968 for the Young Women.

Table 3.2.1 Young Women Reference Numbers by Survey Year

Survey Year	Reference Numbers	Survey Year	Reference Numbers
1968	R00001.–R00811.	1982	R07550.–R08018.
1969	R00851.–R01405.	1983	R08019.–R09452.
1970	R01451.–R02312.01	1985	R09461.–R10609.
1971	R02518.–R03323.13	1987	R10616.–R11069.
1972	R03331.–R04149.55	1988	R11080.–R12313.
1973	R04150.–R05100.	1991	R12315.–R13629.
1975	R05175.–R05451.	1993	R13640.–R15804.
1977	R05467.–R05857.	1995	R16007.–R34923.
1978	R05860.–R07052.	1997	R34950.–R42503.
1980	R07061.–R07547.	1999	R42527.–R54394.

Variable Titles

Every variable within NLS 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 system. Variable titles are assigned by CHRR archivists who endeavor, within the limitations described below, to capture the core content of each variable and to incorporate within the title (1) common words 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 these 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.

Example 1: ‘Rate of Pay Required To Accept a Job (Unemployed 68)’
‘Rate of Pay Required To Accept a Job (OLF 68)’

Reference Periods: Variable descriptions may include a phrase indicating the time period to which these data refer. The following general conventions apply:

Survey Year: When the variable title includes either the phrase XX INT (83 INT) or the year (e.g., 68) without the year being preceded by the preposition “IN,” this indicates the survey year in which that variable was measured, not necessarily the year to which it applies.

Example 2: ‘Move to Current Residence - Prior Region, 83 INT’ refers to a residential move described during the 1983 interview.

Example 3: ‘Number of Weeks Worked in Past Year, 68’ refers to the weeks worked in the 12-month period preceding the 1968 survey.

Calendar Year: When a date follows a verbal description of a variable and is part of the prepositional phrase “in XX,” the date identifies the calendar year for which the relevant information was collected. The title in Example 4 refers to occupation in 1968, with the data collected in the 1969 survey.

Example 4: ‘Household Record – Family Member #1: Occupation in 68 (Age 14+) 69.’

User Notes: All searches for NLS variables are essentially searches for variable descriptions or titles. Electronic searches of NLS variables via the NLS CD-ROM accessing 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 survey 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 assume that two variables with the same or similar titles necessarily have the same (1) universe of respondents **or** (2) coding categories **or** (3) time reference period. While the universe identifier and reference period conventions discussed above have been utilized, 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).

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).

> Example 5: 'Employment Status Recode' (ESR) is the created or reconstructed version of the 'Activity Most of Survey Week' raw variable. The 'Activity' variable is derived from the first item 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 NLS 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. (Note that ESR has been replaced by a similar variable, MLR, beginning in 1995; see the "Labor Force Status" section of this guide for details.)

Finally, different archivists over a period of three decades have performed the task of assigning variable descriptions to data from the NLS cohorts. While every effort has been made to maintain consistency, users may find some differences in variable titles. Two primary sources of variation exist in Original Cohort variable title assignment. The first is systematic error in which identical questions may have the same question wording across the four Original Cohorts but slightly different variable titles. The rule before 1995 was to make title consistency *within* a cohort of highest priority. Starting in 1995, joint fielding forced the archivist to choose one title and cross-reference the other cohort's title in the archivist notes. The second variation is attributed to random error due to spacing or punctuation errors. The sorting process that produces variable title listings usually places these variables near if not next to the series of interest.

User Notes: There are important differences between the content of telephone and personal interviews. In the late 1960s and early 1970s, most of the interviews were conducted in person, usually at the respondent's home. After the first five years, the decision was made to conduct a major survey every five years and two telephone surveys during the five-year span so that problems of recall could be avoided and contact could be maintained with the respondents.

There are several different ways of identifying whether a survey is a personal or telephone interview. Users can (1) refer to Table 2.4.1 in the "Interview Schedule & Fielding Periods" section of Chapter 2, which depicts the type of interview by survey year, or (2) examine variable titles assigned to questions of similar content. Differences in what appear to be comparable variables reflect variations in the wording of the question or the fact that the reference period for an identically worded question may be different in a personal versus a telephone interview. Questions that refer to the last five years were usually found in a personal (or five-year) interview. This difference means that some questions were only asked in the five-year surveys and some were asked only in the telephone surveys. Users conducting longitudinal analysis need to change their variable creation procedures to account for the differences in data collection between the early years of uninterrupted personal interviews and subsequent survey years when telephone interviews were used.

Starting with the 1988 survey, the collection pattern was altered again; a decision was made to conduct a personal interview every other year and collect data going back to the date of the last interview. Due to the collection of the decennial census, the Young Women skipped a year in 1990 and were instead interviewed in 1991. This cohort has been interviewed biennially since 1991; the CAPI instrument was used beginning in 1995.

When analyzing data, users should remember that not all surveys were conducted during the same season of each survey year. Responses to labor force status questions, for example, may differ significantly if fielding occurred during the summer versus winter months. See the discussion of fielding periods in chapter 2 of this guide for more information.

3.3 Young Women Codebook System

All variables present on a main file data set are documented via: (1) a cohort-specific codebook, (2) an accompanying codebook supplement, and (3) error updates. This section describes these three primary components of the codebook system and discusses the important types of information found within each.

Codebooks

The codebook is the principal element of the documentation system and contains information intended to be complete and self-explanatory for each variable in a data file. Codebook information can be viewed using the search software or printed from the CD-ROM. This feature enables researchers to customize their documentation for their particular research needs and to select and print information for the variables of interest.

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

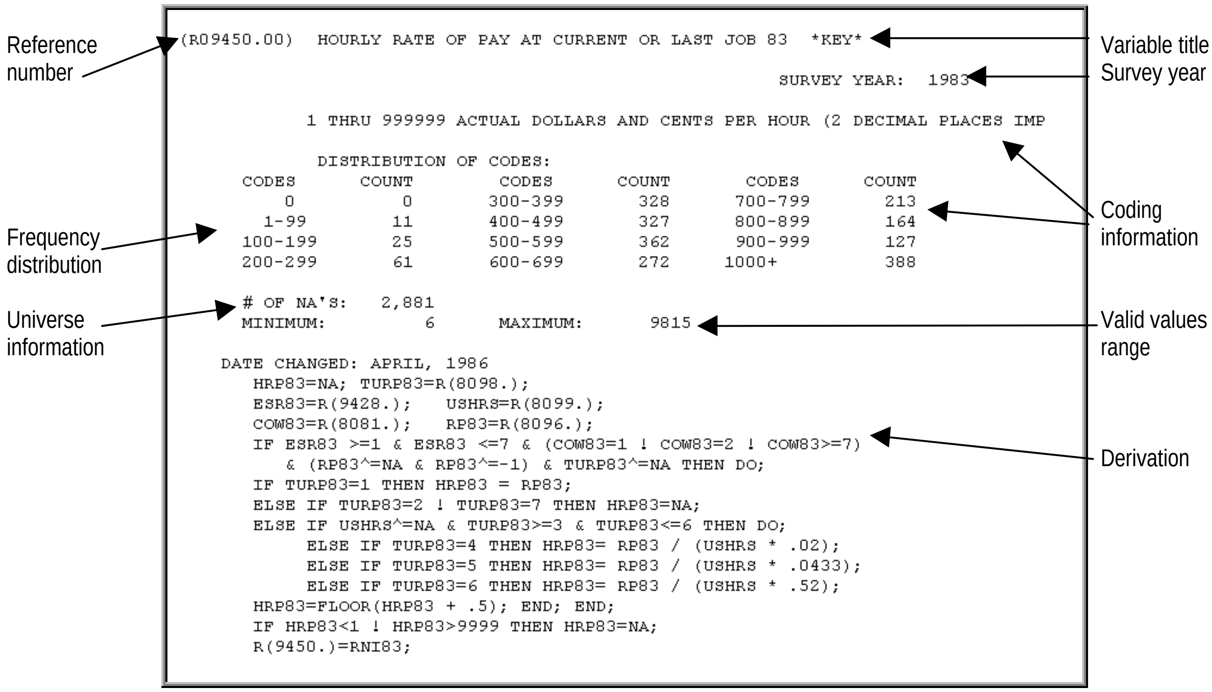
Codebooks are arranged by reference number. Variables are first grouped according to survey year. Within each survey year, those variables related to the interview (e.g., interview method, interview date, reason for noninterview, sampling weight, etc.) appear first, followed by variables picked up directly from the questionnaire and *Information Sheet*. In general, created and edited variables appear last, although the created environmental variables are grouped with variables relating to the interview in the early survey years.

> ***User Notes:*** NLS codebooks are not a substitute for the questionnaires. Although these two pieces of documentation contain similar information, the questionnaires should be used to determine precise universe information and question wording.

Codebook Item Descriptions

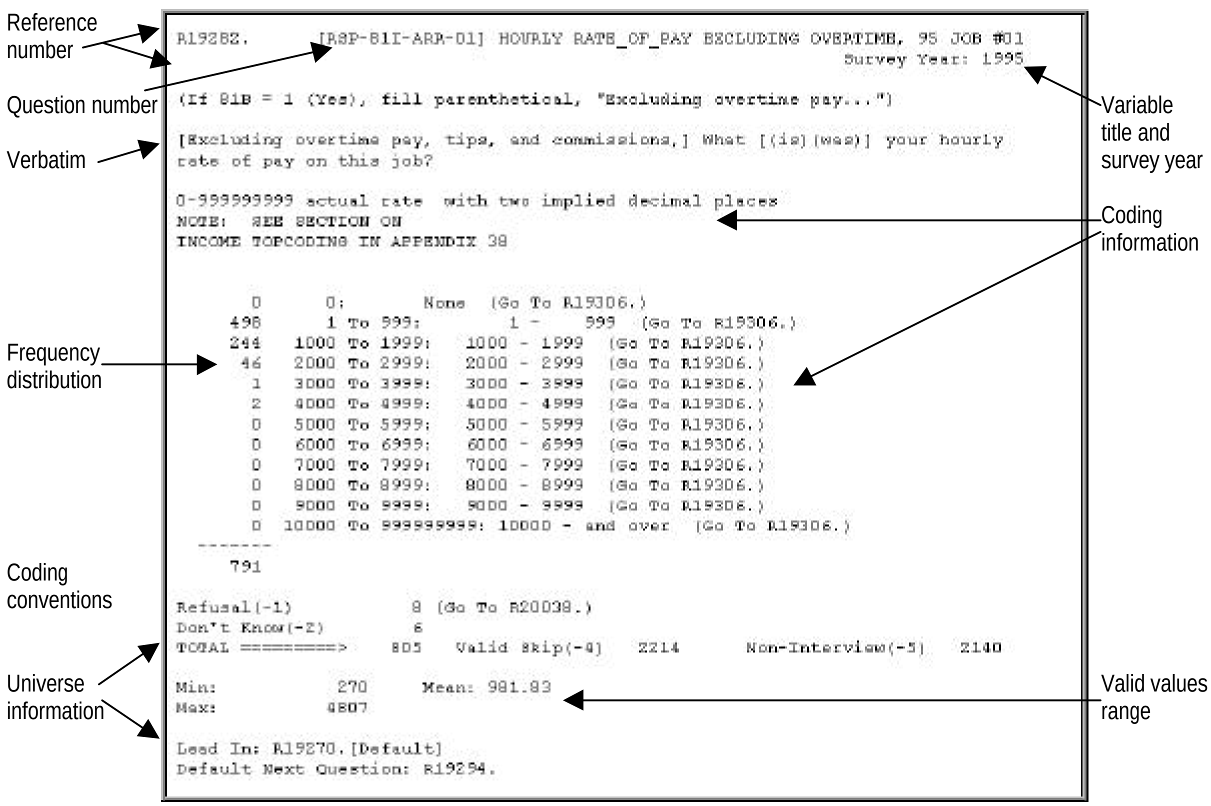
The following common types of information for each variable within a codeblock will be discussed in this section: coding information, multiple responses, missing responses, derivations, frequency distribution, questionnaire items (question numbers), universe information, valid values range, and verbatims. The sample codeblocks in Figures 3.3.1 and 3.3.2 provide visual examples of this information. The first codeblock is a created variable and the second is a question actually asked of respondents during the interview, allowing users to identify the differences between codeblocks for these two types of variables.

Figure 3.3.1 Sample Created Variable Codeblock




```
(R09450.00)  HOURLY RATE OF PAY AT CURRENT OR LAST JOB 83  *KEY*

                                              SURVEY YEAR:  1983

      1 THRU 999999 ACTUAL DOLLARS AND CENTS PER HOUR (2 DECIMAL PLACES IMP

       DISTRIBUTION OF CODES:
   CODES      COUNT        CODES      COUNT       CODES      COUNT
     0          0         300-399      328       700-799      213
    1-99       11         400-499      327       800-899      164
   100-199     25         500-599      362       900-999      127
   200-299     61         600-699      272      1000+         388

   # OF NA'S:   2,881
   MINIMUM:         6      MAXIMUM:      9815

  DATE CHANGED: APRIL, 1986
     HRP83=NA; TURP83=R(8098.);
     ESR83=R(9428.);    USHRS=R(8099.);
     COW83=R(8081.);    RP83=R(8096.);
     IF ESR83 >=1 & ESR83 <=7 & (COW83=1 ! COW83=2 ! COW83>=7)
        & (RP83^=NA & RP83^=-1) & TURP83^=NA THEN DO;
     IF TURP83=1 THEN HRP83 = RP83;
     ELSE IF TURP83=2 ! TURP83=7 THEN HRP83=NA;
     ELSE IF USHRS^=NA & TURP83>=3 & TURP83<=6 THEN DO;
          ELSE IF TURP83=4 THEN HRP83= RP83 / (USHRS * .02);
          ELSE IF TURP83=5 THEN HRP83= RP83 / (USHRS * .0433);
          ELSE IF TURP83=6 THEN HRP83= RP83 / (USHRS * .52);
     HRP83=FLOOR(HRP83 + .5); END; END;
     IF HRP83<1 ! HRP83>9999 THEN HRP83=NA;
     R(9450.)=RNI83;
```

Figure 3.3.2 Sample Interview Question Codeblock




```
R19282.      [RSP-81I-ARR-01] HOURLY RATE_OF_PAY EXCLUDING OVERTIME, 95 JOB #01
                                                        Survey Year: 1995

(If 81B = 1 (Yes), fill parenthetical, "Excluding overtime pay...")

[Excluding overtime pay, tips, and commissions,] What [(is)(was)] your hourly
rate of pay on this job?

0-999999999 actual rate  with two implied decimal places
NOTE:  SEE SECTION ON
INCOME TOPCODING IN APPENDIX 38


       0       0:        None   (Go To R19306.)
     498       1 To 999:        1 -     999   (Go To R19306.)
     244    1000 To 1999:    1000 - 1999   (Go To R19306.)
      46    2000 To 2999:    2000 - 2999   (Go To R19306.)
       1    3000 To 3999:    3000 - 3999   (Go To R19306.)
       2    4000 To 4999:    4000 - 4999   (Go To R19306.)
       0    5000 To 5999:    5000 - 5999   (Go To R19306.)
       0    6000 To 6999:    6000 - 6999   (Go To R19306.)
       0    7000 To 7999:    7000 - 7999   (Go To R19306.)
       0    8000 To 8999:    8000 - 8999   (Go To R19306.)
       0    9000 To 9999:    9000 - 9999   (Go To R19306.)
       0   10000 To 999999999: 10000 - and over   (Go To R19306.)
  --------
     791

Refusal(-1)            8  (Go To R20038.)
Don't Know(-2)         6
TOTAL =========>     805   Valid Skip(-4)    2214      Non-Interview(-5)    2140

Min:           270     Mean: 981.83
Max:          4807

Lead In: R19270.[Default]
Default Next Question: R19294.
```

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 NLS codeblock is not necessarily consistent with the codes found within the questionnaire or for the same variable across years. Use only the codebook coding information for analysis.* The following types of code entries occur in NLS codeblocks:

Dichotomous or yes/no variables are uniformly coded "Yes" = 1, "No" = 0. Other dichotomous variables have frequently been reformulated to permit this convention to be followed.

Discrete (Categorical), as in the case of 'Activity Most of Survey Week 93.'

1	Working	5	Keeping house
2	With a job, not at work	6	Unable to work
3	Looking for work	7	Retired
4	Going to school	8	Other

Continuous (Quantitative), as in the case of 'Hourly Rate of Pay at Current or Last Job 83 *KEY*.' These variables have continuous data, but the codebook presents a frequency distribution as in the sample codeblocks above for ease of use.

Combined Quantitative-Qualitative Variables, i.e., variables which are ostensibly quantitative but which may have several nonquantitative (categorical) responses, utilize positive integers equaling the actual values for the quantitative responses and negative values, beginning with -1, for the qualitative (categorical) responses. For example, 'Expected Age of Retirement' is coded as follows:

45 thru 99 actual age
-1 already retired
-2 never plan to retire

Multiple Responses: Response categories to multiple entry questions found in certain job search, child care, discrimination, or health questions have been coded in a geometric progression. For example, more than one response to the question "Method of seeking employment to be used in next year" was possible. The response categories to that question were each assigned a value as follows:

Checked with public employment agency	1
Checked with private employment agency	2
Checked with employer directly	4
Checked with friends or relatives	8
Placed or answered ads	16
Other method	32

Multiple responses are then coded for each respondent by adding the individual codes, which yields a unique value for each combination. Such multiple entry variables are identified by an asterisk (*) next to the answer categories in the questionnaire. If a multiple entry has only a few unique combinations, the codebook will specify the exact combinations; those with many combinations need to be unpacked. Methods of unpacking such multiple entry variables are presented in Appendix C at the end of this guide.

User Notes: After the 1989 survey, the practice of coding multiple entry variables in a geometric progression was discontinued and all responses were coded as yes/no. In this system, the question above would have six corresponding variables in the codebook, one for each response category. Codes of 1 and 0 would indicate whether the respondent answered positively for each category. Respondents who do not know or refuse to answer the question receive the appropriate missing value for all the variables that correspond to that question. Respondents who do not know or refuse to respond to just one category receive the appropriate missing value for the corresponding variable.

The system for coding missing values in multiple response questions changed slightly in 1999. There are still separate variables for each response category, and respondents who do not know or refuse to respond to just one category are coded with the correct missing value for the corresponding variable. The difference is that, at the end of the series of variables, a new variable indicates that it is the final record for the series. In this variable, respondents who answered any or all of the category questions receive either a –8 or a 0 code, depending on the series, to indicate that they are done selecting response categories. In this variable, respondents who replied "don't know" to the entire series are coded as –2 and those who refused to answer the entire series are coded as –1. For some series, this final variable may have other options in addition to those described above.

Missing Responses: Negative numbers are used to indicate that a respondent does not have a valid value for a particular variable. Different numbers indicate different reasons for nonresponse:

> "Refusal" indicates that the respondent refused to answer a given question. These respondents are assigned a value of -1. This code is only used for CAPI interviews (1995–99).
>
> "Don't know" indicates that the respondent did not know the answer to a given question. These respondents are assigned a value of -2. This code is used for all interviews of this cohort.
>
> "Invalid skip" indicates that the respondent was not asked a question that she should have answered, usually due to programming or interviewer error. These respondents are assigned a value of -3. This code is only used for CAPI interviews (1995–99).
>
> "Valid skip" indicates that the respondent was skipped past the question intentionally, because she was not in the universe of respondents to whom that question applied.

These respondents are assigned a value of -4. This code is only used for CAPI interviews (1995–99).

Finally, a value of -5 has been assigned for slightly different reasons in different years. In PAPI surveys (1968–93), a -5 code indicates the absence of a valid response, because (1) the respondent is not in the applicable universe, (2) the respondent refused to respond, (3) interviewer, coding, transcribing, or data entry error occurred, or (4) the respondent was not interviewed in that year survey. Beginning with the first CAPI survey in 1995, the -5 code is reserved for respondents not interviewed in a given year. Because computer interviewing permits more exact determination of the reason for nonresponse, the other reasons for the absence of valid data are described by the expanded missing value codes listed above.

User Notes: The missing value codes described above are accurate for the 1999 data release. In previous years, a more complicated system was used to indicate missing data in the PAPI interviews. Beginning in 1999, the missing values were reassigned using a standardized system that matches the Young Women's CAPI data as well as the other NLS cohorts. This standardization should make it easier to use the data in analysis. However, researchers using programs written for a previous release of the Young Women data may need to change the parts of their programming code related to missing values. Users who need more information about the codes previously used in order to make these adjustments should contact NLS User Services.

Three additional negative codes are used only with the NLS women's cohorts for particular types of nonresponse.

In questions dealing with usual hours per week worked, if the respondent reported that her hours varied, she was assigned a code of -6.

Women who have been widowed since the last survey are asked a series of questions regarding their husband's care and their financial situation since his death. A code of -7 was assigned to women whom the interviewer judged to be emotionally unable to answer these questions.

Some variables in multiple response question series include codes of -8, indicating that the respondent was done with the series. A more detailed description is provided under "Multiple Responses" above.

> ***User Notes:*** In CAPI surveys, respondents are initially assigned a default code of -4 (valid skip) for all questions in the interview. As the interview proceeds, the -4 codes are replaced by valid data. The -3 (invalid skip) codes must be inserted into the data as hand-edits when data archivists uncover skip pattern errors during the data cleaning process. Therefore, some respondents classified as valid skips may actually have skipped a question incorrectly. If researchers need to know the exact reason a question was not answered, they can examine the skip patterns and universes in the questionnaire to determine whether any additional respondents should have been identified as invalid skips.

Derivations: The decision rules employed in the creation of constructed variables have been included, whenever possible, in the codebook under the title "DERIVATIONS." This information is designed to enable researchers to determine whether available constructs are appropriate for their needs. In the 'Hourly Rate of Pay at Current or Last Job 83 *KEY*' example (Figure 3.3.1), the derivation describes in detail the items of the interview schedule used to create the variable. If the derivation is too lengthy to include in the codebook, the codeblock will instead refer users to the supplemental documentation item that contains variable creation information.

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. In the case of the illustrative variables in Figures 3.3.1 and 3.3.2, the frequency count is straightforward. For example, in Figure 3.3.1 there are twelve categories; the maximum category shown is 1000 and above (since two decimal places are implied, 1000 represents $10.00), for which there is a frequency count of 388.

Questionnaire Item: "Questionnaire item" is a generic term identifying the 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. Questionnaire item identifications are located in the extreme right hand column of the codebook. The question number, when available, is copied exactly from the questionnaire. The question numbering system is described in the questionnaire section earlier in this chapter. In Figure 3.3.2, the question number is RSP-81I-ARR-01.

During PAPI interview years, the absence of a question entry in the codeblock (as in Figure 3.3.1) indicates that a variable was not taken directly from the questionnaire and is therefore a created variable. Created variables in CAPI survey years usually include the letters CV in the question name and usually have the word *KEY* in their title.

Valid Values Range: Depicted below the frequency distribution are the maximum and minimum fields, which define the range of valid values (the upper and lower limits) for a given question. "MINIMUM" indicates the smallest recorded value exclusive of nonresponse codes; "MAXIMUM" indicates the largest recorded value. In the case of the 'Hourly Rate of Pay' example (Figure 3.3.1), the maximum, or highest value recorded, is 9815 with two implied decimal places, or $98.15.

Topcoding Income and Asset Values: Confidentiality issues restrict release of all income and asset values. To ensure respondent confidentiality, income variables exceeding particular limits are truncated each survey year so that values exceeding the upper limits are converted to a set maximum value. These upper limits vary by year, as do the set maximum values. From 1968 through 1971, upper limit dollar amounts were set to 999999. From 1972 through 1980, upper limit variables were set to maximum values of 50000, and in 1982 and 1983 the set maximum value was 50001. Beginning in 1985, income amounts exceeding $100,000 were converted to a set maximum value of 100001.

From the cohort's inception, asset variables exceeding upper limits were truncated to 999999. Beginning in 1983, assets exceeding one million were converted to a set maximum value of 999997. Starting in 1993, the Census Bureau also topcoded selected asset items if it considered that the release of the absolute value might aid in the identification of a respondent. This topcoding was conducted on a case-by-case basis with the mean of the top three values substituted for each respondent who reported such amounts.

Codebook Supplements

Variable creation procedures and supplemental coding information are provided within the *Codebook Supplement*. Information provided in these documents is not available in the electronic documentation files on the NLS CD-ROMs. The following attachments and appendices are included in the *Codebook Supplement*, which is available in hard copy form.

> *Attachment 2: 1960, 1980 & 1990 Census of Population Industry and Occupational Classification Codes* provides the occupation-industry coding assignments made by Census Bureau personnel from the verbal descriptions obtained in the interviews. Users should refer to the "Industries" or "Occupations & Occupational Prestige Indices" sections in chapter 4 of this guide for information about which coding schemes were used in various survey years. This attachment also contains a copy of the Duncan Socioeconomic Index, an ordinal prestige scale assigning a rank of 0–97 to each of the three digit 1960 Census occupations.
>
> *Attachment 4: Bose Index* provides a mean occupational prestige score for each of the three-digit 1960 occupation codes for respondents of the cohort.
>
> *Attachment 5: Employment Status Recodes* describes the methodology used by Census to calculate each respondent's employment status from the CPS questions that are asked in each NLS survey. This document provides (1) definitions of 'working,' 'with a job but not at

work,' 'unemployed,' and 'not in the labor force'; (2) the decision rules used to assign or recode respondents to a particular labor force status; and (3) Census methodology for dealing with exceptions to the rules.

Appendix 1: *Fields of Study in College—Instructions for the Coding Scheme*

Appendix 2: *State Names and State Codes by Census Division Listing*

Appendix 4: *Listing of Median Education for Different Occupations*

Appendix 5: *Source for Occupational Atypicality Scores*

Appendix 6: *Supplemental Edit Specifications for *KEY* Variables: R03297., R03292., R03294., R03293., R03295.*

Appendix 7: *Listing of Correction to Employment Status Recode for 1968 and 1969*

Appendix 9: *Determinants of Early Labor Market Success: Appendix A*

Appendix 10: *Determinants of Early Labor Market Success: Appendix B*

Appendix 11: *Determinants of Early Labor Market Success: Appendix C*

Appendix 12: *Determinants of Early Labor Market Success: Method for Variable Construction*

Appendix 18: *Union Categories—Copy of Coding Instructions for Name of Union or Employee Association*

Appendix 20: *Derivations for R05007., R05012. (Marital Status Patterns)*

Appendix 21: *Rules for Revising Variables Representing Month and Year since Left School*

Appendix 22: *GED (General Education Development), SVP (Specific Vocational Preparation), Job-Level, and Job Family Values*

Appendix 23: *Derivations for R05031.–R05047. (Occupation and Other Job Information before Birth of Child)*

Appendix 24: *Derivations for R05049.–R05060. (Occupation and Other Job Information after Birth of Child)*

Appendix 25: *New Geographic and Environmental Variables for 1968–78*

Appendix 26: *Derivations for 1978 *KEY* Variables*

Appendix 27: *Source for the Job Characteristics Index*

Appendix 28: *Source for the Job Satisfaction Measures*

Appendix 29: *Reason for Reference in Union Certification Election (Item 10e, 1982, R07627.)*

Appendix 30: *Derivations for the 1983 *KEY* Variables*

Appendix 31: *Listing of Changes in 1983 Survey Made after Questionnaire Printed*

Appendix 32: *Derivations for the 1988 *KEY* Variables*

Appendix 33: *Derivations for the 1991 *KEY* Variables*

Appendix 34: *Derivations for the 1993 *KEY* Variables (includes Highest Grade Completed 1993, and topcoding information)*

Appendix 35: *Geometric Progression Coding*

Appendix 36: *Summary of the Major Differences Between the 1995 and Earlier Surveys*

Error Updates

Prior to working with an NLS data file, users should make every effort to acquire current information on 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 an NLS data set from CHRR with corrected information. Errors discovered after the release of a data file are distributed in hard copy form to current disc purchasers along with the data set. Error notices also appear, along with information on how to acquire the corrected data and/or documentation, in *NLS News*, the quarterly newsletter.

3.4 CD-ROM Search Functions

Variables can be accessed through search and extraction software available on the NLS CD-ROMs. This software provides users with bridging information to the codebook and/or survey instruments. The search indexes and lists described below can be used individually or combined to produce a more refined list of variables. This section provides only a cursory overview of the search and extraction software on the NLS CD-ROMs. Researchers who need more information should refer to the quick reference guide in Appendix A of this document and to the *CD-ROM User's Guide* distributed with the data.

Any word search. The "Any Word in Context" function (also called "contextual search") on the CD-ROM software allows the user to search for and select those variables whose titles contain any single word or combination of words found in the entire documentation database. This function allows users to easily access variables on a variety of topics but is still dependent on the wording of each variable title. For more information on the naming of variables, see the "Variable Titles" discussion in section 3.2 above, especially the User Notes.

Area of interest. Areas of interest contain lists of variables grouped by topic. For example, questions on a respondent's health and medical insurance are grouped in the "Health" area of interest. Researchers should be aware that an individual question can be linked to only one area of interest, so questions that apply to a common research topic may appear in different areas of interest.

Question number list. The CD-ROM contains a searchable list of the question numbers for every Young Women variable. By accessing this list, users who know the question number for the item of interest can locate the variable without performing an any word search. Researchers can also browse through the questions for a given questionnaire section.

Reference number list. The disc also contains a searchable list of all Young Women reference numbers. By using this list, researchers can locate variables for which they already know the reference number or browse through questions of interest, which are generally arranged in the order in which they were asked during the interview.

Year index. Finally, the CD-ROM includes an option by which users can limit their searches to a single year of interest. Researchers can browse through all the variables relating to a given survey year or can combine the year with an any word search to locate specific variables of interest.

Chapter 4: Topical Guide to the Young Women

4.1 Age

The data set includes the respondent's date of birth and age as of the initial survey year. The initial survey year age variable was provided by the Census Bureau based on information collected during the 1966 household screening. As age inconsistencies were discovered, Census made date of birth information available in the late 1970s. For the most part, the date of birth and age variables were collected during fielding of the "Household Roster" (HHR) section of the questionnaire.

Date of birth variables (e.g., 'Day of R's Birth,' 'Month of R's Birth,' and 'Year of R's Birth') are provided for the 1968, 1977, 1978, 1982, 1988, and 1991 survey years. During the 1995–99 surveys, the respondent was asked to confirm or correct the most recent birth date information available. A series of variables including age as reported during the screening interview ('Age, 68') and 'Revised Age of R' at interview date (1968–75 survey years) was also created. These revised variables are considered to be more accurate than the age information originally reported.

Table 4.1.1 provides reference numbers for date of birth and age variables; Table 4.1.2 presents age distributions for the Young Women. Data for reported age and birth dates include a small number of inconsistencies. As a result, attempts to restrict the universe according to age-related variables may lead to unwanted or incorrect results. The User Notes below discuss some of the idiosyncratic aspects of these variables.

Table 4.1.1 Reference Numbers for Date of Birth & Age Variables

Year	Date of Birth of R	Age of R	Revised Age of R at Interview Date	Year	Date of Birth of R	Age of R
1968	R00420.10–R00420.12	R00031.	R00420.50	**1978**	R06491.–R06493.	–
1969	–	–	R01166.50	**1982**	R07668.–R07670.	R07671.
1970	–	–	R01970.00	**1988**	R11841.–R11843.	–
1971	–	–	R03119.50	**1991**	R13133.–R13135.	R13136.
1972	–	–	R03962.50	**1995**	R16067.–R16070.	R16671.
1973	–	–	R04805.50	**1997**	R35040.-R35043.	R35044.
1975	–	–	R05345.50	**1999**	R42763.–R42766.	R42767.
1977	R05576.–R05578.	–	–			

Related Variables: In addition to the information collected on the respondent, most surveys have also collected age data on household members. See the "Household Composition" section of this guide for more information.

Survey Instruments: The respondent's age and date of birth were derived from the 1966 *Household Screener*. The respondent's age or date of birth was subsequently collected in the "Household Roster" section of the questionnaire. If the respondent's age or birth date is asked in a particular survey year, an open coded answer box for the respondent will be found in the "Household Roster."

User Notes: Users are encouraged to carefully examine all age and birth date variables when performing any age-related analysis. Birth data collected at the time of screening may have been provided by a family member, giving rise to possible inconsistencies when comparing a respondent's reported age with age calculated from date of birth. In cases where age was unknown, interviewers were directed to obtain a "best estimate" of a respondent's "exact age" at the time of screening and to make corrections later if possible. Finally, a respondent may be inconsistent in reporting her age during different interviews.

There are varying numbers of out-of-scope cases in the Young Women cohort for two reasons: (1) the birth date variables in a handful of cases are inconsistent with the stated age of the respondent and (2) some borderline cases that may actually be in scope for the calendar year of the survey are not necessarily in scope at the time the interview took place. CHRR has investigated causes of birth date inconsistencies and has discovered that they arise from birth data originally provided by the Census Bureau. Unfortunately, these data are generally not recoverable because many of the affected respondents have since attrited. An additional difficulty is that the date of birth for some cases is not reported. Data are not available for two individuals who were reported deceased between 1968 and 1969.

It may be to the user's advantage to calculate his or her own variable for age based on the reported date of birth. When birth date variables are either unavailable or out of scope, the user may wish to investigate other age-related variables, such as schooling information, in order to establish age.

In select survey years, an 'Age at Interview' variable was created even for those not interviewed in that particular year. Age distributions in the codebook are reported for noninterviewed as well as interviewed respondents; interested users may calculate a more accurate age distribution by deleting respondents who were not interviewed in a given year. Table 4.1.2 presents age distributions for interviewed respondents by survey year.

Table 4.1.2 Ages of Interviewed Respondents by Survey Year: 1968–99

Age[1]	Survey Year 68	69	70	71	72	73	75	77	78	80	82	83	85	87	88	91	93	95	97	99
14	130	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
15	538	126	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
16	575	525	128	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
17	524	554	518	125	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
18	529	505	540	506	123	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19	528	510	481	539	496	115	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20	499	504	482	466	529	479	–	–	–	–	–	–	–	–	–	–	–	–	–	–
21	482	479	488	481	469	498	114	–	–	–	–	–	–	–	–	–	–	–	–	–
22	386	459	463	489	469	439	462	–	–	–	–	–	–	–	–	–	–	–	–	–
23	398	362	441	453	475	453	480	110	–	–	–	–	–	–	–	–	–	–	–	–
24	356	373	347	440	444	455	429	448	103	–	–	–	–	–	–	–	–	–	–	–
25	186	338	368	339	427	423	438	465	417	–	–	–	–	–	–	–	–	–	–	–
26	5	175	327	364	335	412	427	416	448	102	–	–	–	–	–	–	–	–	–	–
27	–	5	169	328	360	321	405	423	396	415	–	–	–	–	–	–	–	–	–	–
28	–	–	4	172	324	350	399	420	399	431	101	–	–	–	–	–	–	–	–	–
29	–	–	–	4	164	312	304	381	398	387	407	98	–	–	–	–	–	–	–	–
30	–	–	–	–	3	159	329	383	362	388	423	399	–	–	–	–	–	–	–	–
31	–	–	–	–	–	3	299	290	369	383	367	411	104	–	–	–	–	–	–	–
32	–	–	–	–	–	–	151	324	274	346	364	353	405	–	–	–	–	–	–	–
33	–	–	–	–	–	–	4	294	309	363	364	341	427	107	–	–	–	–	–	–
34	–	–	–	–	–	–	–	147	278	265	331	362	365	400	98	–	–	–	–	–
35	–	–	–	–	–	–	–	4	142	302	349	322	368	417	394	–	–	–	–	–
36	–	–	–	–	–	–	–	–	4	270	254	344	370	354	399	–	–	–	–	–
37	–	–	–	–	–	–	–	–	–	142	290	247	356	354	355	95	–	–	–	–
38	–	–	–	–	–	–	–	–	–	4	258	283	360	364	342	386	–	–	–	–
39	–	–	–	–	–	–	–	–	–	–	135	246	271	357	345	387	84	–	–	–
40	–	–	–	–	–	–	–	–	–	–	4	134	294	352	334	341	369	–	–	–
41	–	–	–	–	–	–	–	–	–	–	–	4	265	252	337	335	368	77	–	–
42	–	–	–	–	–	–	–	–	–	–	–	–	130	289	239	340	318	348	–	–
43	–	–	–	–	–	–	–	–	–	–	–	–	–	260	286	321	318	351	76	–
44	–	–	–	–	–	–	–	–	–	–	–	–	–	127	253	327	311	304	358	–
45	–	–	–	–	–	–	–	–	–	–	–	–	–	3	121	238	300	300	350	77
46	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	266	297	287	310	335
47	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	239	218	276	300	331
48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	120	255	288	294	288
49	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	227	209	294	274
50	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	117	243	279	285
51	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	220	213	271
52	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	110	238	273
53	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	219	205
54	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	113	231
55	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3	214
56	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	110
57	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	3
Total Int'd	5159	4930	4766	4714	4625	4424	4243	4108	3902	3650	3650	3547	3720	3639	3508	3400	3187	3019	3049	2900
Not Int'd	–	229	393	445	534	735	916	1051	1257	1358	1509	1612	1439	1520	1651	1759	1972	2140	2110	2259
Birth Year n/a	23	15	10	8	7	5	2	3	3	3	3	3	2	3	2	2	2	3	2	3

[1] Age of respondent is calculated as of June 30 of the interview year using the 1968 date of birth variables (R00420.10, R00420.11, and R00420.12).

4.2 Alcohol Use

Respondents were asked about their use of alcohol in the 1991–99 surveys. The 1991 instrument included questions on the frequency with which the respondent drank alcoholic beverages such as beer, wine, or liquor during her adult life and in the last 30 days, and, if she drank, the quantity and type of alcohol usually consumed per day. In subsequent surveys, a smaller set of questions addressed frequency and quantity of alcohol used during the past month. Table 4.2.1 lists reference numbers for questions concerning alcohol consumption.

Table 4.2.1 Reference Numbers of Alcohol Use Questions

Question	Reference Numbers				
	1991	1993	1995	1997	1999
In your entire life, did you have at least 12 drinks of any kind of alcoholic beverage?	R13031.	–	–	–	–
On the average, during your adult life, how often did you drink any alcoholic beverages?	R13032.	–	–	–	–
Have you had any alcoholic beverages since the date of last interview?	–	–	R33655.	R41339.	R50911.
Have you had any alcoholic beverages during the last 30 days?	R13033.	R14715.	R33656.	R41340.	R50912.
During the last 30 days, on how many days did you drink any alcoholic beverages?	R13034.	R14716.	–	–	–
Thinking back to the last day you had a drink, about how many drinks did you have that day?	–	–	R33657.	R41341.	R50913.
On the days that you drink, about how many drinks do you have on the average day?	R13036.	R14718.	R33658.	R41342.	R50914.

Survey Instruments: The "Health" sections of the 1991–99 surveys contain the alcohol use questions.

4.3 Aptitude, Achievement & Intelligence Scores

Various aptitude and intelligence test scores (R00603.–R00610.) were collected during the 1968 school survey. This survey was designed primarily to gather information on respondents' academic performance and on the characteristics of the secondary school most recently attended by respondents. Part of the survey collected information on the respondent's scores on the most recent scholastic aptitude or intelligence tests taken. A created composite score combines the results from such tests as the *Otis/Beta/Gamma*, the *California Test of Mental Maturity*, and the *Lorge-Thorndike Intelligence Test*, as well as the *PSAT*, *SAT*, and *ACT* college entrance examinations. The composite score is referred to as the 'IQ Score' (R00603.) as described in the appendix to Kohen (1973). Table 4.3.1 lists each test and the number of respondents for whom data are available. Additional information on this survey can be found in the "High School Survey & College Information" section of this guide.

Table 4.3.1 Aptitude & Intelligence Tests: School Survey

Aptitude/Intelligence Test (R00610.)	Code Category	# of Respondents with Scores
American College Testing Program (ACT/ACTP)	11	43
California Test of Maturity (CTMM/CMM)	2	640
Differential Aptitude Test (DAT)	9	70
Henmon-Nelson Test (HNTMA)	4	178
Iowa Test of Educational Development (ITED)	8	114
Lorge-Thorndike Intelligence Test	3	221
National Merit Scholarship Qualifying Test (NMSQT)	12	17
Otis/Beta/Gamma	1	790
Preliminary & Scholastic Aptitude Tests (PSAT/SAT/CEEB)	7	217
Primary Mental Ability Test (PMA/PMAT)	6	49
School and College Ability Test (SCAT)	10	182
Test of Educational Ability (TEA)	5	45

One assessment, an abbreviated version of the "Knowledge of the World of Work" scale, was directly administered to the Young Women in 1969. This set of questions (R01105.–R01114.) asked respondents to pick one of three statements that best described the duties of each of ten jobs commonly held by women. A total score (R01391.) was calculated by awarding one point for each correct answer.

Survey Instruments & Documentation: A separate instrument called the *Survey of Work Experience of Young Men and Women School Survey* (1968) collected the school information. Appendix 9 of the *Codebook Supplement* contains useful background information on the 1968 school survey and details certain variable creation procedures. The "Knowledge of the World of Work" scale was administered in the "Knowledge of the World of Work" section of the 1969 questionnaire.

> ***User Notes:*** IQ scores were constructed from school records using scores from the tests available; see R00603. and Appendix 9 (Kohen 1973) in the *Codebook Supplement*. While there may be psychometric problems in constructing an IQ measure from a variety of test forms, these constructed variables were designed to keep the user who wishes to construct a unified score from having to repeat the work involved in pooling scores.
>
> Similar versions of the "Knowledge of the World of Work" scale were administered to the Young Men in 1966 and to the NLSY79 in 1979.

References

Kohen, Andrew I. "Determinants of Early Labor Market Success among Young Men: Race, Ability, Quantity and Quality of Schooling." Ph.D. Dissertation, The Ohio State University, 1973.

Light, Audrey. "Notes on the NLS Schooling Data." Columbus, OH: CHRR, The Ohio State University, 1995.

4.4 Attitudes & Expectations

In many surveys, respondents answered questions about their attitudes and aspirations. Many questions refer to attitudes about work and retirement. Periodically, the surveys ask about educational and occupational goals, housework, child care, and satisfaction with life in general.

Attitudes

Attitudes toward women working: The 1972, 1978, 1983, and 1988 surveys asked women about their opinions on the employment of wives. Table 4.4.1 presents reference numbers for these statements about married women's participation in the paid labor market by survey year.

Table 4.4.1 Reference Numbers for Attitudes toward Wives Working Questions

Statement	Survey Year			
	72	78	83	88
Modern conveniences permit a wife to work without neglecting her family	R03867.	R06336.	R08630.	R11590.
Women's place is in the home	R03868.	R06337.	R08631.	R11591.
Job provides wife with interesting outside contacts	R03869.	–	–	–
Wife with a family doesn't have time for employment	R03870.	R06338.	R08632.	R11592.
Working wife feels more useful	R03871	R06339.	R08633.	R11593.
Employment of wives leads to more juvenile delinquency	R03872.	R06340.	R08634.	R11594.
Working wives help raise the standard of living	R03873.	–	–	–
Working wives lose interest in home and family	R03874.	–	–	–
Employment of parents needed to keep up with cost of living	R03875.	R06341.	R08635.	R11595.
It is better for all if man is outside achiever & woman takes care of family	–	R06342.	R08636.	R11596.
Men should share the work around the house with women	–	R06343.	R08637.	R11597.
Working mothers can have as secure relationship with child as non-working mothers	–	R06344.	R08638.	R11598.
Women are happier if they stay home & take care of kids	–	R06345.	R08639.	R11599.
Rearing children should not inhibit career	–	R06346.	R08640.	R11600.

A three-question series asked in 1968, 1972, 1978, and 1983 assessed respondents' approval of women working. On a scale of definitely all right to definitely not all right, respondents indicated their opinion about women working if necessary to make ends meet, if the woman desires and the husband agrees, and if the woman desires and the husband disagrees. Related questions, including her husband's attitude toward the respondent's working, have been asked at select survey points (see Table 4.4.2 below).

Table 4.4.2 Summary of Work Attitudes Questions by Survey Year

Question	Year
Would you say that during the past year there has been any change in your feeling about having a job outside the home for pay, in what way and why?	1969, 1970, 1972, 1973
If, by some chance, you and your husband were to get enough money to live comfortably without working, do you think you would work anyway, why and on what would it depend?	1970, 1972, 1978, 1983, 1988
In this family situation, how do you feel about the mother taking a full-time job outside the home - to make ends meet, if husband agrees, if husband disagrees?	1968, 1972, 1978, 1983
How does your husband feel about your working (employed)?	1968, 1972, 1978, 1983
How do you think your husband would feel about your working now (out of labor force)?	1968, 1972, 1978, 1983

Attitudes toward retirement: As this cohort has aged, the surveys have begun eliciting attitudes and expectations about retirement. In 1995–99, Young Women responded to a series of statements on their attitudes toward retirement in general. These questions (e.g., R42013.-R42017.) asked respondents to agree or disagree with statements such as "Work is the most meaningful part of life" and "People who don't retire when they can afford to are foolish."

Attitudes toward life: In addition to attitudes about work and working, respondents provided data on their feelings about life in general. In the 1980, 1982, and 1985–99 surveys, respondents answered to a global life satisfaction question on how they were feeling these days (e.g., R15693.). They were asked to classify themselves overall as very happy, somewhat happy, somewhat unhappy, or very unhappy. Additional measures of psychological well-being are discussed in the "Health" section of this guide.

Attitudes toward housekeeping and child care: Respondents were asked about their opinions on working in the home as a part of the non-paid labor force. Specifically, at five-year intervals (beginning in 1978) respondents were asked for their attitudes about domestic labor and child care. In 1978, 1983, and 1988, respondents were asked, "How do you feel about keeping house in your own home?" and "How do you feel about taking care of children?" In 1971, employed women with children were asked to state their attitude toward child care centers. See the "Child Care" section of this guide for more information about child care arrangements.

At select survey points, the women were asked more detailed questions about their responsibility for a variety of household tasks. In the 1975, 1978, 1982, 1983, and 1987 surveys, a series of questions was asked of respondents about the degree of their responsibilities for select household chores. The response categories included respondent has sole responsibility, respondent shares responsibility, others have responsibility, and not applicable. In some of these survey years, respondents who answered that they shared responsibility for a particular task with others or that others had sole responsibility for the task were asked for their relationship to the other person who usually performed (shared) the task. In addition, those women who shared responsibility with someone else for a given task were asked the frequency (less than half of the time, about half the time, or more than half the time) with which they performed the task. In the 1982 survey, respondents were asked how they felt about performing each task (like, dislike, or don't mind). Table 4.4.3 summarizes this series of items.

Table 4.4.3 Reference Numbers for Questions on Respondent Responsibility for Household Tasks

Survey Year	Child care	Cleaning dishes	Cleaning house	Cooking	Family paperwork	Grocery shopping	Care of ill/ disabled	Washing clothes	Yard/home maintenance
Extent of respondent responsibility for task[1]									
1975	R05314.	R05316.	R05317.	R05315.	–	R05313.	–	R05318.	R05319.
1978	R06311.	R06315.	R06317.	R06313.	–	R06309.	–	R06319.	R06321.
1982	R07905.	R07911.	R07914.	R07908.	R07923.	R07902.	–	R07917.	R07920.
1983	R08601.	R08607.	R08610.	R08604.	R08619.	R08596.	–	R08613.	R08616.
1987	R10772.	R10775.	R10776.	R10774.	R10779.	R10771.	R10773.	R10777.	R10778.
Relationship of other person sharing/performing task									
1978	R06312.	R06316.	R06318.	R06314.	–	R06310.	–	R06320.	R06322.
1982	R07906.	R07912.	R07915.	R07909.	R07924.	R07903.	–	R07918.	R07921.
1983	R08602.	R08608.	R08611.	R08605.	R08620.	R08599.	–	R08614.	R08617.
Frequency respondent performs task									
1983	R08603.	R08609.	R08612.	R08606.	R08621.	R08600.	–	R08615.	R08618.
Respondent's attitude toward performing task									
1982	R07907.	R07913.	R07916.	R07910.	R07925.	R07904.	–	R07919.	R07922.

[1] Numbering of response categories may change over time. Users should consult the codebook for precise coding.

Expectations

Educational goals: Because the Young Women's survey was developed to examine the transition from school to work, significant effort was devoted to collecting information on future educational plans. From 1968 to 1978, questions were asked about the respondent's goal for her completed education (categories range from less than high school to 7 or more years of college), the actual amount of education she expected to receive, and the reason for any change in her educational plans between surveys. For generational comparisons, the respondent's report of her parents' goal for her education is collected in select survey years, as is the respondent's educational goal for her own children. Table 4.4.4 summarizes the reference numbers for this data and indicates universe limitations where applicable.

Table 4.4.4 Summary of Information on Educational Plans

Question	Survey Year						
	68	69	70	71	72	73	78
Respondent's educational goal[1]	R00142.	R00941.	R01532.	R02602.	R03410.	R04229.	R05925.
Comparison of current year's goal to goal at last interview	–	R00942.	R01534.	R02604.	R03412.	R04231.	–
Reason for change in goal[2]	–	R00943.	R01535.	R02605.	R03413.	R04232.	–
Actual educational level expected	–	–	R01533.	R02603.	R03411.	R04230.	R05926.
Respondent's goal for own children[3]	R00341.	–	–	–	–	–	–
Parents' goal for respondent at age 14	–	–	–	–	R03414.	–	–

[1] Enrolled respondents only
[2] Asked only of respondents whose educational goal changed between surveys
[3] Asked only of respondents with children

Occupational goals: In order to map educational experience to future employment experience, the NLS collected information on the Young Women's occupational goals as they moved into adulthood. Thus, from 1968 to 1987 (when the last respondent reached age 35), questions were asked on their future plans, including the occupation they desired at age 35. Two questions were addressed to respondents who had not yet reached that age. Typically, the first question (e.g., R00329. in 1968) asked what her plans were for age 35. This question was asked of all respondents regardless of their current employment status. The response set included: (1) working at a different job; (2) working at the same job as the current/most recent job; (3) married, keeping house, raising a family; and (4) other. Users should be aware that coding categories for this variable have changed slightly over time and the codebook should be consulted before using individual survey year items in computer programs.

To complete information on the respondent's occupational goal, a second question collects verbatim information on the type of occupation the respondent desires at age 35. This information is then coded in multiple ways. In most survey years, the occupation is coded according to standard Census three-digit occupation codes (see Attachment 2 in the *Codebook Supplement*). In addition, data are coded using a variety of prestige indices, including a measure of the atypicality of the occupation and the Bose and Duncan Indices (see the "Occupations & Occupational Prestige Indices" section in this guide for a discussion of the various indices and additional references). The atypicality index measures the difference for each three digit occupational category between women as a percentage of all workers in that occupation and women as a percentage of the experienced civilian labor force in 1970 (see Appendix 5 in the *Codebook Supplement*). Table 4.4.5 gives reference numbers for the variables discussed above.

For select survey years (1969–73), items that distinguish whether a respondent's occupational goal has changed between the current and last survey are also provided in the data set, along with the respondent's reason for the change in her occupational plans.

Table 4.4.5 Summary of Information on Occupational Plans

Survey Year	Type of Variable				
	Respondent's plans for age 35	Occupation desired at age 35			
		Census 3-digit	Bose Index	Duncan Index	Atypicality
1968	R00329.	R00330.	R00771.10	R00771.	R00775.
1969	R01102.	R01101.	R01359.20	R01359.10	R01383.10
1970	R01903.	R01902.	R02202.15	R02202.10	R02207.20
1971	R02962.	R02961.	R03300.10	R03300.	R03299.
1972	R03883.	R03882.	R04130.10	R04130.	R04130.20
1973	R04644.	R04643.	R04986.10	R04986.	R04986.20
1975	R05335.	R05336.	R05336.30	R05336.20	R05336.10
1977	R05837.	R05838.	R05838.30	R05838.20	R05838.10
1978	R06333.	R06332.	R06488.30	R06488.20	R06488.10
1980	R07521.	R07522.	R07522.30	R07522.20	R07522.10
1982	R07993.	R07994.	–	–	–
1983	R08624.	R08625.	–	–	–
1985	R10553.	R10554.	–	–	–
1987	R11013.	R11014.	–	–	–

Related Variables: The "Aptitude, Achievement & Intelligence Scores" section of this guide provides information about the "Knowledge of the World of Work" scale. The "Job Satisfaction" section describes questions about the respondent's attitude toward her current or most recent job. The "Job Search" section discusses questions about reservation wages, hypothetical job offers, and plans to seek work in the future. See the section on "Health" for additional measures of emotional well-being.

Survey Instruments: Questions on attitudes can be found in various questionnaire sections, including "Work Attitudes and Job Plans," "Work Experience and Attitudes," "Work Attitudes," "Attitudes Toward Woman's Role," "Attitudes," "Health," and "Future Plans."

User Notes: The attitudes toward women working questions have also been asked of the Mature Women and NLSY79 respondents in multiple surveys, permitting comparisons across generations and over time. Questions on household tasks have likewise been addressed to Mature Women and NLSY79 respondents.

4.5 Child Care

Two sets of child care variables have been collected: (1) information on the type and location of child care arrangements and (2) data on the extent of responsibility for various household tasks including child care. An additional series of questions in the "Current Labor Force Status" section of the questionnaire included "child care" and/or "family reasons" as reasons for being out of the labor force or unemployed.

Types and Locations of Child Care Arrangements: Data were collected on the types and locations of child care arrangements, plus select details on the costs, the number of hours child care was required, the preferred child care arrangements, the attitude toward child care/day care centers, and the impact of child care availability on job search activity. Details concerning child care arrangements are available for the 1968–72, 1975, 1977, 1978, 1983, and 1988–95 interviews.

In general, different sets of questions were administered to respondents based upon their labor market status and/or the presence of children under age 18 in the household. Coding categories for the specific type of child care arrangement varied somewhat over the years but typically included: in own home by relative (specified and unspecified), in own home by nonrelatives, in relative's home, in nonrelative's home, and at day care or group care center.

The 1971, 1991, 1993, and 1995 surveys contained an expanded set of coding categories for types of child care arrangements and identified the kinds of child care arrangements utilized by a respondent for different-aged children. The 1983 survey asked whether the respondent had lost any days of work in the last year due to child care problems; the 1991, 1993, and 1995 surveys included questions on the number of days of work lost by the respondent because of child care and total child care costs for each child. During the 1978 and 1983 survey years, data on child care arrangements were collected for only the youngest child.

Finally, a set of variables created for certain survey years includes such information as types and location of child care arrangements, costs per hour worked, preferred child care arrangements, and changes in family child care responsibilities between survey years.

Extent of Child Care Responsibility: Information on the extent of responsibility for various household tasks including child care was collected during the 1975, 1978, 1982, 1983, and 1987 interviews. The basic question in this series asked whether the task of child care, including helping with children, was the sole responsibility of the respondent (or another person) or whether the responsibility was shared. Select interviews included a follow-up question on who (husband, children, hired help) shared this child care responsibility. In 1978 and 1983, respondents also gave their attitude toward caring for children as part of this series (see also the "Attitudes & Expectations" section of this guide). Finally, the 1995 questionnaire asked whether the respondent had any responsibility for the care of children under the age of 18 who lived in her household.

Survey Instruments & Documentation: Questions on types and locations of child care arrangements and the extent of responsibility for child care tasks can be found in the "Child Care," "Work Attitudes," "Work Experience," "Current Labor Force Status," and "Family Background" sections of the questionnaires. The codebook provides derivations for the series of created child care variables.

References

Cook, Judith A. and Grey, Dennis. "Child Care Arrangements Among Adolescent and Young Adult Parents: Findings from a National Survey." Columbus, OH: CHRR, The Ohio State University, 1984.

Leibowitz, Arleen; Waite, Linda J.; and Witsberger, Christina. "Child Care for Preschoolers: Differences by Child's Age." *Demography* 25,2 (May 1988): 205–20.

4.6 Cigarette Use

Information on the use of cigarettes was collected in the 1991–99 surveys. The 1991 survey included questions for both current and past users. Respondents were asked the age when they first started smoking regularly and the number of cigarettes/packs they smoked on a usual day. Respondents who had stopped smoking as of the interview date provided the age when they last smoked regularly. The 1993 survey collected information only about current smoking behavior. In 1995–99, respondents were asked one question, "Do you smoke cigarettes?" Table 4.6.1 provides reference numbers for cigarette use questions.

Table 4.6.1 Reference Numbers of Cigarette Use Questions

Question	Reference Numbers				
	1991	1993	1995	1997	1999
Do you smoke cigarettes now?	R13020.	R14711.	–	–	–
Do you smoke cigarettes?	–	–	R33654.	R41338.	R50910.
On the average, how many cigarettes do you usually smoke in a day (present smoker)?	R13021., R13022.	R14712., R14713.	–	–	–
How old were you when you first started smoking regularly (present smoker)?	R13024.	–	–	–	–
Did you ever smoke cigarettes?	R13025.	–	–	–	–
On the average, how many cigarettes did you usually smoke in a day (past smoker)?	R13026., R13027.	–	–	–	–
How old were you when you last smoked regularly (past smoker)?	R13029.	–	–	–	–
How old were you when you first smoked regularly (past smoker)?	R13030.	–	–	–	–

Survey Instruments: The "Health" sections of the 1991–99 surveys contain the questions on cigarette use.

4.7 Class of Worker

In each survey year, respondents provided data on their class of worker status. In the 1968–93 surveys, respondents reported whether they (1) worked for a private company or an individual for wages, salary, or commission; (2) were government employees; (3) were self-employed in their own business, professional practice, or farm; or (4) were working without pay in a family business or farm. Beginning with the 1995 survey, the categories changed; respondents are now classified as working for (1) the government, (2) a private for-profit company, (3) a nonprofit organization, or (4) a family business. A further question asked at each interview determines whether the business or professional practice is incorporated. After 1977, the government classification includes data on whether the level of government is federal, state, or local. The reference job for these class of worker variables is usually the "current or last job"; however, during the early survey years, the reference job was the "current job." Definitions for class of worker classifications are available in Figure 4.7.1.

Each year, survey staff create collapsed versions of the class of worker variables combining the questions described above. These variables distinguish between (1) wage and salaried workers (including those self-employed respondents who work in an incorporated business), (2) government employees, (3) workers self-employed in unincorporated businesses or farms, and (4) those working without pay on family farms or businesses. These collapsed variables are available for all respondents regardless of current employment status; class of worker status for respondents who are unemployed or out of the labor force is derived from the last job reported.

Class of worker data are available not only for the current or last job but also, during select survey years, for one or more intervening jobs held since the date of the last interview or for dual jobs held during the survey week. Of related interest are two variables which report the resident's class of worker at the last job she held before and first job after the birth of the respondent's first child, constructed from data collected during the 1973 survey. These variables, part of a set of created variables on employment characteristics of young mothers, also identify respondents who never worked prior to and subsequent to their first birth.

Survey Instruments & Documentation: Questions relating to class of worker can be found in the "Current Labor Force Status" or "Work Experience" sections of the questionnaires. The method of creating the collapsed class of worker variables is provided within the codebook. Two appendices within the Young Women's *Codebook Supplement* (see "Occupation and Other Job Information before/after Birth") contain supplementary derivations for the special 1973 series of created variables on young mothers' employment.

User Notes: Employment information collected during the early survey years focused on "jobs," while more recent surveys center on "employers." Users are urged to carefully consult the survey instruments and to be sensitive to the possibility that persons reporting a new job may still be with their former employer.

In 1997 and 1999, self-employed respondents were not asked the same class of worker question as those who were employed in an outside organization or a family business. To obtain the total number of employed respondents, researchers should combine the class of worker variables with the self-employment flag for each job (e.g., R36375.).

Figure 4.7.1 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. Includes persons working for pay for settlement houses, churches, unions, and other private nonprofit organizations.

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

State Government Employees are those who work for State governments and include paid State officials (including statewide JTPA [Job Training and Partnership Act] 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 would be city-owned bus lines, electric power companies, water and sewer service, local JTPA offices, etc. 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 consecutive weeks or more.

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

4.8 Crime, Delinquency & School Discipline

In 1968, a survey of the schools attended by respondents in the Young Women's and Young Men's cohorts was fielded. This survey included two questions on whether school records indicated that the respondent had been committed to or was on probation from a correctional institution. Small numbers of respondents from both cohorts were identified: 5 Young Women were committed and 5 Young Women were on probation; 19 Young Men were committed and 13 Young Men were on probation.

The school survey also recorded whether respondents in the Young Women and Young Men cohorts had ever been expelled or suspended from school. Records of those schools surveyed indicated that 54 Young Women respondents (R00612.) and 205 respondents in the Young Men cohort (R01720.) had been expelled or suspended at some point in their schooling.

Survey Instruments: These questions can be found in the 1968 *School Survey* and are located on the data file along with the other high school data collected during 1968.

User Notes: The scope of the Young Women's surveys is noninstitutionalized individuals; data on incarceration are not available.

4.9 Discrimination

Questions on work-related discrimination were fielded in 1972, 1978–83, 1988, and 1995. In general, respondents indicated whether they had experienced a particular type of discrimination (age, race, religion, nationality, or sex). If a respondent experienced any type of discrimination, a follow-up question elicited information on the type(s) of discriminatory practice experienced (e.g., the respondent believed that she was not hired, interviewed, or promoted; was demoted or laid off; or was paid less for the same work). The 1988 survey contained an expanded discrimination section that asked respondents about steps they had taken to resolve the problem and the eventual outcome. This interview also expanded the categories of discriminatory practices to include performance evaluations and relations with coworkers or supervisors.

As Table 4.9.1 indicates, information on the various types of work-related discrimination and discriminatory practices has been collected across survey years. The reference period of most work-related discrimination questions has been the five-year period preceding each interview; in the 1972, 1982, and 1995 survey years, a shorter two-year interval was referenced.

Table 4.9.1 Types of Work-Related Discrimination Data by Survey Year

	Survey Year						
Type of Discrimination	72	78	80	82	83	88	95
Age	*	*	*	*	*	*	*
Sex	*	*	*	*	*	*	*
Race	*	*	*	*	*	*	*
Religion	*	*	*	*	*	*	*
Nationality	*	*	*	*	*	*	*
Marital Status		*			*	*	*
Health/Handicap/Disability				*	*	*	*
Weight							*
Sexual Orientation							*
AIDS							*

Survey Instruments: Discrimination questions can be found in the "Retrospective Work History," "Attitudes," "Work Attitudes," and "Work History" sections of the questionnaires.

User Notes: From 1978–91, the format of the discrimination questions shifted from a single "most important" response to that of a "mark all that apply." These multiple responses have been coded in a geometric progression; users should refer to section 3.3, "Young Women Codebook System," and Appendix C in this guide for more information. In 1995, the question format shifted again; respondents were asked to give a yes or no response for each type of discrimination. Therefore, answers are no longer coded in a geometric progression.

4.10 Educational Status & Attainment

Schooling and the school-to-work transition process were a primary focus of the Young Women's surveys. Therefore, data were regularly collected on respondents' enrollment in school and their educational attainment. This section summarizes some of the more commonly used educational status and attainment variables by topic. Descriptions of the separately administered School Survey and the constructed college survey variables are presented in the "High School Survey & College Information" section of this guide.

Current School Enrollment Status

1. ***Enrollment Status - Is R Currently Enrolled?*** Respondents were asked whether or not they were attending or enrolled in regular school at the time of the interview during each survey year.
2. ***Grade Attending.*** For those attending regular school, each survey asked about the specific grade within elementary/high school or the year of college they were attending.
3. ***Full- versus Part-time Enrollment.*** In all surveys except 1980, 1982, and 1983, respondents enrolled in school were asked whether they were enrolled as full-time or part-time students.

Educational Attainment

1. ***Highest Grade Completed.*** Respondents indicated the highest grade completed during the initial survey year and every survey year thereafter. A series of created attainment variables provides longitudinally consistent measures of each respondent's reported educational attainment record. These summary variables, the titles of which contain the term "REVISED," are available for 1969–99. Non-revised 'Highest Grade Completed' variables collected during 1975, 1977, and 1978 provide information for a select universe, namely those not enrolled in school since the last interview/as of the current interview. For post-1978 attainment variables, the universe is those respondents attending regular school since the last interview.
2. ***Date of Diploma.*** The 1983 survey collected information from each respondent on whether or not she had obtained a high school diploma or General Equivalency Diploma (GED) and, if so, which type and the month/year it was received. Similar information (exclusive of dates) was collected during the 1985–99 interviews from those respondents who had attended school since the last interview. The 1978 interview gathered information from respondents not enrolled in high school or college on the month/year a diploma was received.
3. ***College Enrollment Status.*** The 'Grade Attending' variables discussed above provide college enrollment status information for each survey year. In addition, the 1968 questionnaire collected information on date started/stopped most recent college enrollment; the 1973 survey asked respondents who were not working a retrospective question on whether or not they had been attending college in February 1968.

4. ***Type of College Degree.*** Respondents who had ever attended college as of the initial survey year were asked for information on the type (if any) of college degree received (associate, bachelor's, master's, doctorate). During all subsequent interviews except 1978, this information was updated for those who had received a degree since the last interview. The 1978 survey collected information from those respondents who had more than one year of college on the type of highest college degree received.

High School & College Experiences

During 1968, a special set of questions gathered information from the respondent on her high school and college experiences. Specifically, the high school series asked:

- which high school subjects the respondent liked most/least and the reasons
- number of hours per week she spent on homework, where she studied, and if there were distractions to her homework efforts
- whether or not she participated in extracurricular activities, the number of hours per week, and her favorite activity (e.g., sports, music, dramatics, other clubs, etc.)
- the kinds of non-school-related activities that took up most of her time (e.g., sports, working for pay, a hobby, etc.)
- the respondent's general attitude toward her high school years

The college experience series collected information on: (1) how respondents felt about their college experience; (2) the field of study they liked most/least and the reasons; and (3) for those respondents currently enrolled who would like more education, how many years of education they would like to complete, how much education they thought they would actually get, what college they would like to attend, and what field they would like to study. Information collected on the names and locations of up to four colleges was used in the construction of the college survey variables; see the "High School Survey & College Information" section of this guide for details.

High School & College Curricula

1. ***Type of High School Curriculum.*** Type of high school curriculum, (i.e., vocational, commercial, college preparatory, or general) was collected in 1968 from all respondents who had ever attended high school. These data were updated during the 1969–73 surveys for respondents enrolled in high school during those years. A 1970 created variable, 'Curriculum in Most Recent High School,' edited information on each respondent's current enrollment status, grade attending, and high school curriculum collected during the 1968, 1969, and 1970 surveys. During the 1968 survey, those respondents who had attended high school were asked whether they had taken typing or shorthand and, if so, which one(s) and the number of years the course(s) had been taken. The 1983 interview included a series of questions on whether the respondent had been enrolled in various types of mathematics courses (e.g., algebra, geometry, trigonometry/calculus), the number of years such courses were taken, and how well she had done in these courses.

2. ***College Field of Study.*** Information on the field of concentration or discipline was collected in 1968 from those respondents who had ever attended college. These data were updated during subsequent surveys for those respondents who had received a degree since the last interview. The 1978 interview collected field of study information for (1) those currently attending college; (2) those who were not attending college but who at some point had done so although no degree had been received; and (3) those who had obtained a college degree. The classification system(s) utilized through 1975 included disciplines such as humanities, education, mathematics, social science, science, business/commerce, and home economics. The post-1975 categories were expanded to include business and management, fine and applied arts, health professions, and public affairs and services, as well as specific disciplines leading to an associate degree (data processing technologies, public service related technologies, health services and paramedical technologies, etc.).

College Tuition & Financial Aid

Full-time annual tuition amounts were collected during 1968 for the most recent college attended and during 1969–73 and 1978 for the college the respondent was attending that year. Information on whether the respondent received financial aid and the amount received was collected during 1968–78. Types of financial aid received (scholarship, fellowship, assistantship, loan, etc.) were collected during all except the initial survey year.

Type and Location of Schools

1. ***Is School Public?*** Information on whether the schools attended by the respondent were public or private was gathered during the 1968–73 and 1978 surveys.
2. ***Census Division of Last High School Attended.*** The Census division (New England, Pacific, Mountain, etc.) of the last high school attended by the respondent as of the 1968 interview is available for most respondents. The User Notes below contain a cautionary note on the address information used to construct these variables.
3. ***Comparison of School Locations with Location of Current Residence.*** A set of variables created by Census compares the location of the respondent's school (high school, college) with her current residence for the 1968–71 survey years. Coding categories include: same SMSA or county; different SMSA or county, same state; different state, same division; different division; and abroad. A second set of variables (e.g., 'Comparison of Location of High School and Most Recent College') compares the location of schools attended as of 1968, 1977, and 1978. The User Notes below contain a cautionary note on the address information used to construct these variables.

4. ***Presence & Type of Accredited Two- & Four-Year Colleges in Labor Market of Current Residence.*** Variables created by the Census Bureau for the 1968, 1969, and 1970 survey years provide information on the types of colleges (e.g., only two-year colleges, only four-year colleges, both two- and four-year colleges) that existed within the respondent's labor market. A second set of variables, available for the 1968 survey only, provides descriptive information on local area colleges, e.g., the colleges present within the labor market that were, for example, coeducational, both public and private colleges, or women-only colleges. The User Notes below contain a cautionary note on the address information used to construct these variables.

Related Variables: In the 1991–97 Young Women surveys, the respondents were asked for information concerning any of their children who attended college in the past calendar year. These surveys also recorded the amount of support the respondent contributed to these college expenses.

Survey Instruments & Documentation: The sets of variables described above are found in a variety of questionnaire sections including: the "Education and Training," "High School Experiences," "College Experiences," and "Educational Goals" sections of the 1968 questionnaire; the "Educational Status" or "Education and Training" sections of subsequent instruments; and the "Family Background" section of the 1973 questionnaire. Appendices in the *Codebook Supplement* present the fields of study classification systems and Census division/state codes.

User Notes: During the initial survey years, the presence of the edited 'Highest Grade Completed' variables made the construction of an attainment variable unnecessary. The 'Highest Grade Completed' variables were the result of extensive hand-edits; they are, in some ways, a best guess made by examining the complete longitudinal record of each respondent. After the mid-70s, a series of questions was asked during each interview about whether the respondent was currently attending or had attended regular school since the last interview. If the respondent replied in the affirmative, information was gathered on the grade attending and/or completed. These variables are used to create the 'Highest Grade Completed (Revised)' series.

In the early years, variables that depend upon address information were created by the Census Bureau in an inconsistent manner. The majority of geographic variables were revised in the mid-1970s to correct for known discrepancies in permanent versus temporary address data. However, certain variables, including the 'Comparison of School Locations with Location of Current Residence' and 'Presence and Type of Accredited Two- and Four-Year Colleges in Labor Market of Current Residence,' were not updated. A more complete discussion can be found in the User Notes in the "Geographic Residence & Environmental Characteristics" section of this guide.

4.11 Family Background

The Young Women surveys provide researchers with a variety of family background data. The surveys have collected information on three primary topics: parents, siblings, and the respondent's family background at age 14.

Parent Background

In the 1968 interview, the women were asked about the birth countries of their parents and grandparents; Table 4.11.1 depicts the results.

Table 4.11.1 Birth Country of Parents and Grandparents

Country	Mother	Father	Maternal Grandfather	Maternal Grandmother	Paternal Grandfather	Paternal Grandmother
U.S. or Canada	4996	4940	4276	4322	4163	4238
N or W Europe[1]	48	54	160	144	227	195
C or E Europe[2]	29	49	155	147	158	144
S Europe[3]	27	44	120	100	142	120
Latin America[4]	32	46	40	43	39	37
Other	23	22	26	19	26	21
Not available	4	4	382	384	404	404

Note: This table is based on R00384.–R00389. in the 1968 interview.

[1] Austria, Belgium, Denmark, England, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Northern Ireland, Norway, Scotland, Sweden, Switzerland, Wales.

[2] Albania, Bulgaria, Czechoslovakia, Estonia, Finland, Hungary, Latvia, Lithuania, Poland, Romania, U.S.S.R., Yugoslavia.

[3] Andorra, Azores, Gibraltar, Gozo, Greece, Italy, Liechtenstein, Malta, Monaco, Portugal, San Marino, Spain, Trieste, Vatican City, Europe– Country not specified.

[4] Mexico, Central America, South America.

If a respondent did not live in her parents' household, five of the first six surveys asked about the number of weeks worked by her parents, whether they usually worked full- or part-time, and their occupation. This information is in the "Household Roster" for respondents still residing with their parents.

The 1968 survey collected the life status of the respondent's and her husband's parents. In 1988 and 1991, additional information on the respondents' biological parents included their current ages (if they were still alive) or the ages when they died. The 1991 survey also asked about the main cause of death for all deceased parents. The in-depth "Parents and Transfers" section of the 1993 and 1997 surveys collected information on the respondent's and her husband's biological parents, including their current ages or the ages when they died. The respondent also reported the month and year of each parent's birth and death, as applicable. In these surveys, information was also collected about each parent's overall health and the distance each parent lived from the respondent. Other information from this detailed series of questions is discussed in the "Transfers" section of this guide.

Siblings

The Young Women surveys collected sibling data six times. The first collection, in 1968, asked respondents how many brothers and sisters lived outside their home. It also asked the age and highest grade completed of the oldest sibling. In 1978, a full collection of information about siblings was included in the survey. Respondents were asked to provide the name, sex, birth date, and highest grade completed of up to 10 siblings who were not living in their home at the interview date. Respondents were also asked to count how many brothers and sisters lived in their home currently; information about these siblings is in the "Household Roster." In 1983, 1988, 1991, and 1993, respondents were asked if they or their husbands had any dependents; they could then list how many brothers or sisters were dependent on them for at least half their support. Finally, in 1993, another full roster of siblings was included in the survey. Respondents were asked to state the sibling's name, sex, age, life status, highest grade completed, number of children, and age when first child was born for up to 10 siblings.

User Notes: The sampling design for the Original Cohorts produced a number of multiple respondent households. Over 30 percent of Young Women have a mother in the Mature Women cohort; 20 percent have a father in the Older Men cohort. More than 50 percent of Young Women have a sister in the Young Women cohort, a brother in the Young Men cohort, or both. These multiple respondent households provide a great deal of data about a respondent's parents and siblings in addition to that collected during the regular surveys. For more information, see the "Screening" section in chapter 2 and the "Household Composition" section in this chapter.

Respondent Background at Age 14

The 1968 survey asked respondents where they were born and how long they had lived at their current residence. Of the 5,159 respondents, 5,043 (97.8%) reported having been born in the United States.

Information was also collected during the initial interview about the living arrangements of respondents when they were 14 years old, including with whom the respondent lived and whether the residence was in a large or small city or in the country. In addition, the survey collected the occupation and the highest grade completed of the respondents' parents; these findings are reported in Tables 4.11.2 and 4.11.3 below. In 1978, the respondent was again asked whether her mother worked when she was a teenager. If so, follow-up questions asked about her mother's occupation and about the respondent's perception of how her mother felt about working. The 1968 survey also asked whether magazines and newspapers were available in the respondent's home at age 14 and whether the respondent or someone in the household had a library card. In 1973, the survey asked the respondent whether a language other than English was spoken in the home when she was a child and, if so, which language.

Table 4.11.2 Occupation of Mother and Father of Respondent at Age 14

Occupation	Mother	Father
Professional, Technical & Kindred	205	388
Managers, Officials & Proprietors	69	477
Clerical & Kindred	394	178
Sales Workers	137	181
Craftsmen, Foremen & Kindred	25	891
Operatives & Kindred	405	871
Private Household Workers	320	7
Service Workers, Except Private Household	448	212
Farmers & Farm Managers	16	475
Farm Laborers & Foremen	104	91
Laborers, Except Farm & Mine	16	386
Armed Forces	0	52
No Job	2944	152
Not Available	76	798
Total	5159	5159

Note: This table is based on R00394.–R00395. (mother) and R00392.–R00393. (father/head of household) from the 1968 survey. In households without a father, mother information is found under the father/head of household variables. R00391. can be used to determine the respondent's relationship to the head of the household.

Table 4.11.3 Highest Grade Completed by Mother and Father of Respondent in 1968

Grade Level	Mother	Father
Less Than 3	73	132
3–5	240	323
6–8	1054	974
9–11	992	663
12	1623	1057
1–3 years of college	349	287
4 years of college	189	197
5+ years of college	77	176
NA	562	1350
Total	**5159**	**5159**

Note: This table is based on R00676. (mother) and R00656. (father).

Related Variables: In each survey, information is collected on all members of the respondent's household; see the "Household Composition" section of this guide for details. More information about the respondent's background is available in the "Race, Ethnicity & Nationality" section of this guide.

Survey Instruments: Questions pertaining to family background can be found within the "Family Background" sections of the questionnaires. Questions about life status of parents are located in the "Health" or "Parents and Transfers" sections of the questionnaires.

4.12 Fertility

The Young Women surveys contain two types of information on fertility. In most surveys, information is collected about each child living in the respondent's household at the time of the interview. This information is found in the "Household Record" and includes the child's age and relationship to the respondent. Depending on the survey, the household record may also include the child's date of birth, educational attainment, labor force status, and sex. For more information about data collected in the household record (also called the "Household Roster"), see the "Household Composition" section of this guide.

Household record information only provides a partial picture of each respondent's fertility because it does not capture children given up for adoption, children who died, and children who reside outside the home. To remedy this problem, a number of surveys have gathered additional information about each respondent's fertility. This information is quite complex, making construction of a fertility history for the Young Women more time-consuming than for other NLS cohorts. Users will find small gaps in the collection of fertility data for respondents not consistently interviewed over time. However, close examination of household record data for new children after survey gaps can help to ameliorate this limitation.

The first set of fertility questions was asked in 1973. Respondents were asked how many children they had given birth to, how many more children they desired, and their opinion of the optimal family size. The 1978 interview collected detailed fertility information about each of up to six children born to the respondent and about each of up to five adopted children or children from an earlier marriage of her husband. Information available for each child includes sex, date of birth, life status, whether the child was still residing in the respondent's home, and, if not, the month and year the child left the household. While the adopted child roster covers the respondent's entire life, the 1978 biological roster only asks about children born since 1973.

In 1983 the fertility and adoption rosters were repeated to include children born since January 1978. Users should note that respondents who were noninterviews in 1978 do not provide information back to 1973, so these respondents would be missing fertility information for 1973–77.

Beginning in 1985, the roster format was dropped and respondents were asked the number of births since their last survey and the total number of children ever born. For each child born since the last survey, the date of birth was recorded. Respondents were also asked how many more children they expect to have overall and within the next five years.

In 1988, the fertility question format used in 1985 was repeated for births. The section was expanded, however, by a roster for adopted and other children who came to live in the household. This roster asked the name, sex, birth date, year they entered the household, life status, and date they left the household. This roster was designed to capture all nonbiological children who had entered the household since January 1983.

In the 1991 and 1993 surveys, biological births were recorded using the format instituted in the 1985 survey; the 1993 survey additionally recorded the child's sex.

User Notes: While it is difficult to construct a complete fertility history for the Young Women, many researchers do not need all this information. Those who only need the total number of children ever born to a respondent can find this information in Question 38A (R14384.) in the 1993 interview.

Related Variables: The "Intrafamily Transfers" section, administered in 1999, collected information about transfers of time and money between respondents and their children. Some demographic data were gathered as part of this collection. For more information, interested users should refer to the "Transfers" section of this guide.

Survey Instruments: Fertility questions can be found within the "Marital History, Fertility, and Other Family Background," "Children," or "Family Background" sections of the questionnaires.

4.13 Fringe Benefits

This section reviews the fringe benefit data collected for the Young Women. Additional information on other work-related benefits can be found in the "Pension Benefits & Pension Plans" section of this guide.

Data on the availability of fringe benefits provided by employers of respondents were collected in 1978 and 1983–99. At each survey point, information was gathered about the following fringe benefits: (1) medical, surgical, hospital, and dental insurance (as well as vision insurance in some surveys); (2) life insurance; (3) a retirement pension program; (4) paid sick leave; (5) paid vacation; (6) training/educational opportunities; and (7) profit sharing. In addition, select surveys collected data on the availability of free/discounted meals or merchandise, paid and unpaid maternity leave, stock options, flexible work hours, child care, paid personal time, time off for child care, time off for elder care, or a flexible menu of benefits. Table 4.13.1 below summarizes by survey year the numbers of employed respondents reporting the availability of each type of fringe benefit.

In 1987, additional items asked respondents to rank their most important and most desired fringe benefits. In 1991, the collection of fringe benefit data was broadened to include data on actual coverage by a health or retirement plan provided by the respondent's employer. Information on specific types of health insurance coverage (e.g., medical/surgical/hospital care, dental services, vision care, or prescription drugs) was collected, as were data on whether those respondents covered by a pension plan were vested. These pension data are discussed in the "Pension Benefits & Pension Plans" section of this guide.

Related Variables: Additional information has been collected on eligibility for and receipt of various kinds of retirement benefits and/or on coverage by medical insurance. Users interested in these sets of questions should refer to the "Income & Assets," "Health," or "Pension Benefits & Pension Plans" sections of this guide.

Survey Instruments: The "Current Labor Force Status," "Current Labor Force Status and Work History," "Employment," and "Employer Supplement" sections of the questionnaires contain the questions on fringe benefits.

User Notes: The universe for the fringe benefit series is restricted to those respondents who have worked since the last interview and who were employed in a private business or as government workers.

Multiple entry "mark all that apply" questions typically found in the fringe benefit sections were originally coded as geometric progressions. Program statements to unpack such variables are presented in Appendix C of this guide. Beginning in 1993, each type of benefit is reported in a separate variable with a yes or no response. With this new format, geometric progressions are no longer used.

Table 4.13.1 Numbers of Employed Respondents Reporting the Availability of Various Types of Fringe Benefits at Their Current Job

Reporting Availability[1]	1978	1983	1985	1987	1988	1991	1993	1995	1997	1999
One or More Benefits	1763	2089	2439	2445	2336	2364	2161	1724	1679	1586
No Benefits	232	284	–	283	272	318	316	356	359	318
Type of Benefit										
Medical/Surgical/Hospital/Dental/ Vision Insurance	1523	1634	1911	2010	1895	1937	1796	–	–	–
Medical Insurance	–	–	–	–	–	–	–	1615	1593	1495
Dental Insurance	–	–	–	–	–	–	–	1264	1271	1226
Life Insurance	1087	1349	1636	1729	1576	1588	1505	1399	1362	1284
Retirement Pension Program	1091	1295	1547	1654	1532	1634	1583	1453	1446	1343
Training/Education Opportunities	801	1038	1418	1537	1306	1337	1276	1122	1118	1004
Profit Sharing	327	430	570	634	504	519	482	450	408	367
Stock Options	284	362	457	487	401	411	396	–	360	344
Free or Discounted Meals	287	224	431	482	395	385	349	–	–	–
Free or Discounted Merchandise	400	436	645	712	501	459	401	–	–	–
Paid Sick Leave	1356	1575	1833	1891	1743	1772	1694	1354[2]	1333[2]	1226[2]
Paid Vacation Leave	1501	1683	1949	2001	1869	1922	1761	1369[2]	1305[2]	1217[2]
Paid Maternity Leave	480	827	1158	1110	918	923	869	1391	1368	1217
Unpaid Maternity Leave	561	493	1165	1144	617	609	653	–	–	–
Flexible Work Hours	–	717	1131	1199	899	955	855	732	773	740
Child Day Care	–	62	113	137	101	136	142	144	155	138
Paid Personal Time	–	–	–	1136	874	1059	937	–	–	–
Time off for Child Care	–	–	–	576	316	371	484	–	–	–
Time off for Elder Care	–	–	–	–	–	235	403	–	–	–
Flexible Menu of Benefits	–	–	–	–	–	529	584	–	–	–
Other	–	207	378	412	380	233	240	–	–	–

Universe: Respondents who were working, at the survey date, in a private company or as a government worker.
Note: For 1978-95, this table is based on R06026., R08115., R09541., R10700., R11179., R12421.–R12440., R13764.–R13783., and R20074.–R20262. For 1997 and 1999, numbers are derived from the currently employed flag for each job (e.g., R44404.) and the fringe benefits series for each job (e.g., R44548.-R44563.).
[1] The numbers will not sum to the universe total because respondents may receive more than one benefit.
[2] A few respondents reported availability of combined sick/vacation leave, a separate category added in 1995 and not represented in this table.

Reference

Bureau of Labor Statistics. *Work & Family: Changes in Wages and Benefits among Young Adults*. Report No. 849. Washington, DC: U.S. Department of Labor, July 1993.

4.14 Geographic Residence & Environmental Characteristics

A limited number of geographic variables are available in this data set. Due to Census Bureau confidentiality concerns, such variables provide only broad geographical demarcations of the respondent's area of residence, e.g., the name of the Census division, whether the residence was located in the South or non-South, and whether the residence was in an SMSA. A series of comparison variables contrast the respondent's current state/SMSA of residence with those of her birthplace, previous residences, and current job. A set of geographic mobility questions have been included in recent surveys. Finally, characteristics of the respondent's environment are available in several variables describing the size of the labor force and unemployment rate for the labor market of current residence; this series stops with the 1988 interview. Specific information on the names of the county, state, or metropolitan statistical area(s) in which respondents reside is not available.

Due to the fact that Census procedures for the geocoding of geographical boundaries were deliberately frozen in the mid-1970s, users are advised to be skeptical about all variables relating to location below the state level except those delineating movement between counties. For more information, see the User Notes at the end of this section.

Geographic Residence

Some of the primary sets of geographic variables are described below. Table 4.14.1 depicts the years for which various created variables are available.

Table 4.14.1 Created Variables for Geographic Residence and Mobility by Survey Year

Created Variables	Survey Years	
	1968–88	1991–99
Region of Residence (South/Non-South)	*	*
Residence Comparison		
State, County	*	*
SMSA	*	
Size of Labor Market	*	
Residence in SMSA	*	
Residence Status (Mover)	*	*
Unemployment Rate for Labor Market	*	

Birthplace: Information for each respondent identifies the birthplace in relation to the respondent's permanent residence as of the initial survey year. Coding categories include same SMSA/county; different SMSA/county, same state; different state, same division; different division; and abroad. Birthplace information is also available for each respondent's mother, father, and maternal/paternal grandparents; see Table 4.11.1 in the "Family Background" section of this guide for a breakdown of birth country of parents and grandparents. The decision rules used to create a nationality variable for each respondent are discussed within the "Race, Ethnicity & Nationality" section of this guide.

Region of Residence (Revised): A series of variables indicates whether the location of the respondent's permanent address was in the South or in one of the non-South regions of the United States, e.g., the Northeast, North Central, or West. A listing of states constituting the various Census divisions is provided in Appendix 2 in the *Codebook Supplement*. The three divisions comprising the South include the South Atlantic Division, the East South Central Division, and the West South Central Division. Users should note that both a revised version and a non-revised version of the 'Region of Residence' variables are present. Revised versions should be used whenever available. See the User Notes at the end of this section for more information.

Census Division of Current Residence: A series of variables is available for the early years that identifies the Census division (e.g., New England, Middle Atlantic, Mountain, Pacific, etc.) of the respondent's permanent address. Appendix 2 in the *Codebook Supplement* contains a listing of the nine Census divisions and the states comprising each.

Residence - SMSA (SMSA Status): A series of revised variables identifies whether the current residence of a respondent is "central city of the SMSA," "balance (not central city) of the SMSA," or "not in SMSA." Two versions of this variable are present: (1) 'Current Residence in SMSA' and (2) 'SMSA Status in (YR) (Revised).' The revised version of these variables should be used when it is available. The User Notes at the end of this section discuss issues relating to the SMSA classification systems in use by Census.

Residence Status (Mover): A series of revised variables indicates whether a respondent has moved (i.e., reported a permanent address change) since the initial survey year. Residence in the first survey year is coded "1." Code "2" in a subsequent survey year indicates that the respondent has had an address change from the original residence, and code "3" indicates that no move occurred.

Comparisons of Current Residence with Previous State/County/SMSA: This set of variables, available for each survey year, does not reveal the actual state, county, or SMSA of the respondent's current residence, but rather codes movement of the respondent in relationship to the permanent address reported in the first survey. The respondent's county, state, and SMSA are all coded "1" for 1968. A code of "2" in a given survey year indicates that the respondent had moved to, for example, a different county. A subsequent move in year 10 back to the 1968 county would again be coded "1." "Appendix 25: New Geographic and Environmental Variables" in the *Codebook Supplement* provides a further explanation of this coding system along with a listing of other geographic variables present through the mid-70s. The SMSA comparison series was discontinued after 1988 for reasons described in the User Notes below.

Comparison of Current Residence & Location of Current Job: A set of variables present for select survey years compares each respondent's location of current residence with the location of her current (or last or longest) job. Coding categories include same SMSA or county; different SMSA or county, same state; different state, same division; different division; abroad; and other. The User Notes section below includes a discussion of issues affecting SMSA boundaries.

Geographic Mobility: Information on the geographic mobility of respondents was collected during 1983 and 1988–97. Data were collected, for those whose residence had changed, on date of move to current residence, location of previous residence, number of miles between current and previous residence, length of time the respondent lived in her previous residence, and the reason(s) she moved. The 1983 interview included an extended series on the impact of the move on the respondent's and her husband's employment, e.g., attitude toward job and effect on seniority, pension, retirement, and earnings.

Second Residence: Information on whether a respondent resided in another residence during part of the year was collected during the 1995 interview. Variables provide information on the specific months of the year the respondent was in residence at that location and give the year she first started spending time there. The location of the second residence is compared with that of the respondent's current residence using the same coding categories as the comparison of the respondent's residence and current job (above).

Type of Property of Residence: A single variable identifies whether the respondent's property in the original survey year was "urban" or a "farm" or "nonfarm" residence with varying acreage and sales.

Type of Area of Residence: A single 1968 variable identifies whether the respondent lived in (1) an "urbanized area" of a certain size (over 3 million, under 250,000, etc.), (2) an "urban place outside an urbanized area" of varying population sizes, or (3) a "rural" area.

Environmental Characteristics

Two sets of created variables provide information on characteristics of the labor market in which a respondent resided. The geographical unit used to define "residence" for the revised versions of the following variables was the 1970 Primary Sampling Unit (PSU), a geographical sampling area made up of one or more contiguous counties or Minor Civil Divisions (MCD).

Residence - Size of Labor Force: Two series of created variables provide information about the size of the labor force in the respondent's area of residence. The first series, present for 1968–78, is based on data from the 1960 Census. In the mid-70s, when problems with address information were discovered, the Census Bureau recreated the variables using the 1970 Census data. This more accurate revised series of variables is present for 1968–88.

Residence - Unemployment Rate for Labor Market: Two series of variables provide data, drawn from the 1970 *Census of Population* and varying years of the *Current Population Surveys*, for the unemployment rate of the respondent's labor market of current residence. These variables are present for the 1968–88 survey years. Unemployment rates were calculated for each *CPS* PSU by summing the total number of unemployed for the 12-month period and dividing by the total number in the labor force. A combined unemployment rate was computed for PSUs in the same Special Labor Market Area (i.e., combinations of two or more PSUs) and assigned to each PSU within the area.

Survey Instruments: These geographic residence variables are, for the most part, created by Census Bureau personnel from the permanent address information available for each respondent. Information on the birthplace of each respondent and of each respondent's parents and grandparents was collected from the respondent during the initial survey year; questions can be found in the "Family Background" section of the questionnaire. Information on the location of a current job used to construct the comparison of current residence with location of job was collected in the "Current Labor Force Status" questionnaire sections.

User Notes: Users should be aware of a number of changes in the geographic data over the years. Important information about inconsistencies, revisions, and privacy issues is contained in the following paragraphs:

The amount of geographic information that the Census Bureau has provided to CHRR has always been limited. This was, in part, the trade-off for the richness of data available in all other topical areas. Census felt that the detailed information available for each respondent in combination with the geographic location was sufficient, in some cases, to identify specific respondents. To protect respondent identities and fulfill the promise of anonymity, only gross geographic measures such as South/non-South, size of the labor force from the 1970 Census, and unemployment rate from the 1970 Census and current CPS are consistently released.

As data were analyzed based on respondents' permanent addresses, some peculiar and inconsistent results were observed. When specifications for the creation of these variables were checked, a problem with the type of address information utilized, permanent versus temporary, was uncovered. It was not clear in all cases exactly which address had been used by Census as the respondent's permanent address or which respondents had their original data based on address information from the screening as opposed to the first interview. One critical universe that was apparently affected was college students temporarily away from their permanent residences at the time of the interview. As a result of these problems, the entire series of geographic variables was revised in the mid-1970s.

While in most instances the geographic information from the early surveys will be consistent with that in the revised series, there are a number of instances when this will not be true. Thus, the revised series should be considered as replacing all earlier geographic information even though the unrevised information has been left on the data sets. Users will find the word "REVISED" appended to the variable titles of most of these variables; the custom of appending REVISED was continued after the mid-1970s revisions to alert users to the fact that the same methodology continued to be utilized to create subsequent years' variables. Notes that appear within the codeblock of the unrevised variables reference the appendix of the *Codebook Supplement* that describes the revised variables released at that point in time. It is strongly suggested that this new set of variables be used in any analysis that includes geographic mobility.

After Congress passed the Privacy Act of 1974, Census froze the definitions of NLS geographic variables in an attempt to carry out the spirit of the new law. SMSA codes assigned to the 'Residence - SMSA Status' variables were those in effect as of January 1, 1976 (Office of Management and the Budget). As time passed, these geographic variables became increasingly less useful since the information Census provided was based on definitions that did not correspond to current geographical definitions.

Due to the increasingly inaccurate boundaries and the limitations imposed by the Privacy Act, BLS and CHRR decided to restrict the set of variables that would be created to those that were known to be accurate. For all post-1990 surveys, the following variables are no longer created: (1) 'Comparison of Current Residence with Previous SMSA,' (2) 'Residence - Size of Labor Force,' and (3) 'Residence - Unemployment Rate for Labor Market' (both Census and CPS versions). Characteristics of the respondent's local labor market are no longer released, nor are measures of the geographic proximity of the respondent's residence to the employer (except what can be approximated by length of travel). Also unavailable is information on whether the location of a respondent's employer is in an SMSA. Any variables reflecting SMSA status and related comparison variables were discontinued. Retained for continued release were (1) 'Residence Status (Mover),' a set of variables that had always been based on permanent address comparisons, and (2) three other variables based on definitions that had remained the same since the inception of the surveys (i.e., 'Region of Residence [Revised],' 'Comparison of Current Residence with Previous State,' and 'Comparison of Current Residence with Previous County'). These last two comparison variables do not reveal the existing geographic location of the respondent, only her movement into and out of the state and/or county. The standard set of mobility questions that allows researchers to track reasons associated with mobility will continue to be included in each questionnaire.

References

Maxwell, Nan L. "Economic Returns to Migration: Marital Status and Gender Differences." *Social Science Quarterly* 68,1 (March 1988): 108–21.

Office of Management and the Budget. *Standard Metropolitan Statistical Areas, Revised Edition*. Washington, DC: Office of Information and Regulatory Affairs, 1975.

Sandell, Steven H. "Women and the Economics of Family Migration." *Review of Economics and Statistics* 59,4 (November 1977): 406–14.

Spitze, Glenna D. "Black Family Migration and Wives' Employment." *Journal of Marriage and the Family* 46, 4 (November 1984): 781–90.

4.15 Health

This section details the health-related data collected from respondents. These data take three distinct forms. First, information on the respondent's physical health has been gathered during many of the surveys. Second, the post-1982 surveys have collected information on the respondent and her family members' health insurance coverage. Third, measures of psychological well-being are available at select survey points.

Physical Health

A comprehensive set of health-related variables is available for all respondents. In the early survey years, this data collection focused on health as related to employment and schooling, with questions in most interviews about whether the respondent's health limited her work activity or prevented her from working and whether her health affected her schooling, housework, or other activities. Information on whether any of the reported health problems were the result of an accidental injury and whether the most serious injury occurred on the job was collected in 1978. Respondents were also asked at multiple survey points to identify if any specific workplace characteristics would cause them trouble because of their health (e.g., places that were hot, damp, or that had fumes or noise).

Some surveys have also asked respondents about their current health status and perceived health changes over time. Beginning in 1971, periodic questions have been fielded on whether the respondent considered her health to have remained about the same or to have changed for the better or worse over a set period of time (e.g., the past five years, since the last interview). In the 1993–99 surveys, each respondent was asked to rate her health as excellent, good, fair, or poor compared to other women her age. Self-reported height and weight data are available for respondents interviewed during 1991; weight was also asked in 1995.

As the cohort aged, the health collection expanded. Information on the specific diseases that limited the amount or kind of work that the respondent could do was collected during the 1991 and 1993 surveys. Details on up to four health conditions (e.g., cancer, heart trouble, diabetes, hypertension, senility) and the length of time that the respondent has been limited by the primary health condition were coded during each year. The 1991 survey further included an extensive list of medical conditions, ranging from heart problems to allergies to osteoporosis, and asked respondents to state whether they had ever experienced each condition. In 1997 and 1999, a series of questions asked all respondents about high blood pressure, cancer, and heart disease, including limited information about treatment.

In 1971, 1978, 1983, 1988, and 1991, respondents who reported that health limited the amount or kind of work or housework they could do were also asked if their health problems prevented them from performing a predetermined set of other activities such as walking, using stairs, stooping or crouching, etc. In 1995, a similar set of activity questions was addressed to all respondents. During these same surveys, respondents were also asked whether they experienced certain health-related problems (e.g., pain, tiring easily, weakness, aches or swelling, fainting spells or dizziness, anxiety or depression, and/or shortness of breath).

In 1995–99, an additional section on menopause expanded the health module's focus. First, this section determined the respondent's current ovulation status. If the respondent had stopped ovulating, she dated her last ovulation and stated why her period stopped. Additional questions asked if the respondent had surgery to remove her ovaries or uterus. This section ended by querying about hormonal supplements and birth control pill usage to control menopausal or aging symptoms.

A second new series included only in the 1995 survey informs researchers about these women's day-to-day driving activities. The section asked if the respondent ever drove a car and if she had driven over the last 12 months. Those who had driven in the last 12 months were asked the number of miles driven and whether they drove after dark. Those who had not driven in the last 12 months, but who had during their lifetime, stated when they stopped driving.

Health Insurance

During the 1988–99 surveys, information was collected on whether the respondent and/or other family members were covered by health insurance. This series gathered information on whether any family member was covered by medical or hospital insurance and the specific source of the coverage for each family member (e.g., a group policy through the respondent's or spouse's employment, a policy purchased directly from the company, Medicaid, or veterans benefits). In 1991 and 1995–99, respondents who had employer-provided health care also stated whether they contributed toward the cost of the policy. Table 4.15.1 depicts respondents reporting health care coverage by provider.

The 1993–99 surveys asked those respondents who were covered by health insurance through their current or former employer whether they and their husbands expected to be covered by health insurance after the respondent retired.

Table 4.15.1 Medical Insurance Coverage of Respondent by Provider (Unweighted): 1988–99

Source of Insurance	1988	1991	1993	1995	1997	1999
Total respondents interviewed	3508	3400	3187	3019	3049	2900
R or any member of R's household covered by medical insurance	3116	2811	2855	2631	2612	2485
R's provider:						
From R's job/union	1452	1285	1365	1296	1304	1185
From husband's/partner's job/union	1213	1021	970	853	755	728
Directly from insurance company	187	203	154	135	153	143
Medicaid	37	39	135	67	71	73
Veterans Benefits	2	4	9	8	14	12
From R's former job/union	–	10	21	33	55	62
From husband's/partner's former job/union	–	7	34	59	76	97
From other family member's job	–	1	4	2	3	–
Medicare	–	13	26	40	59	72
Other	150	131	28	51	33	28
Don't know/Refused	2	1	2	18	7	9
Total Rs covered	3043	2715	2748	2562	2530	2409

Source: This table is based on R11810., R11812., and R11814. in 1988; R13097., R13100., and R13102. in 1991; R14720., R14723., and R14725. in 1993; R33708., R33711., and R33764. in 1995; R41396., R41399., and R41401. in 1997.; and R50972., R50975., and R50978. in 1999.

Psychological Well-being

In 1993, the full 20-item CES-D (Center for Epidemiological Studies Depression) scale was administered to the Young Women respondents (R14740.–R14759.). This scale measures symptoms of depression and discriminates between clinically depressed individuals and others; it is highly correlated with other depression rating scales (see Radloff 1977; Ross and Mirowsky 1989). The 1995–99 surveys contained a reduced set of seven items from the original 20-item CES-D scale. The CES-D items can be found in the data set by searching for the phrase "Attitude in past week."

At five survey points, the Young Women gave responses to a measure of internal-external locus of control. Internal control refers to the perception of events as being under personal control; external control involves events being perceived as unrelated to one's own behavior. In 1970, 1973, and 1978, an 11-item abbreviated version of Rotter's (1966) Internal-External Control Scale was used. The abbreviated scale was constructed by including only those items of the original 23-item Rotter scale which were the most general and oriented to the adult world of work (see Parnes et al. 1974, Appendix to Chapter VI). Reducing the number of items would have required an overall reduction in the range of scores. To avoid this situation, the response format was modified to four choices rather than two as in the original scale. The respondent was thus asked how closely each of the 11 statements represented her own view of the issue. The total score is obtained by summing the values of all 11 items, resulting in a range of 11 to 44 in order of increasing external control. The modified scale has been shown to be highly correlated with the original 23-item scale (see Parnes et al. 1974, Appendix to Chapter VI). In 1983 and 1988, this scale was further reduced to only four items.

Related Variables: Additional information on the respondent's general satisfaction with life can be found in the "Attitudes & Expectations" section of this guide. Questions on job satisfaction can be found in the "Job Satisfaction" section of this guide.

Survey Instruments: Health and health insurance questions are located within the "Health" section of the questionnaires. The CES-D scale items can be found in the "Health" section of the survey instruments in the years they are collected. Components of the Rotter scale can be found in the "Work Attitudes" section of the appropriate survey year questionnaires.

References

Parnes, Herbert S., Adams, Arvil V.; Andrisani, Paul J.; Kohen, Andrew I.; and Nestel, Gilbert. *The Pre-Retirement Years: Five Years in the Work Lives of Middle-aged Men, Vol. 4.* Columbus, OH: CHRR, The Ohio State University, 1974.

Radloff, Lenore. "The CES-D Scale: A Self Report Depression Scale for Research in the General Population." *Applied Psychological Measurement* 1 (1977): 385–401.

Ross, Catherine E. and Mirowsky, John. "Explaining the Social Patterns of Depression: Control and Problem Solving—or Support and Talking?" *Journal of Health and Social Behavior* 30 (June 1989): 206–9.

Rotter, Julian B. "Generalized Expectancies for Internal vs. External Control of Reinforcements." *Psychological Monographs* 80,609 (1966): 1–28.

4.16 High School Survey & College Information

This section describes information collected from the high schools attended by respondents in the Young Women and Young Men cohorts and the set of created variables detailing characteristics of up to three colleges attended by respondents in the two cohorts.

High School Survey

The Census Bureau, via a separate school survey, collected information on secondary schools during 1968. The survey was mailed directly to the 3,030 schools attended by respondents in the Young Women and Young Men cohorts. After Census conducted follow-up procedures to maximize responses, partial information is available for approximately 95 percent of the schools attended by the members of these two cohorts; complete information is available for 75 percent of the schools (Kohen 1973). The survey collected data on (1) characteristics of the schools (type of school, total student enrollment by grade, annual expenditure per pupil, number of books in the school library); (2) characteristics of the school's teachers and counselors (number of full-time teachers and counselors, annual salary for an inexperienced teacher, presence of a vocational guidance program); and (3) respondents' performances on various aptitude and intelligence tests, as well as their absenteeism and school disciplinary records. Available constructed variables include an index of school quality, number of books per pupil, number of students per full-time teacher, number of counselors per 100 students, percent black/Hispanic student enrollment, and percent black faculty for one or both cohorts. Users can find additional information in the "Aptitude, Achievement & Intelligence Scores" and "Crime, Delinquency & School Discipline" sections of this guide.

Survey Instruments & Documentation: Census collected data using the *School Survey* instrument. These variables can be identified by searching for the term "School Survey" on the CD-ROM. A series of appendices within each cohort's *Codebook Supplement* provides additional information on this survey and some of its constructed variables.

User Notes: The universe for this survey consisted of those respondents who had (1) completed the ninth grade by the time of the 1968 survey and (2) signed a waiver form permitting Census to collect information from their school record.

College Information

A series of variables provides information about the colleges attended by respondents in the Young Women and Young Men cohorts during the late 1960s and early 1970s. Data on schooling were collected during the regular surveys (e.g., grade attending, when entered this school, names and locations of colleges, highest grade completed) and merged with information detailing the characteristics of each college to form a set of created variables called the "College Survey."

Certain variables were created for each of up to three colleges attended, i.e., the first college attended, the most recent college attended as of 1971/1972, and the college attended for the longest time between the first and most recent college. These variables include the following: the last year the respondent attended that college, state identification code for the college's location, whether the college was private or public, the type of college or university, the highest college degree offered at the institution, the race/sex composition and socioeconomic status of the student body, an index of institutional selectivity, the number of books in the library, the percentage of faculty with a Ph.D., expenditures per full-time student, the ratio of students to faculty, and an index indicating whether the college was "below average," "average," or "above average" in six areas of occupational/career orientation.

Survey Instruments & Documentation: Responses to *Information Sheet* items and data collected from the "Educational Status" sections of the 1968–72 Young Women questionnaires provided the schooling information for each respondent. These variables can be identified by searching for the term "College Survey" on the CD-ROM. External data sources are identified in the codeblock for each created variable.

> ***User Notes:*** Respondents who attended fewer than three institutions are coded as "NA" for the college attended for the longest time between first and most recent college. For those respondents attending only one institution, characteristics of that institution are reflected twice, both in the series of variables relevant to the first college attended and in those relevant to the most recent college attended.

Reference

Astin, Alexander. *Who Goes Where to College.* Chicago: Science Research Associates, 1965.

Kohen, Andrew I. "Determinants of Early Labor Market Success among Young Men: Race, Ability, Quantity and Quality of Schooling." Ph.D. Dissertation, The Ohio State University, 1973.

Light, Audrey. "Notes on the NLS Schooling Data." Columbus, OH: CHRR, The Ohio State University, 1995.

4.17 Household Composition

This section first describes variables related to household and family composition, characteristics of household members, and household residence. Household identification and linkages between members of multiple respondent households are then discussed. Some familiarity with the following survey instruments which gather information on households is helpful: the Original Cohort *Household Record Cards*, the Original Cohort "Household Roster," and the household screeners that were used to select respondents for the various cohorts. The "Survey Instruments and Other Documentation" section in chapter 3 of this guide provides detailed descriptions of each of these instruments. The availability of information on partners is discussed in the "Marital Status & Marital Transitions" section of this guide. Those interested in information detailing the geographic residence (e.g., state, county, or SMSA) of NLS respondents should refer to the "Geographic Residence & Environmental Characteristics" topical discussion.

Household Characteristics

Household and Family Composition: During each survey year, a complete listing of family or household members is obtained in the "Household Roster" or household enumeration section of the questionnaire. Through 1985, only family members (i.e., related household members) are included on the "Household Roster," although some information about unrelated household members was collected in a separate series of questions in 1978, 1982, 1983, and 1985. In more recent years, all household members are listed on the "Household Roster"; however, variable titles have not been altered to reflect this change. For example, 'Household Record - Family Member # 5: Relationship to R' may actually provide the relationship to the respondent of an unrelated household member. The number of family or household members on the roster has varied from 9 to 23 across survey years; users can determine whether unrelated household members were listed and the total number included for a given year by examining the questionnaire. Name, relationship, and date of birth items are generally transcribed from the *Household Record Cards*, documents that are completed before the interview begins. Items in the "Household Roster" can be easily found on the CD-ROM by searching for the word "Record."

Characteristics of Household Members: Although questions and universes have varied slightly across surveys, basic information about the age, relationship to the respondent, and labor force participation of members listed on the roster has been collected each year. Information about educational status and attainment of family members was gathered in each year through 1985. Gender, while not reported in the roster before 1997, can usually be inferred from the relationship code; see the User Notes below for details. Table 4.17.1 summarizes the survey years and universes for which the various types of information have been collected.

Table 4.17.1 Young Women Household Roster Questions 1968–99

Key: F = Family members, H = Household members; Numbers indicate age restrictions

Survey year	Relationship to R	Age/date of birth (DoB)	Gender	Enrollment status	Highest grade attended (not enrolled members)	Highest grade completed	Work last week?	Weeks worked last year	Usual hours per week worked	Occupation (if worked in past year)
1968	F	F age	–	F 6–24	F ≥ 6	F ≥ 6	–	F ≥ 14	F ≥ 14	F ≥ 14
1969	F	F age	–	F 6–24	F 6–24	F 6–24	–	F ≥ 14	F ≥ 14	F ≥ 14
1970	F	F age	–	F 6–24	F 6–24	F 6–24	–	F ≥ 14	F ≥ 14	F ≥ 14
1971	F	F age	–	F 6–24	F 6–24	F 6–24	–	F ≥ 14	F ≥ 14	F ≥ 14
1972	F	F age	–	F 6–24	F 6–24	F 6–24	–	F ≥ 14	F ≥ 14	F ≥ 14
1973	F	F age	–	F 6–24	F 6–24	F 6–24	–	F ≥ 14	F ≥ 14	F ≥ 14
1975	F	F age	–	F 6–24	–	–	–	F ≥ 14	F ≥ 14	F ≥ 14
1977	F	F both	–	F ≥ 3	F ≥ 3	F ≥ 3	–	F ≥ 14	F ≥ 14	F ≥ 14
1978	F	F DoB	–	F ≥ 3	F ≥ 3	F ≥ 3	–	F ≥ 14	F ≥ 14	F ≥ 14
1980	F	F both	–	F ≥ 3	F ≥ 3	F ≥ 3	–	F ≥ 14	F ≥ 14	F ≥ 14
1982	F	F both	–	F ≥ 3	F ≥ 3	F ≥ 3	–	F ≥ 14	F ≥ 14	F ≥ 14
1983	F	F both	–	F ≥ 3	F ≥ 3	F ≥ 3	–	F ≥ 14	F ≥ 14	F ≥ 14
1985	F	F both	–	F ≥ 3	F ≥ 3	F ≥ 3	–	F ≥ 14	F ≥ 14	F ≥ 14
1987	H	H age	–	–	–	–	–	H ≥ 14	H ≥ 14	H ≥ 14
1988	H	H DoB	–	–	–	–	–	H ≥ 14	H ≥ 14	H ≥ 14
1991	H	H both	–	–	–	–	H ≥ 14	H ≥ 14	H ≥ 14	H ≥ 14
1993	H	H both	–	–	–	–	H ≥ 14	H ≥ 14	H ≥ 14	H ≥ 14
1995	H	H both	H	–	–	–	H ≥ 14	H ≥ 14	H ≥ 14	–
1997	H	H both	H	–	–	–	H ≥ 14	H ≥ 14	H ≥ 14	–
1999	H	H both	H	–	–	H ≥ 3	H ≥ 14	H ≥ 14	H ≥ 14	–

Although unrelated household members were not included on the household roster until 1987, some information is available for 1978, 1982, 1983, and 1985. For the first three years, a second series of questions similar to the roster asked for the relationship, age, and sex of up to five unrelated household members. In 1985, an extended series of questions asked about the relationship; age; enrollment status, highest grade attended, and highest grade completed (for those age 3 and older); and number of weeks worked last year, usual number of hours worked per week, and occupation (for those age 14 and older). This series of questions also asked about the contributions of members age 14 and older to the household in terms of both financial support and help with household tasks.

Household Residence: A very limited amount of information is available about the type of residence in which the respondent lived. The 1970–72 surveys asked how many rooms the respondent's dwelling had. In 1993–99, the "Interviewer Remarks" section included a question about the type of dwelling, with answer categories such as detached house, apartment in building with or without elevator, trailer, etc.

User Notes: Beginning in 1993, most information on the respondent's husband is gathered in the main body of the questionnaire rather than the "Household Roster" section.

Relationship codes for family and household members have varied across survey years. From 1968–75, family members were given one of twelve codes identifying only direct relationships like spouse, children, parents, and siblings, with sex usually identified (e.g., son, daughter, other relative - male). Any other family members were simply coded as "other relative." In the mid-1970s, these household record variables were revised and expanded for the 1968–73 (but not 1975) survey years. Additional codes, with sex usually identified, included grandparents; children by marriage; adopted, step-, and foster children; partners; and boarders and other nonrelatives. The same expanded codes were used for the 1977–93 surveys. In 1995, codes with sex not identified were added for adopted, step-, and foster children; boarders; and partners.

Household Identification and Linkages

The sampling design used to select respondents often generated more than one NLS respondent from the same household. More than three-quarters of the respondents from the Young Women cohort shared the same household with at least one other respondent from the same or another cohort at the time the screening was performed (see Tables 4.17.2 and 4.17.3). To facilitate use of this unique aspect of NLS data, constructed variables link respondents sharing the same household at the time of the 1966 screening.

Table 4.17.2 Distribution of Respondents Living within Single & Multiple Respondent Households: The Original Cohorts

Household Type[1]	Older Men		Mature Women		Young Men		Young Women	
Single Respondent	3353	66.6%	2509	49.4%	1031	19.7%	1018	19.7%
Multiple Respondent	1681	33.4	2574	50.6	4194	80.3	4141	80.3
2 Respondent Households	871	17.3	1347	26.5	1997	38.2	1887	36.6
3 Respondent Households	481	9.6	775	15.2	1206	23.1	1216	23.6
4 Respondent Households	234	4.6	311	6.1	650	12.4	637	12.3
5 Respondent Households	71	1.4	115	2.3	264	5.1	300	5.8
6 Respondent Households	17	0.3	21	0.4	49	0.9	75	1.5
7 Respondent Households	5	0.1	3	0.1	21	0.4	20	0.4
8 Respondent Households	1	[2]	1	[2]	1	[2]	5	0.1
9 Respondent Households	1	[2]	1	[2]	6	0.1	1	[2]
Total Respondents	**5034[3]**	**100%**	**5083**	**100%**	**5225**	**100%**	**5159**	**100%**

[1] Household types for all cohorts are based on information gathered during the household screening. Reference numbers include: R00003.–R00021. (Older Men, Mature Women, and Young Men) and R00003.–R00021.55 (Young Women).
[2] Less than 0.05%.
[3] Data are available on a total of 5,020 respondents. Originally 5,027 men were interviewed. However, seven men had duplicate records, for a total of 5,034. All fourteen records were eliminated from the data files.

Table 4.17.3 Distribution of Respondents by Intra- & Inter-Cohort Households: The Original Cohorts

Household Type and Cohort(s)[1]	Older Men[2]	Mature Women	Young Men	Young Women	Households
Total Respondents	5034	5083	5229	5159	12,382
Single Respondent	3353	–	–	–	3353
	–	2509	–	–	2509
	–	–	1031	–	1031
	–	–	–	1018	1018
Multiple Respondent					
Intra-Cohort Respondents[3,4]	105	–	–	–	50
	–	74	–	–	36
	–	–	1697	–	785
	–	–	–	1645	743
Inter-Cohort Respondents[3,5]					
OM-MW	574	572	–	–	567
OM-YM	936	–	1167	–	931
OM-YW	843	–	–	1069	839
MW-YM	–	1415	1792	–	1406
MW-YW	–	1508	–	1957	1502
YM-YW	–	–	2253	2260	1880
OM-MW-YM	240	239	306	–	238
OM-YM-YW	402	–	513	519	401
OM-MW-YW	232	231	–	301	231
MW-YM-YW	–	618	786	799	614
OM-MW-YM-YW	123	122	159	160	122

[1] All information on respondents residing in the same household is based on information collected at the 1966 screenings. Reference numbers include: R00003.–R00021. (Older Men, Mature Women, and Young Men) and R00003.–R00021.55 (Young Women).
[2] Includes 14 cases later dropped from the public data file.
[3] Categories are not mutually exclusive. For example, a household containing three Young Men and one Mature Woman would be included as an intra-cohort Young Men household as well as an inter-cohort Mature Women-Young Men household.
[4] The number of respondents from households in which at least two respondents from the same cohort resided together at the time of the 1966 screenings.
[5] The number of respondents from two or more cohorts who resided in the same household at the time of the 1966 screenings. Older Men is abbreviated OM, Mature Women is MW, Young Men is YM, and Young Women is YW.

Variables specifying the dominant relationships (e.g., siblings, spouses, parents-children) are available within each Original Cohort data set. These variables provide the identification codes of other respondents originating from the same household by relationship and cohort, e.g., 'Identification Code of 1st Sister.' The following relationship linkages are available: spouses (Older Men and Mature Women, Young Men and Young Women), mothers and children (Mature Women and Young Women, Mature Women and Young Men), fathers and children (Older Men and Young Women, Older Men and Young Men), and siblings (Young Women and Young Men). Table 4.17.4 depicts the numbers and types of pairs that existed during the initial survey years among members of the four Original Cohorts.

Table 4.17.4 Number & Types of Dominant Pairs Identified during the Initial Survey Years: The Original Cohorts

Pairs	Young Women	Young Men	Mature Women
Older Men Pairs			
Spouse Pairs	–	–	492
Parent-Child Pairs	988	1098	–
Mature Women Pairs			
Parent-Child Pairs	1848	1671	–
Young Men Pairs			
Spouse Pairs	584	–	–
Sibling Pairs	1814	902	–
Young Women Pairs			
Sibling Pairs	949	–	–

Note: This table is based on R00003.50 (Older Men and Mature Women), R00003.01–R00003.52 (Young Men), and R00003.50–R00003.52 and R00021.01–R00021.55 (Young Women).

CHRR staff developed relationship codes based on a Census tape that included the identification numbers of all individuals who shared a household during the screening procedure. The following logic was used in assigning relationship codes: if a 47-year-old man from the Older Men cohort said he had a 38-year-old wife and a 38-year-old woman from the Mature Women cohort with the same household ID said she had a 47-year-old husband, husband-wife relationships were assigned. A one-year difference was allowed between the reported ages; three years of interview information were checked. Although these matches represent unique samples for a number of research topics, users should be aware that they typically include demographically non-representative matches. For example, father-daughter matches from the Older Men and Young Women Cohorts include fathers who were at least 45 years of age in 1966 and daughters who were no older than 24 in 1968.

Although other types of relationships may have existed, only spouse, sibling, or parent/child relationship codes were assigned. However, identification of other relationship types is possible through use of created variables (R00003. to R00021.) that provide, by cohort, both the identification numbers of other respondents in the household (e.g., ‘Identification Code of 1st Older Male in R’s Household’) and of the household (‘Identification Code of R’s Household’). To determine the nature of other relationships, users can match characteristics of household members from the first respondent’s survey information (e.g., the age the first respondent claims for a cousin) with characteristics of household members on the second respondent’s household roster (e.g., the age the second respondent claims for a cousin), as was done for the development of the relationships described above.

Note that phrases such as "Younger Female," "Older Male," etc., within the titles of the constructed variables refer to the cohort—not to the relative age to the respondent. For example, a 14-year-old male has a 17-year-old sister; both are respondents. On his record, she would be called a "Younger Female" because she is in the Young Women cohort.

Survey Instruments: Generally, information on the "Household Roster" was transcribed from the *Household Record Cards*. The "Household Roster" is located within the "Family Members," "Family Background," or "Household Members" sections of the questionnaires.

User Notes: Users are warned that the relationships were inferred from data on the public data files. CHRR did not have access to detailed information from the Census Bureau (names, etc.) to confirm these linkages. Only "dominant" relationships were considered, as discussed above. While these pairings are believed to be fairly accurate, they and the matching algorithms may have been affected by, for example, misreporting of age in the "Household Roster."

Once a family relationship was assigned, it was generally considered binding even if the household members lived separately. For instance, if the son of a mother/son pair left for college between the screening and the first interview, but a mother/son relationship could still be established based on information collected on the mother's "Household Roster" (for anyone away at college), a mother/son relationship was assigned. Similarly, if a husband/wife pair was divorced several years after the initial interview, this pair would still be linked as spouses. Data from the marital status variables would need to be used to update the relationship.

The data files for all four Original Cohorts include identification numbers for all other respondents in the household, which can be accessed by searching for the word "Identification." However, the **relationship** of the other respondent is not always identified. While identification numbers of spouses in other cohorts are given for all four cohorts, only the Young Men and Young Women files include identification numbers for parent-child pairs. Therefore, for example, a mother-daughter relationship cannot be identified by looking at the Mature Women data file; users can only discover that a respondent in the Young Women's cohort lives in the same household. They must use the Young Women data files to discern whether that pair is a mother-daughter relationship.

4.18 Income & Assets

Respondents have been asked numerous questions about their income, assets, and debts over the course of the surveys. While many researchers use income as the primary measure of economic resources available to a respondent, users can draw a more complete picture of economic well-being by examining both income and wealth. Wealth, which is equal to a respondent's assets minus her debts, reflects the total financial resources available to the respondent.

Data Summary: In every survey year, respondents were asked about their income. Table 4.18.1 presents the broad range of income questions asked since 1968, including wages, business and farm income, rental income, interest and dividends, public assistance support sources, and alimony. In early survey years, respondents were asked about the combined income of themselves and their husbands; in later years, respondents were asked separate questions on how much income they and their husbands received (pretax) from the various sources. Beginning in 1983, respondents were also asked about the income of their partners. In years when the entire survey was shortened, some income sources were combined into fewer questions; in years when a more in-depth survey was used, the questions were separated.

In addition to the in-depth questions about the income of the respondent and her husband or partner, respondents also provided their estimate for total income of all individuals in the family in some years, while in other years they were asked to estimate the total income of all individuals except their husbands and themselves. Finally, respondents have been asked in select years about their ability to get along on their family's income, with choices ranging from "always have money left over" to "can't make ends meet."

Correctly gauging respondent income is a complicated task. Respondents may misreport their total income due to the many sources of income and debt they must consider. A final income figure is calculated based on questions about individual income sources. The 1988–99 surveys first asked respondents about the total income of all people living at the residence. Respondents were then asked to provide a detailed breakdown of each type of income for themselves and their spouses/partners. These questions provide researchers with a method of checking how close an individual's rough guess of income is to the more finely derived total.

Table 4.18.1 Income Questions: 1968–99

Question[1]	Survey Year										
	68–73	75	77	78	80	82	83	85, 87	88, 91	93	95–99
Wage & Salary	*	*	*	*	*	*	*	*	*	*	*
Business Income	*	*	*	*	*	*	*	*	*	*	*
Farm Income	*	*	*	*	*	*	*	*	*	*	*
Interest, Dividends	*	*	*	*	*	*	*	*	*	*	*
Rental Income	*	*	*	*	*	*	*	*	*	*	*
Social Security							*		*	*	*
Pension Income							*		*	*	*
Unemployment Compensation	*	*	*	*	*	*	*	*	*	*	*
Workers' Compensation				*			*		*	*	*
Disability Income	*	*	*	*	*	*	*		*	*	*
Welfare (AFDC)	*	*	*	*	*	*	*	*	*	*	*
Food Stamps			*	*	*	*	*	*	*	*	*
Alimony, Child Support				*	*	*	*	*	*	*	*
Assistance from Relatives	*				*	*		*		*	
Total Family Income	*	*	*	*		*	*	*	*	*	*
Ability to Get Along on Income					*	*		*			
R and Husband/Partner Keep Joint or Separate Accounts										*	*

[1] All income categories are not asked as separate questions in all years; categories were most often combined in telephone surveys.

Respondents have periodically been asked a full set of asset questions. Table 4.18.2 depicts the questions pertaining to assets by survey year; note that telephone surveys are omitted from the table because no asset questions were asked in those surveys. When respondents are asked the full selection of questions, they provide information on the value and mortgage of their home, cash assets, business and farm activity, vehicles, and other debts. In several years, respondents have also been asked to rate their overall financial position as better than, worse than, or about the same as the previous year.

Table 4.18.2 Asset Questions: 1968–99

Question	Survey Years							
	68	69, 70	71–73	78	83, 88	91	93	95–99
Own Home/Apartment	*		*	*	*		*	*
Market Value of Property	*		*	*	*		*	*
Amount Owed on Property	*		*	*	*		*	*
Have Estate/Trust						*	*	*
Amount Estate/Trust						*	*	*
Have Money Assets	*		*	*	*	*	*	*
Amount of Money Assets	*		*	*	*	*	*	*
Have Savings Bonds	*		*	*	*		*	*
Amount of Savings Bonds	*		*	*	*		*	*
Have Stocks/Bonds	*		*	*	*		*	*
Value of Stocks/Bonds	*		*	*	*		*	*
Have IRA/Keogh/401k/Life Insurance								*
Amount IRA/Keogh/401k/Life Insurance								*
People Owe You Money					*		*	*
Amount Owed to You					*		*	*
Own Farm/Business/Real Estate	*		*	*	*		*	*
Market Value Farm/Business/Real Estate	*		*	*	*		*	*
Amount Debts Farm/Business/Real Estate	*		*	*	*		*	*
Own Vehicles	*		*	*	*		*	*
Owe Any Money on Vehicles	*		*	*			*	*
Amount Owe on Vehicles	*		*	*			*	*
Market Value of Vehicles			*	*			*	*
Make/Model/Year of Vehicle	*		*					
Owe Money to Creditors	*		*	*	*		*	*
Amount Owed to Creditors	*		*	*	*		*	*
Received Inheritance since DOLI						*	*	*
Received Life Insurance Settlement								*
Better/Worse Financially		*	*	*	*	*	*	*

Nonresponse: One major concern when asking individuals about their income and wealth is nonresponse bias. While it is outside the scope of this chapter to fully investigate nonresponse bias, this section briefly describes nonresponse in 1997 as an example of the issues raised. There are two primary types of questions on income and assets (or debts): general questions asking whether the respondent received income from a particular source or owned a particular asset, and specific questions asking about the amount of income or value of the asset. Factors that are likely to contribute to nonresponse are suspicion, uncertainty, shared responsibility for family finances, and complex financial arrangements.

Table 4.18.3 provides information on response rates to questions on income in the 1997 survey. Respondents who refuse to answer, who respond with "don't know," or who are valid or invalid skips are all counted as nonresponses. The cohort has high response rates on the receipt questions—generally around 96 percent. The percentages in the amount column are based only on individuals who reported receiving that type of income. These amount questions show much lower response rates. For example, the response rate for business and farm income drops by more than 12 percent.

Table 4.18.3 Response Rates to Income Questions (Unweighted): 1997

Respondent's Income	Receive Income from Source?	Amount[1]
Wages/Salaries/Tips	95.8%	91.1%
Business/Farm	95.4	83.0
Unemployment Benefits	96.2	94.6
Social Security	96.3	95.7
Veterans Comp/Pension	96.3	81.5
Workers' Compensation	96.3	73.5
Social Security Disability	96.3	92.7
Other Disability	96.3	97.1

Note: This table is calculated from R41534.–R41538., R41540.–R41544., R41546., and R41548.–R41555.
[1] Universe is restricted to individuals who receive income from the relevant source.

Table 4.18.4 provides information on response rates to questions on wealth in the 1997 survey. The table again shows high response rates on the ownership questions—generally 94 percent or higher. The amount column is based only on individuals who own a particular asset or have a particular debt. These amount questions have much lower response rates.

Table 4.18.4 Response Rates to Questions on Wealth (Unweighted): 1997

Type of Wealth		Ownership	Amount[1]
Assets:	Money Assets[2]	94.1%	77.0%
	Securities[2]	93.9	62.9
	Savings Bonds[2]	94.0	75.9
	Primary Residence	96.9	90.9
	Vehicles	96.1	84.1
Liabilities:	Mortgage	–	88.8
	Vehicle Debt	98.6	89.9

Note: This table is calculated from R41463.–R41465., R41473.–R41474., R41483.–R41484., R41478.–R41479., and R41528.–R41531.
[1] Universe is restricted to individuals who have the relevant asset or debt.
[2] In addition, 19.5% of the respondents answered the stepladder questions for money assets, 29.8% for securities, and 20.2% for savings bonds.

Beginning in 1995, questions about some asset categories incorporated a "stepladder" to obtain some information from respondents who initially refused to answer or did not know the answer to an asset value question. For example, if a respondent refused to state or didn't know the value of her securities, she was then asked whether the value was over $15,000. If she answered affirmatively, she was asked whether the value was over $40,000. If the value of the securities was less than $15,000, she reported whether it was more than $5,000. This system was used to obtain some information about several asset categories; the ranges of the values are adjusted so that they are appropriate for each category. Users should consult the questionnaire or codebook if they are interested in determining the types of assets and ranges for which stepladders were used in 1995 and subsequent surveys.

Top Coding: To ensure respondent confidentiality, income variables exceeding particular limits are truncated each survey year so that values exceeding the upper limits are converted to a set maximum value. These upper limits vary by year, as do the set maximum values. From 1968 to 1971, upper limit dollar amounts were set to 999999. From 1972 to 1980, upper limit amounts were set to maximum values of 50000, and in 1982 and 1983 the set maximum value was 50001. Beginning in 1985, income amounts exceeding $100,000 were converted to a set maximum value of 100001. The top coding system changed in 1999; this is reflected in the codebook page for each variable.

From the cohort's inception, asset variables exceeding upper limits were truncated to 999999. Beginning in 1983, assets exceeding one million were converted to a set maximum value of 999997. Starting in 1993, the Census Bureau also topcoded selected asset items if it considered that release of the absolute value might aid in identification of a respondent. This topcoding was conducted on a case-by-case basis with the mean of the top three values substituted for each respondent who reported such amounts.

Created Values and Summary Statistics: CHRR staff have created a small number of summary income and asset variables for this cohort. The standard variable, created in 1968–73, 1978, 1983, and 1988–99, is entitled 'Total Net Income of Family.' This variable is created by adding up all of the individual's income categories. Should any of the categories be unavailable, the created variable for that year is labeled "not available." A small number of cases each year have negative income; these individuals have business expenses that are larger than their business and other income. The peak number of respondents with negative family income occurred in 1983 and 1995, when seven individuals fell into this category.

The data set also includes a standard summary variable for wealth entitled 'Total Net Family Assets,' created in 1968, 1971–73, 1978, 1983, 1988, and 1993–99. 'Total Net Family Assets' is created by adding up the individual's housing, savings, bond, IRA, insurance, and business assets and then subtracting mortgages, loans, and other debts; it excludes automobile wealth. Users are cautioned that a number of respondents have negative net family assets.

Related Variables: Recent surveys have collected detailed information about pension income; these data are discussed in the "Pension Benefits & Pension Plans" section of this guide. Additional income sources are described in the "Public Assistance Support Sources" and "Social Security & Disability" sections of this guide.

Survey Instruments: Income and wealth information is collected in the "Income" or "Income and Assets" section of each year's questionnaire.

User Notes: A number of respondents have husbands or parents in the other NLS Original Cohorts. If the respondent is part of a multiple respondent household, researchers may be able to compare the respondent's income and asset information with that provided by other members of her family. (For more information on the possible linkages, users should refer to the "Household Composition" section of this guide.) Using the husband-wife pairs may provide a more complete picture of a respondent's available resources, while the parent-child pairs provide researchers with information on how income and assets are propagated across generations.

4.19 Industries

Open-ended questions (e.g., "What kind of business or industry is/was this?") have been included in each interview. Verbatim responses to this question are coded by Census personnel using three-digit codes from the 1960, 1980, and 1990 classification systems (Census 1960, 1980, and 1990). Two- and one-digit edited versions of these raw variables are available for most survey years for 1960 codes. Table 4.19.1 summarizes the years in which each of the various coding systems have been used. The User Notes at the end of this section contain an extensive discussion of the Census/CHRR editing and creation procedures that affect the industry variables.

Table 4.19.1 Industry Coding Systems Used by Survey Year

Coding System	1968–82	1983–87	1988, 1991	1993	1995–99
1960 Codes	*	*	*	*	
1980 Codes-current/last job only		*			
1980 Codes-current/last job and dual job only			*		
1980 Codes-all jobs				*	*
1990 Codes-all jobs				*	*

Information with which to code the industry of the respondent's current job or current/last job was collected during each survey. In addition, the industry of intervening jobs was coded for each personal interview beginning in 1969 and for each dual job reported in a personal interview beginning in 1972. Table 4.19.2 provides information about the coding systems used in the various surveys. The first survey included a retrospective collection of respondents' work experience prior to the first interview, which asked about the industry of the job held one year ago and that held during the last year of high school. In 1973, 1978, and 1983, five-year retrospectives contained a question on the industry of the job held in February 1968, and that of the longest job held since January 1973 and since January 1978. Other related variables for single survey years include (1) the industry of an alternative job that those respondents who reported job-shopping while remaining employed with the same firm indicated that they could have had and/or had been offered (1973) and (2) two created variables that indicate the industry of the last job held before and after the birth of the respondent's first child (1973).

Present for each survey year through 1993, edited variables from the Occupation & Industry (O & I) Rewrite provide one-, two-, and three-digit versions of the raw current/last job variables. Beginning in 1986, several versions of the current/last job variables (e.g., edited and unedited, collapsed and noncollapsed) are also available. See the User Notes section below for additional information.

Table 4.19.2 Industrial Sector of Respondents' Current/Last Job by Survey Year: 1968–99

Industrial Sector	Total	Agriculture, Forestry, Fisheries	Mining	Construction	Manufacturing	Transportation, Communications & Public Utilities	Wholesale & Retail Trade	Finance, Insurance & Real Estate	Business & Repair Services	Personal Services	Entertainment & Recreation Services	Professional & Related Services	Public Administration	Military[1]
68	3665	178	2	16	589	143	854	177	71	746	52	786	151	–
69	4059	155	2	20	669	142	960	210	79	717	42	893	170	–
70	4195	119	1	21	724	169	992	250	93	608	42	995	181	–
71	4344	111	8	14	754	175	970	271	110	568	51	1096	216	–
72	4351	96	6	23	785	184	963	277	121	499	57	1143	197	–
73	4247	80	7	32	834	171	886	293	100	457	34	1146	207	–
75	4104	64	8	32	846	155	794	285	98	348	34	1216	224	–
77	4007	66	13	34	762	146	732	279	107	338	39	1281	210	–
78	3807	72	9	40	710	147	687	284	99	326	23	1212	198	–
80	3728	61	8	34	676	147	655	267	113	301	37	1219	210	–
82	3583	61	9	40	609	145	620	277	126	283	42	1168	203	–
83	3477	65	9	48	566	145	582	270	125	293	39	1148	187	–
85	3585	63	8	48	569	143	576	258	138	296	36	1228	222	–
87	3530	57	7	54	538	149	548	282	159	260	29	1215	232	–
88	3423	57	7	60	506	132	531	268	161	241	31	1220	209	–
91	3323	65	7	50	461	130	507	249	150	214	28	1231	231	–
93	3123	61	5	55	409	116	458	248	143	202	30	1186	210	–
95	2573	48	3	32	302	123	385	176	132	131	41	1068	132	–
97	2550	41	2	34	303	113	366	174	151	133	47	1055	130	1
99	2419	40	2	32	255	103	357	164	145	117	47	1028	129	–

Universe: Respondents both working and not working during the survey week for whom an industry code for their current or last job was available.

Note: Through 1995, this table is based on R00730., R01362., R02206., R03268., R04105., R04950., R05441., R05853., R07025., R07547., R08018., R09445., R10609., R11069., R12313., R13629., R15804., and R18993.-R18999. The 1997 and 1999 numbers are based on the 1990 industry code for each job (e.g., R36398. for job #01 in 1997, R44422. for job #01 in 1999). Through 1993, industries were coded using the 1960 Census classification system. The 1995–99 data are based on the 1990 classification system.

[1] Although respondents serving in the Armed Forces are not eligible for interview, those who entered the military following sample selection may be interviewed after they have left the military.

Survey Instruments & Documentation: Questions about industry affiliation can be found in the regularly fielded "Current Labor Force Status," "Work Experience & Attitudes," "Work History," "Retrospective Work History," "Employment," and "Employer Supplement" sections and the special 1968 "Previous Work Experience," 1973 "Family Background," and 1983 "Attitudes" sections of the questionnaire. Part One and Appendix H of "Attachment 2: 1960, 1980 & 1990 Census of Population Industrial & Occupational Codes" in the *Codebook Supplement* provide listings by industry of the relevant one-, two-, and three-digit codes. Appendices 23 and 24 of the *Codebook Supplement* provide derivations for the job before and after birth variables.

User Notes: Researchers should be aware of a number of issues related to the industry variables. These issues are discussed in the following paragraphs.

Variable titles for industries listed within the various NLS documentation items do not always specify the Census coding system utilized. *If no year is listed, users should assume that the 1960 classification system was used for coding.*

Substantive differences exist between a number of similarly titled occupation, industry, and class of worker variables present in the Original Cohort data files. One set of raw variables relating to the respondent's current job is derived from responses to questions found within the "CPS" section of each questionnaire. Additional versions of this set of variables are created using the two different procedures described below.

(1) An Occupation & Industry (O & I) Rewrite creates a set of seven "backfilled" or summary variables that enable researchers to identify the last occupation, industry, or class of worker status of all respondents who were interviewed in a given year, whether or not they were currently working. Values utilized are either those from the job in which the respondent was employed the week before the interview or "backfilled" values from the job that was current at the last time the respondent reported employment. Although the industry associated with an intervening job might technically be a respondent's most recent industry affiliation, the O & I program is not designed to pick up information from such jobs. All O & I variables are classified utilizing the 1960 Census codes. Titles for this set of O & I Rewrite variables appear in Table 4.19.3.

Table 4.19.3 Occupation & Industry Variables from the O & I Rewrite

Variable Title	Version	Question #
Class of Worker at Current or Last Job	Collapsed	[Always Blank–Created Variables]
Occupation of Current or Last Job	3-digit	
Occupation of Current or Last Job	Duncan Index	
Occupation of Current or Last Job	1-digit	
Industry of Current or Last Job	3-digit	
Industry of Current or Last Job	2-digit	
Industry of Current or Last Job	1-digit	

The user can differentiate O & I Rewrite variables from non-backfilled variables by (a) the absence of a question number in the documentation that identifies the source of the variable or (b) the presence of the word “collapsed” at the end of the O & I variable title. This series ended in 1993 because the 1960 codes no longer matched the U.S.’s industrial structure.

(2) In the 1980s, Census began an editing procedure that cleans items from the “CPS” section of the questionnaire during the creation of the ‘Employment Status Recode’ variables. Census originally created the ESR variables with no cleaning or editing of the items from the “Current Labor Force Status - CPS” section of the questionnaire. In the mid-1980s, recurring problems with the program that created ESR forced Census to create edited “CPS” items. Census sends both unedited and edited versions of these items to CHRR for public release. Edited variables are identified with either the word “EDITED” or the abbreviations “EDT” or “E” appended to the variable title. Edited versions of these variables will have fewer cases than the unedited versions. When looking at patterns over time, users may wish to use the set of unedited versions.

References

Census Bureau. *1960 Census of Population Alphabetical Index of Occupations and Industries (Revised Edition)*. Washington, DC: U.S. Government Printing Office, 1960.

Census Bureau. *1980 Census of Population Classified Index of Industries and Occupations*. Washington, DC: U.S. Government Printing Office, 1980.

Census Bureau. *Census of Population and Housing, 1990, Alphabetical Index of Industries and Occupations*. Washington, DC: U.S. Government Printing Office, 1990.

4.20 Job Characteristics Index

This section discusses a special 1980 Young Women data collection. Users can find descriptions of the broader range of job characteristic data available in the relevant sections of this guide, such as "Fringe Benefits," "Industries," "Occupations," "Wages," and "Work Experience."

The 1980 survey included a series of questions on characteristics of the respondents' current job, e.g., the amount of variety and autonomy, the opportunity to deal with people and develop friendships, the opportunity to complete tasks, the amount of significance they attributed to their job, and the amount of performance feedback received. Sims, Szilagyi, and Keller (1976) developed items for this scale, called the Job Characteristics Index (JCI).

The JCI, an extension of the work first begun by Turner and Lawrence in 1965, was preceded by an instrument developed by Hackman and Oldham (1975) known as the Job Diagnostic Survey (JDS). Dimensions of the JDS are also incorporated into the JCI, although in a simpler format. Comparisons of the JCI and JDS by Dunham et al. (1977) 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 JCI scale are listed in Table 4.20.1.

Table 4.20.1 Variables Needed to Construct the Job Characteristics Index: 1980

	Employed		Self-Employed	
Dimension	Reference #	Question #	Reference #	Question #
Variety	R07185.	10a	R07213.	14a
Social Interaction	R07186.	10b	R07214.	14b
Autonomy	R07187.	10c	R07215.	14c
Feedback	R07188.	10d	–	–
Friendship	R07189.	10e	R07216.	14d
Task Significance	R07190.	10f	R07217.	14e
Task Completion	R07191.	10g	R07218.	14f

Survey Instruments: Users can find these questions within the "Current Labor Force Status or CPS" section in the 1980 questionnaire.

> ***User Notes:*** This special series of questions was also administered to the Young Men in 1978 and to the NLSY79 in 1980.

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.

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.

Turner, A.N. and Lawrence, P.R. *Industrial Jobs and the Workers: An Investigation of Responses to Task Attributes.* Boston: Harvard University Press, 1965.

4.21 Job Satisfaction

Global Job Satisfaction: During all surveys except 1975 and 1977, respondents rated how they felt about their current/last job (all jobs in 1995–99) on a scale from "like it very much" to "dislike it very much." In most of these years, respondents also listed specific factors about their jobs that they liked and disliked. In addition, data comparing respondents' attitudes toward their current jobs with their attitudes toward their jobs in a previous survey year were collected during certain early years of the survey. In 1970, 1972, 1978, 1980, and 1988, respondents answered a question intended to capture their commitment to working. Respondents stated whether they would continue to work if they had enough money to live comfortably without working; in all years except 1988, they also gave a reason for their response. Finally, the 1968 original survey asked respondents about their motivation to work (R00321.). Table 4.21.1 provides reference numbers for regularly asked job satisfaction items.

Table 4.21.1 Reference Numbers of Job Satisfaction Questions by Survey Year

Survey Year	Attitude toward current job, current / last job, or all jobs[1]	Attitude toward current job compared to job in a previous interview	Things liked / disliked about job	Commitment to work
1968	R00262.	–	R00263.–R00268.	–
1969	R01077., R01090.	R01091., R01092.	R01078.–R01083.	–
1970	R01861.	R01874., R01875., R02229.	R01862.–R01867.	R01881.–R01884.
1971	R02946.	R02959., R02960., R03307.	R02947.–R02952.	–
1972	R03819.	R03849., R03850.	R03820.–R03825.	R03856.–R03859.
1973	R04609.	R04626., R04627.	R04610.–R04615., R04628.	–
1978	R06277.	R06285., R06286.	R06278.–R06283.	R06485.–R06488.
1980	R07178., R07206.	–	R07179.–R07184., R07207.–R07212.	–
1982	R07630.	–	R07631.–R07636.	–
1983	R08545.	R08553., R08554.	R08543.–R08551.	R08778.–R08781.
1985	R09560.	–	–	–
1987	R10740.	–	–	–
1988	R11150.	R11582., R11583.	R11151.–R11153., R11155.–R11157.	R11589.
1991	R13606., R12385.	–	–	–
1993	R13717., R13718., R15781., R15782.	–	–	–
1995	R25476.–R25481.	–	–	–
1997	e.g., R36578. (job #01)	–	–	–
1999	e.g., R44618. (job #01)	–	–	–

[1] Attitude toward current job was asked in the 1968–87 surveys. In 1988–93, the survey inquired about the respondent's current or last job. In 1995–99, the survey asked about each job the respondent held since the last interview.

Facet-Specific Job Satisfaction Scale: During the 1980 survey, employed respondents (wage and salary workers or self-employed respondents) were asked to rate a series of descriptive statements, on a scale from "very true" to "not at all true." These job satisfaction statements covered pay, working conditions, chances for promotion, job security, competence of the supervisor, and the friendliness of their coworkers. The variable titles include the phrase "Job Satisfaction Index" and their reference numbers are R07195.–R07209. and R07219.–R07227.

Users can construct a job satisfaction index by coupling: (1) the global job satisfaction measures described above, (2) select items from the facet-specific job satisfaction ratings, and (3) responses to the commitment to work question. Table 4.21.2 presents the years in which these components are available.

Table 4.21.2 Job Satisfaction Scale Components by Year and Search Phrase

Job Satisfaction Scale Components	Years Available
Global Satisfaction Measures	all except 1975 and 1977
Facet Specific Job Satisfaction Ratings	1980
Commitment to Work	1970, 1972, 1978, 1983, 1988

Survey Instruments & Documentation: The user can find the job satisfaction questions within the "Current Labor Force Status" sections of the questionnaires. More information on constructing the seven-item job satisfaction scale can be found in Appendices 23 and 28 of the Young Women's *Codebook Supplement.*

> ***User Notes:*** Cross-cohort analyses are possible using items from the other Original Cohorts and the NLSY79.

Reference

Andrisani, Paul J.; Appelbaum, Eileen; Koppel, Ross; and Miljus, Robert C. *Work Attitudes and Labor Market Experience: Evidence from the National Longitudinal Surveys*. New York: Praeger Publishers, 1978.

4.22 Job Search

Each of the Young Women surveys includes at least basic job search questions, while several years have had extensive series concerning various job search aspects. These include questions about a respondent's job search activities based on the *Current Population Survey*, searches conducted while the respondent was otherwise employed, how geographic mobility affects job search, and what a respondent would do in hypothetical job offer situations.

CPS Job Search Questions

Questions based on the *Current Population Survey* were asked in every survey to determine respondents' labor force status (see the "Labor Force Status" section of this guide for more information). These asked about the respondent's main activity during the week before the interview (i.e., working, looking for work, going to school), whether she was looking for work during the past four weeks, and the reason she could not take a job last week (i.e., temporary illness, child care problems). The 1995–99 surveys also asked for the main reason the respondent was not looking for work during the last four weeks (i.e., could not find any, lacks experience, family responsibilities).

In all personal interviews in the early years, Young Women respondents looking for work were questioned concerning the details of their job search. This series asked which methods they used during the previous four weeks to look for work, why they started looking (e.g., lost or quit job), the starting date or duration of their search, and whether they were looking for full- or part-time work.

Most interviews asked the respondent various questions concerning her labor force status during a specific time period (past calendar year, since date of last interview). In some years, the questionnaire requested the number of non-working weeks that she spent looking for work or on layoff. If "missing" weeks exist when the respondent was not working and not looking for work, she is asked for the reason no job search was conducted during those weeks (i.e., illness, birth of child, in school).

In all personal interviews, respondents who reported looking for work were presented with a series of questions about the kind of work and amount of pay they wanted. Any restrictions that would be a factor in taking a job, such as hours or location, were also listed. Some of these surveys included an additional question in this series that asked for the hours per week that the respondent wanted to work.

Most personal surveys include some series that were presented only to respondents categorized as being a particular labor force status (i.e., working, unemployed, looking). Respondents who reported neither working nor looking for work were questioned about whether they had any intentions of starting a job search during the next 12 months. If they answered "definitely" or "probably," follow-up questions asked when they planned to start looking, the kind of work they would look for and the search methods they planned to use. All respondents not working and not looking for work at the interview date were asked for the reason they did not start a job search, or why they had not begun looking now instead of waiting to start a search. Similarly, working respondents who were classified as "other" (not working and not looking for work) at the date of last interview were asked for the reason they decided to take a job since the last interview. The 1995–99 surveys also asked if a respondent intended to begin looking for work during the next 12 months.

Some job search questions were only included in a few Young Women surveys. The first two interviews included a set of questions about any weeks spent looking for work or on layoff during the past calendar year (in 1968) or the last 12 months (in 1969). The follow-up questions inquired as to whether these weeks were all in one stretch and whether they were during summer vacation or the school year. Also, in 1983, the survey asked respondents which methods they used to look for work and how they found out about their current job.

Related Variables: In most surveys, the respondent was asked about the number of her husband's (or partner's beginning in 1987) non-working weeks during the past 12 months and whether he spent any of them looking for work. The CPS questions addressed to respondents in 1995–99 were repeated later in the interview to determine the labor force status of the respondent's husband or partner. A limited number of questions were asked about the husband's/partner's CPS status in 1993. In surveys from 1985–91, married respondents were asked whether they or any other family members had started working or looking for work because the respondent's husband was not working.

User Notes: The CPS redesign and the implementation of the CAPI interview have influenced both the choice of questions and their wording (see the "Labor Force Status" section for details on these developments). Users are cautioned to review the questionnaire rather than assuming that similarly titled variables used the same question wording, were addressed to the same universe, or referred to the same time period.

Job Search while Employed

The 1973 Young Women interview included an extensive series of questions concerning any job search activities respondents conducted while otherwise employed. Respondents were eligible to answer these questions if not in school but with the same employer or self-employed in 1971–73. Those respondents who had looked for another job while employed were asked for the frequency of such a search, when this occurred, why they looked at that time, their search methods, the kind of work desired, and whether they looked in the same geographic area. If the respondent was unable to find another job, she was asked for a reason why her search was unsuccessful. Any respondent who found a job she could have had was then asked for various details about the position, including whether she accepted the job offer or not. If she declined it, the respondent was asked for a reason why. If an employer offered a respondent a job (since February 1971) that she did not take and she stopped searching or had no other success in her search, the survey requested various characteristics about the job. An additional question asked if the job was offered by a friend or relative, business acquaintance, former employer, or some other person.

Also in 1973, any employed respondent who did not receive an offer from an employer (and did not search for other work) was asked if she ever thought of looking for another job during this period. If the respondent answered no, the follow-up question asked why not; if she said yes, the next questions asked why she thought of looking and why she never actually searched for other work.

In the 1985 and 1987 telephone interviews, a question about the respondent's level of job satisfaction led into a job search question. It simply asked whether these employed respondents had been looking for other work during the four weeks before the interview.

Geographic Mobility

In 1969, 1978, and 1983, the survey asked respondents who had moved since the date of last interview if they had a job lined up at the time they moved. If not, a follow-up question in 1969 and 1978 asked for the number of weeks they looked before finding a job (other possible answers included "did not look for work" and "still have not found work"). Also in 1978, parallel questions asked about job search activities conducted before and after a respondent's move. The universe for this series depended on the respondent's job status prior to the move.

The 1983 questionnaire asked respondents who had moved since 1973 if they were looking for work or on layoff from a job right before or after the move to their current residence. If these respondents worked for a different employer in the 12 months after the move, another question asked whether they had a new job arranged beforehand.

The 1983 interview also included two questions that asked respondents about how a move affected their husband's labor force status or job search. The Young Women respondents were asked if their husbands had a job lined up at the time of their move and whether he was searching for work right before or right after the move.

Most surveys which have asked respondents about their reasons for moving include "better employment opportunities" as one of the options.

Hypothetical Jobs

Several surveys have included questions about hypothetical job offers and reservation wages. The initial survey in 1968 included some hypothetical situation questions about a respondent's current job. The first question asked what she would do if she were to lose that job tomorrow. If the answer was "look for work," the respondent then reported what kind of work she would look for, the job search methods she would use, any specific companies where she would apply, and a reason for mentioning those employers. Respondents who chose any other answer (i.e., stay at home, return to school) were then asked about their future plans after their current job ends. If they said "taking another job" or "looking for work," they were asked for the kind of work they wanted and whether it would be full- or part-time.

In 1978 and 1983, a hypothetical wages question asked respondents looking for work if they would accept a job offered at the same rate of pay as their last position. The possible answers for this question included "yes, definitely," "depends on the type of work," "no, not enough money," and "had no prior job."

Beginning in 1968 and continuing through the 1988 survey, respondents were asked about their reactions to hypothetical job offers. Most frequently, these questions were set in the context of a job offer in the same geographical area in which the respondent currently lived, but occasionally the questions referred to a different geographical area. The hypothetical job offer series was often broken down by current labor force status of the respondent (e.g., employed, unemployed, or out of the labor force); component questions ask about the rate of pay required to accept the job offer, hours per week the respondent would be willing to work on the job, and the occupation required to accept the position. Researchers should consult the questionnaires for survey years in which these types of questions were asked and note any minor variations in text wording or universes. These questions can be found on the CD-ROM by searching under the word "Hypothetical."

Survey Instruments: Job search questions can be found in multiple sections throughout the Young Women questionnaires. CPS job search questions are part of the various "Current Labor Force Status," "Work Experience," "Work History," and "Work Attitudes" sections. The "Retrospective Work History" and "Employment" questionnaire sections include the job search while employed questions. Job search questions related to geographic mobility are found in "Family Background," "Marital History, Fertility, and Other Family Background," and "Geographic Mobility" sections. All the hypothetical job and wage series are in the sections "Work Attitudes and Job Plans" and "Work Experience."

4.23 Labor Force Status

This section describes the labor force status variables. It does not provide either a comprehensive discussion of all questions asked in the "Current Labor Force Status" sections of the 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 for references to additional labor market–related topics of interest such as 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 week prior to the interview. This series is based on the questions asked in the monthly *Current Population Survey (CPS)* of American households conducted by the Census Bureau for the 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 out of the labor force during a given survey week. Results from the *CPS* surveys, released in the monthly publication *Employment and Earnings*, provide detailed information, classified by age, sex, race, and various other characteristics, on the employment and unemployment experiences of the U.S. population.

Survey Week Labor Force Status: Two sets of variables describe each respondent's labor force status during the survey week for each year through 1993. Due to the redesign of the *Current Population Survey* in 1994 and the subsequent redesign of the comparable Young Women questions, only the second set is present in 1995 and later surveys.

1. ***Activity Most of Survey Week:*** The 1968–93 'Activity Most of Survey Week' variables reflect each 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. Although coding categories differ slightly over time, the following categories of responses have been used to classify the data: (a) working; (b) with a job, not at work; (c) looking for work; (d) going to school; (e) keeping house; (f) unable to work; and (g) other. A new coding category, "retired," was added in 1991. Beginning in the mid-1980s, two versions of the 'Activity Most of Survey Week' variables, one edited by the Census Bureau during preparation of 'Employment Status Recode' and an unedited version, were made available to the public. In the early years of these surveys, responses to the CPS section were never edited. However, minor consistency problems which developed during the creation of ESR over time led the Census Bureau to start editing the questions before running the ESR program. CHRR requested that the unedited versions continue to be made available, appending "Edited," "Ed," or "E" to the edited variable

descriptions to help researchers distinguish between the two. Additional information on this editing procedure can be found in the User Notes discussion in the "Industries" section of this guide.

The main survey week activity question is followed by a second question that seeks to identify those respondents who did any work at all last week in addition to a main non-working activity (such as "looking for work" or "going to school"). This follow-up question is asked of all respondents except those who indicate that they were working or were unable to work.

Definitions for each of these labor market activities are intended to be consistent with those utilized in the CPS. Census interviewers are instructed to use their CPS manual for assistance in coding the current labor force status questions. Since Census is responsible for CPS data collection, it is likely that NLS CPS questions are interpreted in a consistent manner.

2. ***Employment Status Recode (ESR)/Monthly Labor Recode(MLR):*** Created by the Census Bureau, ESR and MLR are very similar variables that recode responses to various employment-related questions into a consistent measure of each respondent's survey week labor force activity. ESR was constructed for the 1968–93 surveys; due to changes in the *Current Population Survey* which were reflected in the Young Women "Current Labor Force Status" section, MLR is constructed for 1995 and subsequent surveys. A series of decision rules, depicted below in Table 4.23.1, clusters information collected from ten questions (dealing with main survey week activity, hours worked, whether/why absent from a job, job search activity, occupation, class of worker, etc.) into positive or negative indicators of "working," "with a job but not at work," and "unemployed (looking for work)." To be assigned to one of these recodes, a respondent must display at least two positive and no negative indicators that she belongs to one of these groups; otherwise she is considered to belong to one of the "not in the labor force" categories. For example, working more than 14 hours/week and a class of worker of "private employee" are positive indicators for a "working" ESR/MLR; a respondent with these positive indicators would not have any negative indicators for a "working" ESR/MLR. More detail on the decision pathways used to assign each recode and on exceptions to the rules presented below can be found in "Attachment 5: Standardized Employment Status Questions and Recodes" (Census 1977) in the *Codebook Supplement*.

Either ESR or MLR is available for all survey years. Information on creation inconsistencies can be found in the User Notes section below.

Table 4.23.1 Employment Status Recode/Monthly Labor Recode Creation

Ten Employment-Related Questions Used to Create ESR/MLR		
Major activity	Whether absent from job	Reason could not take job (availability for work)
Whether worked last week	Why absent from job	Occupation
Hours worked	Whether looking for work	Class of worker
	What doing to find work	

	ESR/MLR - 1 WORKING	ESR/MLR - 2 WITH A JOB, NOT AT WORK	ESR/MLR - 3 UNEMPLOYED (LOOKING FOR WORK)
Positive indicators	1. Working last week 2. 15+ hours worked 3. Class of worker entry other than "never worked" 4. 1–14 hours worked combined with class of worker entry other than "without pay"	1. Absent from job or business 2. Class of worker entry other than "without pay" or "never worked" 3. Reason for absence from work other than "layoff" or "new job to begin in 30 days"	1. Absent from job or business 2. Reason for absence is "layoff" or "new job to begin in 30 days" 3. Looking for work 4. Any entry in class of worker (including "never worked" and "without pay") 5. Method of looking for work entered other than "nothing"
Negative indicators	1. 1–14 hours worked combined with class of worker = "without pay"	1. Reason for absence from work is "layoff" or "new job to begin in 30 days" 2. Working last week 3. Any hours worked 4. Class of worker is "without pay"	1. Method of looking for work is "nothing" 2. Not available for work 3. Reason for absence from work is "other" (not "layoff" or "new job to begin in 30 days") 4. Working last week 5. Any hours worked

Source: Census Bureau. "Standardized Employment Status Questions and Recodes." Washington, DC: U.S. Department of Commerce, April 1977. This document is distributed by CHRR as "Attachment 5: Employment Status Recodes" and is an important source of information on exceptions to the general indicators listed above.

Related Variables: Information available on the employment status of household members is described in the "Household Composition" section of this guide.

Survey Instruments & Documentation: Questions on main survey week activity are located at the beginning of the "Current Labor Force Status" section of each questionnaire. Each year's *Interviewers' Reference Manual* provides detailed instructions for interviewers on how to code this section of the questionnaire in a manner consistent with CPS. Decision rules that guide Census in its creation of the ESR/MLR variables can be found in "Attachment 5: Standardized Employment Status Questions and Recodes" (Census 1977) in the *Codebook Supplement*.

User Notes: The various codes that categorize activities for those respondents not in the labor force vary across survey years and cohort. Table 4.23.2 presents the coded values by survey year for the ESR/MLR variables.

Table 4.23.2 Employment Status Recode/Monthly Labor Recode Codes

	68–77	78–82	83	85–88	91, 93	95–99
Working	1	1	1	1	1	1
With a Job, Not at Work	2	2	2	2	2	2
Unemployed	3	3	3	3	3	
Unemployed, Layoff						3
Unemployed, Looking						4
In School	4	4	4	4	4	
Keeping House	5	5	5	5	5	
Retired					7	5
Unable to Work	6	6	6	6	6	
Disabled						6
(Code Not Used)	7	7				
Other	8	8	7	8	8	7
Never Worked	0					
Noninterview	(Blank all years)					

While the "Current Labor Force Status" sections of NLS questionnaires follow the wording and format of those asked in the *CPS*, users should be aware that NLS CPS sections include additional questions over and above those found in the *CPS* surveys.

Classification of "unemployed" and "out of the labor force" for the telephone surveys in 1975, 1977, 1980, and 1982 is not absolutely consistent with CPS definitions due to the absence of one question, "What were you doing last week to find work?" Beginning in 1995, MLR replaced ESR to match changes in the *Current Population Survey;* the decision rules for MLR are slightly different. In this year, CHRR also began to create the status variable, which had previously been created by the Census Bureau.

Researchers examining employment over time can construct a loose approximation of ESR/MLR by using positive responses to the following three questions: (1) Did you do any work at all last week? (2) Did you have a job or business from which you were temporarily absent? and (3) Have you been looking for work? A respondent, for example, who is coded "other" on 'Activity Most of Survey Week' but has a job from which she was absent would be reclassified as "working."

Labor Force Status Tables

Tables 4.23.3, 4.23.4, and 4.23.5 depict labor force status as measured by Employment Status Recode and Monthly Labor Recode variables. Readers should note that these tables contain *unweighted* frequencies and should only be used as an aid in describing raw frequency counts in these data. They must not be used to make inferences about population data.

Table 4.23.3 Labor Force Status: Civilian Respondents 1968–99 (Unweighted)

		In the Labor Force			Out of the Labor Force				
Survey Year	Total Intv'd	Total	Employed	Unemp	Total	Retired	Unable to Work[1]	Other[2]	Not Intv'd
1968	5159	2460	2051	409	2699	–	2	2697	–
1969	4930	2564	2194	370	2366	–	9	2357	229
1970	4766	2656	2265	391	2110	–	18	2092	393
1971	4714	2718	2339	379	1996	–	20	1976	445
1972	4625	2747	2403	344	1878	–	20	1858	534
1973	4424	2685	2440	245	1739	–	24	1715	735
1975	4243	2679	2377	302	1564	–	29	1535	916
1977	4108	2678	2414	264	1430	–	26	1404	1051
1978	3902	2555	2359	196	1347	–	22	1325	1257
1980	3801	2627	2453	174	1174	–	29	1145	1358
1982	3650	2640	2419	221	1010	–	28	982	1509
1983	3547	2580	2373	207	967	–	25	942	1612
1985	3720	2810	2640	170	910	–	30	880	1439
1987	3639	2862	2715	147	777	–	29	748	1520
1988	3508	2781	2687	94	727	–	39	688	1651
1991	3400	2736	2645	91	664	2	61	601	1759
1993	3187	2605	2517	88	582	3	58	521	1972
1995	3019	2384	2330	54	635	25	117	493	2140
1997	3047	2443	2364	79	604	41	172	391	2112[3]
1999	2900	2253	2203	50	647	74	215	358	2259

Note: This table is based on R00726., R01356., R02200., R03263., R04100., R04944., R05436., R05850., R07012., R07529., R08001., R09428., R10563., R11052., R12234., R13612., R15716., R16813., R35764., and R43443.

1 "Disabled" in 1995 and subsequent surveys.

2 Depending on the survey year, "other" may include categories such as in school, keeping house, and never worked. Consult the codebook for information on specific categories available in a given year.

3 Includes two interviewed respondents for whom MLR data are unavailable.

Table 4.23.4 Labor Force Status: Non-black Civilian Respondents 1968–99 (Unweighted)

		In the Labor Force			Out of the Labor Force				
Survey Year	Total Intv'd	Total	Employed	Unemp	Total	Retired	Unable to work[1]	Other[2]	Not Intv'd
1968	3700	1796	1561	235	1904	–	1	1903	–
1969	3530	1857	1656	201	1673	–	5	1668	170
1970	3435	1937	1712	225	1498	–	9	1489	265
1971	3385	1949	1744	205	1436	–	8	1428	315
1972	3328	1982	1786	196	1346	–	9	1337	372
1973	3194	1913	1788	125	1281	–	9	1272	506
1975	3068	1902	1739	163	1166	–	11	1155	632
1977	2974	1879	1746	133	1095	–	11	1084	726
1978	2838	1818	1711	107	1020	–	7	1013	862
1980	2769	1854	1780	74	915	–	10	905	931
1982	2659	1892	1770	122	767	–	11	756	1041
1983	2585	1859	1746	113	726	–	11	715	1115
1985	2767	2070	1979	91	697	–	20	677	933
1987	2719	2137	2065	72	582	–	18	564	981
1988	2628	2092	2032	60	536	–	21	515	1072
1991	2552	2068	2014	54	484	2	32	450	1148
1993	2417	2003	1945	58	414	2	30	382	1283
1995	2268	1823	1785	38	445	18	55	372	1432
1997	2285	1881	1831	50	404	33	80	291	1415[3]
1999	2189	1750	1710	40	439	61	106	272	1511

Note: This table is based on R00032. (race), R00706., R00857., R01308., R01989., R02822., R03049., R03270., R04511., R04858., R05237., R06617., R08841., R09995., R12924., R16813., R35764., and R43443.

[1] "Disabled" in 1995 and subsequent surveys.

[2] Depending on the survey year, "other" may include categories such as in school, keeping house, and never worked. Consult the codebook for information on specific categories available in a given year.

[3] Includes two interviewed respondents for whom MLR data are unavailable.

Table 4.23.5 Labor Force Status: Black Civilian Respondents 1968–99 (Unweighted)

Survey Year	Total Intv'd	In the Labor Force			Out of the Labor Force				Not Intv'd
		Total	Employed	Unemp	Total	Retired	Unable to work[1]	Other[2]	
1968	1459	664	490	174	795	–	1	794	–
1969	1400	707	538	169	693	–	4	689	59
1970	1331	719	553	166	612	–	9	603	128
1971	1329	769	595	174	560	–	12	548	130
1972	1297	765	617	148	532	–	11	521	162
1973	1230	772	652	120	458	–	15	443	229
1975	1175	777	638	139	398	–	18	380	284
1977	1134	799	668	131	335	–	15	320	325
1978	1064	737	648	89	327	–	15	312	395
1980	1032	773	673	100	259	–	19	240	427
1982	991	748	649	99	243	–	17	226	468
1983	962	721	627	94	241	–	14	227	497
1985	953	740	661	79	213	–	10	203	506
1987	920	725	650	75	195	–	11	184	539
1988	880	689	655	34	191	–	18	173	579
1991	848	668	631	37	180	0	29	151	611
1993	770	602	572	30	168	1	28	139	689
1995	751	561	545	16	190	7	62	121	708
1997	762	562	533	29	200	8	92	100	697
1999	711	503	493	10	208	13	109	86	748

Note: This table is based on R00032. (race), R00706., R00857., R01308., R01989., R02822., R03049., R03270., R04511., R04858., R05237., R06617., R08841., R09995., R12924., R16813., R35764., and R43443.

[1] "Disabled" in 1995 and subsequent surveys.

[2] Depending on the survey year, "other" may include categories such as in school, keeping house, and never worked. Consult the codebook for information on specific categories available in a given year.

[3] Includes two interviewed respondents for whom MLR data are unavailable.

4.24 Marital Status & Marital Transitions

Marital Status: Questions on marital status have been asked of respondents in each survey year. In general, the resulting 'Marital Status' variable includes six coding categories: married—spouse present, married—spouse absent, widowed, divorced, separated, and never married. Revised marital status variables, created for several survey years, add a seventh category of spouse absent for unknown reason. Users are encouraged to use the revised variables. In some early survey years, another created marital status variable is available, 'Marital Status and Family Status,' which combines marital status with presence of children.

Marital Transitions: It is possible to construct a fairly comprehensive marital history using the Young Women data. The user should be aware, however, that very different questions are asked at different points in time. The following month and year variables are present in various years: (1) the date of first marriage; (2) the date of the most recent (latest or present) marriage; (3) the date of marriage to the current spouse; (4) the date of each change in marital status since a past interview; and (5) the date of becoming widowed, divorced, or separated. Other variables spanning various years include types of marital status changes and patterns of changes in marriage. Users are urged to examine the original questionnaires to determine wording, context, universe, and coding categories. In addition, while marital transition questions are asked periodically and cover previous dates, they were not asked annually in the early years of the survey. A series of marital status and transition variables is available for the following survey years: 1969, 1970, 1973, 1978, and 1982–99.

Note that in earlier years, marital status information was updated for all respondents, including noninterviews. Noninterviewed respondents were assigned the marital status reported at their previous interview. In later years, updates to the marital status variables were made for interviewed respondents only (regardless of year). The User Notes section below provides a more complete explanation. Finally, some marital information is missing, since respondents did not report on their marital history prior to 1969.

Created marital transition variables. The 1999 data release includes new created variables that trace a respondent's marital transitions reported during the years of the Young Women survey (1968–99). For each respondent, a series of variables indicates the start date (variable name STDATxx) and end date (ENDATxx), if applicable, of each marriage reported. These variables were created using the form YYMM. For example, if a woman was first married in October of 1965, she would have a value of 6510 for the STDAT01 variable. Missing codes for these created variables indicate that the respondent had never married (-999), that her first marriage never ended (-998), that her first marriage ended and no second marriage has been reported (-997), and so forth. If a woman reported her marital status as married but did not provide a marriage date, she is assigned a code of 0, meaning that the date is unreported. More information on the creation of these variables, and the rules used to accommodate missing data, is provided in Appendix 41 of the *Young Women Codebook Supplement*.

> ***User Notes:*** Users should carefully check coding category differences in marital status. In addition, there are many related variables such as marital status collected retrospectively for noninterview years and interviewer check items that use different categories than those described above. When marital transitions were updated from a midpoint of a previous year rather than from a previous interview, certain vital information may be missing. For instance, if a respondent was interviewed in 1980, was a noninterview in 1982, and then was interviewed again in 1983, her marital history was updated since a specified date in 1982 (not 1980). If she was married in 1980 but divorced and remarried before 1982, her marital status would be married for both 1980 and 1983, with no marital transitions recorded. Her husband, however, would be a different person with different characteristics than in 1980. It is imperative for researchers to examine the questionnaires to determine *exactly* what information is recorded, especially for those not interviewed in earlier years of the survey.

Questions for Widowed Respondents: In 1995–99, a special series of questions was addressed to Young Women who had been widowed since their last interview. Respondents first answered questions about their husband's needs during the last year of his life, including whether the respondent provided special nursing care for the husband, the number of hours per day such care was required, and how this affected the respondent's employment opportunities. Respondents also provided information about how medical costs were paid during this time.

The second part of this series focused on the respondent's financial situation after her husband's death. These questions determined the types and amounts of benefits or other assistance the widow had received in connection with her husband's death. Sources of income recorded include insurance, Social Security, pensions, and family members.

Users should note that if the respondent appeared to be too uncomfortable to answer these questions at any point in the series, interviewers could skip past the remaining questions at their discretion. In these cases, a code of –7 in the data indicates that the respondent was unable to answer.

Spouse/Partner Characteristics: Information on the respondent's spouse is available in all years; data are collected about the partners of respondents beginning with the 1983 survey. Spouse/partner data include health, income, education, weeks worked, and attitudes. The "Household Roster" is also a possible source of partner information. Although the list of possible relationships to the respondent on the "Household Roster" section of the questionnaire ("Household Record" variables) does not include "partner" in the early years, the revised relationship codes of later years do include this category.

In addition to this basic background information, beginning in 1993 the survey collected detailed information on the work experiences of the respondent's husband. The same questions have been asked regarding the respondent's partner since 1995. In questionnaire sections such as "Husband's Work History" and "Husband's Employer Supplement," the respondent reports on the husband's/partner's current labor force status; occupation, industry, and class of worker at current or most recent job; start and stop dates of employment; rate of pay; usual hours worked; and union membership. Similar information is then recorded for other jobs held since the last interview. Additionally, the respondent describes the husband's or partner's job search activity in the past month and weeks of unemployment since the last interview/in the last year. Finally, the interview addresses retirement issues by asking the respondent whether her husband/partner was covered by Social Security (1993 only); what his or her plans and expectations are for retirement; and what types of pension coverage are available from current and past employers.

Survey Instruments & Documentation: Current marital status of the respondent is generally transcribed from the updated *Household Record Cards* to page one of the questionnaire or to the *Information Sheet.* In some survey years, however, current marital status is collected in other sections of the questionnaire, such as "Health" or "Work Attitudes." Marital transition information for the respondent is collected in the "Marital History," "Family Members," "Family Background," or "Marital Status" questionnaire sections. The derivations of the revised versions of marital status come from consistency checks and hand-edits and result in revised household information (see Attachment 3 in the *Codebook Supplement*). The derivation for the 'Pattern of Marital Status 68–73' variables, a series of created variables, is listed in Appendix 20 of the *Young Women Codebook Supplement.*

4.25 Occupations & Occupational Prestige Indices

This section reviews (1) the occupational classification coding systems used by the Census Bureau to classify occupations of NLS respondents and other household members and (2) the occupational prestige scoring systems assigned to 1960 Census occupations. Data on the occupation(s) that respondents were seeking or in which they were employed or received training have been collected during most survey years. In addition, select surveys have collected information on the occupation of intervening and dual jobs.

Coding by occupation has been based on an open-ended question (e.g., "What kind of work [are/were] you doing?"). Follow-up questions fielded during some survey years elicit more specific information on job duties and job titles. Interviewers enter verbatim responses from the respondent into the questionnaire; Census personnel then code the responses using the 1960, 1980, and/or 1990 *Census Bureau Alphabetical Index of Occupations and Industries*. Table 4.25.1 shows which coding systems have been used in various survey years.

Table 4.25.1 Occupation Coding Systems Used by Survey Year

Coding System	1968–82	1983–87	1988, 1991	1993	1995–99
1960 Codes	*	*	*	*	
1980 Codes-current/last job only		*			
1980 Codes-current/last job and dual job only			*		
1980 Codes-all jobs				*	*
1990 Codes-all jobs				*	*

A series of edited variables (O & I Rewrite) provides three-digit and one-digit occupational codes for the current or last job reported by the respondent. The universe for these variables is all respondents interviewed in a given survey year for whom occupational data were collected. The User Notes in the "Industries" section of this guide provide additional information on the editing and creation procedures utilized for certain occupation variables. This series ended in 1993 because the 1960 codes no longer matched the industrial structure of the United States.

Background information on the development of the 1960 and 1980 classification systems and the relationships between the 1960 and 1970 and the 1970 and 1980 coding categories is available within various Census publications (Census 1972, 1989).

Occupational prestige indices. The following occupational prestige scores are provided for select variables:

(1) Duncan Index: All three-digit 1960 Census occupational categories have been assigned a two-digit ordinal prestige score based upon the education and income distributions of the occupation. 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).

(2) Bose Index: This ordinal measure of the prestige of an occupation was developed from responses of a sample of 197 white households in the Baltimore metropolitan area to questions about the prestige of 110 selected occupations. The rankings within each occupation were averaged and the mean values transformed to a metric with values 0 to 100 (Bose 1973). The latter scores were regressed on the 1959 median earnings and 1960 median years of school completed of the civilian experienced labor force employed in these occupations (Census 1960). The resultant equation was then used to estimate the mean prestige scores for occupations of the Young Women.

GED and SVP scores. The 1968, 1971, and 1973 surveys of the Young Women include created variables providing two special occupational scores: a General Education Development (GED) score and a Specific Vocational Preparation (SVP) score (Department of Labor 1965, Appendix B).

(1) GED score: A representation of the amount of general education or life experience needed to perform a given job, this score includes three factors: reasoning development, mathematical development, and language development. Each of these factors is divided into six levels, with one representing the least amount of education and six the most. The first number in the 3-digit GED score represents the level of reasoning required for the job, the second number is the level of mathematical achievement, and the last number indicates language requirements.

(2) SVP score: This score considers the opposite proposition: that some amount of time is required to learn to perform a specific occupation at an average level of competence. This single-digit score ranges from 1 to 9, with 1 meaning that the job only requires a short demonstration, 2 indicating that the job requires up to 30 days of training and experience, and so on up to 9, which means that the job requires more than 10 years of specific learning and experience before it can be performed at an acceptable level.

Related Variables: Information on the occupations of family or household members is available in many survey years; see the "Household Composition" section of this guide for more information.

Survey Instruments & Documentation: Questions on occupations are found within the "Current Labor Force Status," "Work History," and "Retirement and Pension" sections of the questionnaires; occupations of household members have been collected as part of the "Family Background" or "Household Members" sections. Attachment 2 of the *Codebook Supplement* provides the 1960, 1980, and 1990 *Census of Population* industry and occupational classification codes and the accompanying Duncan Index. Attachment 4 lists the Bose Index scores for select 1960 occupations. Appendix 22 in the *Codebook Supplement* provides the GED and SVP scores for the various occupations.

User Notes: Variable titles for occupations listed within the various NLS documentation items do not always specify the Census coding system utilized. *If no year is listed, users should assume that the 1960 classification was used for coding.* Appendix E in Bose (1985) presents additional Bose scores for the 1970 and 1980 as well as 1960 Census occupations.

The series of edited occupational variables (O & I Rewrite) can be differentiated from the direct questionnaire item 'Occupation of Current or Last Job' variables by the absence of a question number in the source field or by the word "collapsed" appended to the titles of these edited variables. See the Occupation & Industry Rewrite discussion in the "Industries" section of this guide for additional information. This series ended in 1993 because the 1960 codes were outdated.

In the questionnaires and Census versions of the data files provided to CHRR, the responses to some employment-related questions were coded in such a way as to require reference to another question's response. Relevant notations are present within the codebook. The user should also be aware that "job" changes are tracked with ambiguity as to whether they are an occupation change, employer change, or both.

References

Bose, Christine E. *Jobs and Gender: Sex and Occupational Prestige*. Baltimore: The Johns Hopkins University Center for Metropolitan Planning and Research, 1973.

Bose, Christine E. *Jobs and Gender: Sex and Occupational Prestige.* New York: Praeger Publishing, 1985.

Census Bureau. *1960 Census of Population Alphabetical Index of Occupations and Industries (Revised Edition)*. Washington, DC: U.S. Government Printing Office, 1960.

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.

Census Bureau. *1980 Census of Population Classified Index of Industries and Occupations*. Washington, DC: U.S. Government Printing Office, 1980.

Census Bureau. *Census of Population and Housing, 1990, Alphabetical Index of Industries and Occupations*. Washington, DC: U.S. Government Printing Office, 1990.

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.

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.

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.

Scoville, James G. *The Job Content of the U.S. Economy 1940-1970.* New York: McGraw-Hill, 1969.

U.S. Department of Labor. "Dictionary of Occupational Titles (Fourth Edition)." Washington, DC: U.S. Government Printing Office, 1977.

4.26 Pension Benefits & Pension Plans

This section reviews the pension coverage information from recent surveys and the pension plan data collections. For details on income from Social Security/Railroad Retirement or disability insurance, see the "Social Security & Disability" section of this guide.

Pension Benefits

The 1993–99 surveys collected information about pension benefits received as income by the respondent and her husband or partner. Pension sources included a personal plan (e.g., IRA/401k), a private employer, the military, the federal government, a state or local government, a union, or another source.

Pension Plans

The 1991–99 interviews included the collection of extensive information on employer pension plans for which the respondent and her spouse were eligible and participating.

1991 survey. The 1991 survey included questions on actual pension coverage and vesting rights of those respondents who indicated, during administration of the fringe benefit series, that a retirement pension program was available from their current or last employer. Respondents enrolled in an employer's pension program were asked for information on (1) the method used to determine their benefit amount, i.e., a defined benefit formula based on years of service/salary, the amount accumulated in their pension account, or both, and (2) whether they had worked under the plan long enough to be vested or entitled to some pension benefits. Those not vested were asked for information on the number of additional years needed until such rights would be obtained, what would happen to the money accumulated in each retirement account should the respondent leave her job, the dollar amount in the account now, and the amount of money that would be received in a partial or full cash settlement.

1995–99 surveys. Information on employer-provided pension plans was collected in 1995–99. The respondent provided information about the eligibility of herself and her spouse for current pensions from current employers. Details were gathered on participation in both defined benefit and defined contribution pension plans offered by an employer. Data were collected from those participating in a defined benefit plan on the number of years included in the plan, the amount of money contributed, age at which full or reduced benefits would be/were being received, and expected/actual benefit amounts at retirement. For those with defined contribution plans, information included the type(s) of account plan (e.g., thrift or savings, 401k, 403b, Supplemental Retirement Account, profit sharing, stock purchase), amounts both the employer and respondent contributed, total dollar amount of contributions ever made, and how the dollars were invested. All respondents who provided pension plan information were asked whether an early retirement option with incentives had been offered and, if so, the type(s) (e.g., extra service credit, increased benefits, early benefits, lump sum settlement, etc.).

User Notes: Researchers should be aware of a shift in the way pension data were organized between 1995 and 1997. In 1995, the pension questions are included as part of the employer roster, so the pensions are organized by employer. This means that respondents report all pensions from employer #01, then all pensions from employer #02, and so on. The employer number (#01, #02, etc.) is included in the variable title. In 1997 and 1999, pension data are located in a separate roster, so that plans are organized in the order they were reported by the respondent. The variable titles include only "PN #01," "PN #02," "PN #03," etc., for the first plan reported, second plan reported, and so on, regardless of which employer that plan is associated with. A set of ID variables then permits researchers to link the plans with the appropriate employer.

The following example illustrates the implications of this change. Consider a respondent with four pensions, two from a current employer listed on line 2 in the employer roster, and two from a past employer listed on line 5 of the employer roster. In 1995, the respondent would start with question RSP-108-ARR-02 and answer questions about the first plan for employer #02. She would then return to the same question, now numbered RSP-208-ARR-02, and provide information bout the second plan with that employer. This pattern would repeat for plans three and four. In 1997, the respondent would answer a series of questions, beginning with RSP-102-ARR-01, about her first pension plan. She would next answer the same series of questions, now numbered RSP-102-ARR-02, about her second plan, and so on until all plans are reported. Researchers can then look at the R7PENS variables to determine which plan number a given plan is for a specific employer. Finally, researchers can use the R7EMPS variables to determine which employer matches with a given plan. Note that, in the example, the plans are listed by employer, but they would not necessarily be listed in that order.

Table 4.22.1 Pension Plan Rostering Systems

	1995		1997, 1999			
	Question name	Variable title	Question name	Variable title	Value of R7PENS	Value of R7EMPS
Pension 1	RSP-108-ARR-02	1st pension plan-job #02	RSP-102-ARR-01	PN #01	R7PENS-ROST1=1	R7EMPS-ROST1=2
Pension 2	RSP-208-ARR-02	2nd pension plan-job #02	RSP-102-ARR-02	PN #02	R7PENS-ROST2=2	R7EMPS-ROST2=2
Pension 3	RSP-108-ARR-05	1st pension plan-job #05	RSP-102-ARR-03	PN #03	R7PENS-ROST3=1	R7EMPS-ROST3=5
Pension 4	RSP-208-ARR-05	2nd pension plan-job #05	RSP-102-ARR-04	PN #04	R7PENS-ROST4=2	R7EMPS-ROST4=5
Meaning	108, 208, etc. indicate the 1st, 2nd, etc., plan from the same employer. ARR-## indicates the employer number on the employer roster.		ARR-## indicates the number of the plan on the pension roster. ROST# serves the same function in similar question names.		The value indicates whether this is the 1st, 2nd, etc. plan for a single employer.	The value indicates the number of the employer on the employer roster.

Related Variables: The "Geographic Mobility" section of the 1983 questionnaire collected information on the effect of the respondent's move to her current residence on (1) the job seniority rights of the respondent or spouse and (2) the retirement plans of the respondent or spouse. Coding categories delineated whether the respondent/spouse had lost some, none, or all seniority or pension/retirement rights or whether she or he had no such rights before the move. The fringe benefit series regularly includes "retirement pension program" as one of the benefits made available by a current or past employer. Availability should not be confused with actual coverage under a pension plan or receipt of pension benefits.

Survey Instruments: The "Income and Assets" section of the questionnaires contains the pension income questions. The "Current Labor Force Status and Work History" section of the 1991 questionnaire and the "Respondent Employer Supplement," "Husband Employer Supplement," and "Income and Assets" sections of the 1995–99 questionnaires contain the pension plan questions.

4.27 Public Assistance Support Sources

Data on public assistance income sources have been collected in each survey year except 1968; sources generally include public assistance/welfare, Aid to Families with Dependent Children (AFDC)/Temporary Assistance to Needy Families (TANF), food stamps, Supplemental Security Income (SSI), and public housing. Users should be aware that not only is there considerable variation across years in the types of public assistance income sources for which data were collected but also that universes (all family members, any family member, respondent and spouse, respondent only, spouse only), reporting periods (past calendar year, previous 12 months, most recent month), and question wording can differ substantially from year to year. Table 4.27.1 presents these variations.

Beginning in 1978, data were collected on the number of months in the past year the respondent or husband/partner received each type of assistance. In 1978, 1983, and 1988–99, respondents also reported the monthly average welfare (AFDC) income and monthly average SSI income they received.

Related Variables: From 1968 to 1973, two variables were constructed in each survey year: the percent of eligible welfare (AFDC) recipients in the respondent's state of residence who were receiving welfare and the average monthly welfare (AFDC) payment for the respondent's state of residence.

Survey Instruments: The "Assets and Income" or "Income" sections of the questionnaires contain the questions on public assistance income sources.

User Notes: NLS surveys also collect data on Unemployment Insurance, Workers' Compensation, Disability, and Social Security; none of these sources of income are considered here as part of "public assistance." The "Social Security & Disability" section of this guide describes some of these additional income sources.

Table 4.27.1 Public Assistance Questions by Survey Year, Type of Assistance, Reference Period & Universe

Survey Year	Type of Assistance					Reference Period	Universe
	AFDC/TANF	Welfare / Public Asst.	Food Stamps	SSI / Public Assistance	Public Housing		
1969	–	R01134.	–	–	–	Past Calendar Year	Family Members
1970	–	R01932.	–	–	–	Previous 12 Months	Family Members
1971	–	R03088.	–	–	–	Previous 12 Months	Family Members
1972	–	R03926.	–	–	–	Previous 12 Months	Family Members
1973	–	R04752.	–	–	–	Previous 12 Months	Family Members
1975	–	R05334.	–	–	–	Previous 12 Months	Family Members
1977	–	R05835.	R05836.	–	–	Previous 12 Months	R/Family Members
1978	R06752.	–	R06748.	R06755.	–	Previous 12 Months	R/Husband
1980	–	R07485.	R07482.	–	–	Previous 12 Months	R/Husband
1982	–	R07956.	R07953.	–	–	Previous 12 Months	R/Husband
1983	R09079.	–	R09076.	R09082.	–	Previous 12 Months	R/Husband/Partner
1985	–	R10482.	R10479.	–	–	Previous 12 Months	R/Husband/Partner
1987	–	R10943.	R10940.	–	–	Previous 12 Months	R/Husband/Partner
1988	R12021.	–	R12018.	R12024.	–	Previous 12 Months	R/Husband/Partner
1991	R13344.	–	R13341.	R13347.	–	Previous 12 Months	R/Husband/Partner
1993	R15155.	–	R15152.	R15158.	–	Previous 12 Months	R/Husband/Partner
1995	R33968.–R33970.	–	R33965.–R33967.	R33971.–R33973.	R33822.	Previous 12 Months	R/Husband/Partner
1997	R41618.–R41620.	–	R41615.–R41617.	R41621.–R41623.	R41472.	Previous 12 Months	R/Husband/Partner
1999	R51207.–R51209.	–	R51204.–R51206.	R51210.–R51212.	R51054.	Previous 12 Months	R/Husband/Partner

4.28 Race, Ethnicity & Nationality

Race: One race variable (R00032.) is available for each respondent. 'Race' is a three-category variable ("black," "white," and "other") available only for the respondent and, in general, is derived from the household screening. According to the *Current Population Survey Interviewer's Reference Manual* (Census 1962) in use at the time of the screening, race was to be determined by interviewer observation. Interviewers were instructed to code Mexicans, Puerto Ricans, and other Latin Americans as "white" unless they were obviously of another race and were to include respondents of Japanese, Chinese, American Indian, Korean, Hindu, Eskimo, etc., heritage in the "other" category. At the time of the first survey, race information for each respondent was manually transferred to the questionnaire from data entered on the *Household Record Cards* during the 1966 household screening. (Only in the case of the creation of a new household, where a respondent had moved out of the household in which she was living at the time of the screening, would the interviewer fill out a new *Household Record Card*, in which case all household member information would be newly recorded.) Table 4.28.1 presents a distribution of race by nationality.

User Notes: Self-reported race questions provide very different answers than race determined by the interviewer. Because of this difference, most national surveys now ask the respondent to classify their own race.

Table 4.28.1 Number of Respondents by Race and Nationality

Nationality	Total	White	Black	Other
Total	5159	3638	1459	62
U.S. or Canada[1]	3856	2427	1413	16
North or West Europe	483	479	2	2
Central or East Europe	274	273	0	1
South Europe	232	225	3	4
Latin America	118	109	5	4
Other	65	23	11	31
NA	131	102	25	4

Note: This table is based on R00032. and R00786.
[1] The U.S. and Canada category appears overrepresented because nationality was based on birthplace of parents and grandparents (i.e., this category includes all respondents whose parents and grandparents were born in the U.S. or Canada).

Nationality/Ethnicity: The variable 'Nationality of R' (R00786.), created in 1968, is available for each respondent. The nationality of respondents was derived from the first parent or grandparent born outside of the U.S. and Canada using the following decision rules: if the father was born outside of the U.S. and Canada, his nationality was assigned to the respondent; if he was born inside the U.S. and

Canada but the respondent's mother was not, her nationality was assigned; and so forth. Categories include U.S. or Canada, North or West Europe, Central or East Europe, South Europe, Latin America, and other; there are no separate categories for Asian or African countries. Specific countries in each category are not listed in the codebook with the nationality variable but are included in Table 4.28.2.

Table 4.28.2 Country Codes for the Nationality Variables

Coding Category	Countries
North or West Europe	Austria, Belgium, Denmark, England, France, Germany, Iceland, Ireland (Eire), Luxembourg, Netherlands, Northern Ireland, Norway, Scotland, Sweden, Switzerland, Wales
Central or East Europe	Albania, Bulgaria, Czechoslovakia, Estonia, Finland, Hungary, Latvia, Lithuania, Poland, Romania, U.S.S.R., Yugoslavia
South Europe	Andorra, Azores, Gibraltar, Gozo, Greece, Italy, Liechtenstein, Malta, Monaco, Portugal, San Marino, Spain, Trieste, Vatican City
Latin America	Mexico, Central American countries, South American countries

A single question fielded in 1993 asked each respondent for information on her origin or descent. Thirty-one ethnicity coding categories (e.g., Chinese, Dutch, Mexican-American, Portuguese, etc.) were provided with instructions to "mark all that apply." This question was repeated in 1995, 1997, and 1999 for respondents who had not been interviewed during any previous survey in which it was included.

Survey Instruments & Documentation: Race was recorded on *Household Record Card* form LGT-1, used at the time of the 1966 screening and the initial interview, and was manually transferred to the first page of the 1968 questionnaire. Birthplace was recorded in the "Family Background" section of the 1968 questionnaire. The 1993 ethnicity question can be found in the "Marital History, Fertility, and Other Family Background" section; it is included in the "Other Family Background" section in 1995–99. The codebook contains information on the specific derivation of the nationality variable.

Reference

Census Bureau. "*Current Population Survey and Housing Vacancy Survey: Interviewer's Reference Manual*." Washington, DC: U.S. Department of Commerce, 1962.

4.29 Social Security & Disability

This section describes income from Social Security, Railroad Retirement, and disability programs such as Workers' Compensation. Refer to the "Pension Benefits & Pension Plans" section of this guide for information on income from pension plans.

Social Security/Railroad Retirement Payments: The 1983 and 1988–99 surveys collected information on whether income from Social Security/Railroad Retirement benefits had been received during the past 12 months. If income was received, the survey asked about the amounts received by either the respondent or her spouse. During other years, receipt of such income was incorporated within a residual "all other" income question. The 1991 and 1993 surveys included a question for respondents reporting a current or last job on whether she was covered by Social Security/Railroad Retirement on that job.

Social Security Disability/Other Disability Payments: In 1978, 1983, and 1988–99, the survey included questions on whether disability income had been received during the past 12 months. If the respondent or her spouse received income, the specific amount received from each of the following sources was collected: Social Security Disability, Veterans Compensation or pension, Workers' (previously Workman's) Compensation, or another disability program. In 1991, each respondent was asked whether she had ever received or applied for a pension or compensation for any existing disability; this series was updated in 1993–99. Questions asked during the 1968–82 surveys did not differentiate disability income from other income such as rental income, dividends, etc.

Survey Instruments: Users can find questions on income from and eligibility for Social Security and disability payments in the "Assets and Income" sections of the 1968–91, 1997, and 1999 questionnaires and the "Current Labor Force Status and Work History" sections of the 1991–95 questionnaires.

4.30 Training

Training questions have been fielded in each survey year. In 1968, respondents were asked a series of questions on their plans for more education or training. The survey also asked about past training, including whether they had ever been enrolled outside of regular schooling in a full-time (two weeks or more) company training course sponsored by an employer, in any other vocational training (such as typing, nursing, or cosmetology) other than on-the-job training, or in additional general courses (e.g., English, mathematics, science, or art) since they stopped attending full-time school.

For each training experience, information was gathered on the type of training (technical/professional, managerial, clerical, skilled manual, semi-skilled manual, other technical, or other training [including basic or general courses]); number of months and hours per week spent in the training; whether the program was completed and if not, the reason; and whether the skills acquired in the training program were used on the respondent's current/last job. Respondents also reported whether they had ever obtained a certificate needed to practice a profession or trade, the type of certificate (e.g., professional [teacher, nurse, etc.] or trade [beautician]), and whether the certificate was currently valid.

Two variables were created from these 1968 data. The first, '# of Years of Occupational Training Outside Regular School, 68,' summarizes the duration of time spent in training by number of programs in which the respondent had participated. The second is 'Type of Longest Occupational Training Program Taken in Past Year, 68.'

Surveys administered during 1969–78 updated the information collected in the initial survey year. For those respondents who had participated since the last interview in a training course or educational program of any kind, either on the job or elsewhere, data were gathered on the type of training, type of organization providing the training (e.g., business college/technical institute, company training school, correspondence school, regular school, and other [including federally funded MDTA or Title V programs]), duration and intensity, completion status, reason for engaging in additional training, and use of the training on the respondent's current/last job.

For those who had obtained a certificate since the last interview, updated information included type of certificate (i.e., professional or trade), occupational code, and whether the certificate was valid. The 1971, 1975, and 1978 questionnaires included only one certificate question; the 1972 survey provided retrospective information on certification back to February 1970. Beginning in 1977, the coding categories for the type of certificate included certificate, license, journeyman's card, or other.

Variations present during the 1969–78 fieldings included the following: (1) Beginning in 1972, regular school as a training provider was differentiated into high school, area vocational school, or community or junior college. (2) Regular 4-year college, university or graduate school; nursing school, hospital, or medical school/college; and government program or agency (federal, state, or local) were added to the training provider series in 1975. (3) During 1972, 1973, and 1978, questions were fielded on the respondent's plans to enroll in additional training or educational programs. (4) Finally, sales and service were added to the type of training categories beginning in 1978.

Beginning in 1980, the training section was restructured to include two series of questions, one dealing with on-the-job training (OJT) courses in which the respondent had participated since the last interview and the second on other training courses or educational programs other than OJT or college courses in which she had enrolled. The OJT series included questions on duration and intensity of the training and whether the respondent was still attending or had completed the program. Beginning with the 1985 survey, two additional OJT questions were regularly administered: (1) specification of the job for which the respondent was being trained and (2) the reason that the respondent decided to take on-the-job training.

The second training series for the 1980–99 surveys continued the core set of questions asked during the 1968–78 interviews. From 1980 to 1991, there was an additional regularly fielded question on whether the training program was part of an apprenticeship program. Beginning with the 1985 survey, three new questions on the respondent's other training were added that included the collection of information on (1) the kind of work for which the respondent was being trained; (2) whether the respondent's employer required the training; and (3) for those whose employer did not require the training, the reason for taking the training. A new provider type, community organization (e.g., church, temple, synagogue, YMCA, Red Cross, neighborhood association), was added in 1985 as a permanent coding category for the training provider series. Certification information, i.e., whether a certificate had been received as a result of this (other) training and if so, the type of certificate, continued to be collected during the 1980–88 interviews.

Beginning in 1983, respondents identified on the *Information Sheet* as having been enrolled in a training program at the time of last interview were asked for information on whether they had completed the training and the number of weeks they had been enrolled. These variables, 'Did R Complete Occupational Training Program Enrolled at Last Interview' and 'Duration of Occupational Training Program Enrolled at Last Interview,' are available for the 1983–99 survey years. The 1995–99 surveys included an additional question that asked whether the respondent's employer required the training. Table 4.30.1 presents by year and race the number of respondents participating in on-the-job and other vocational training programs since 1980. Because the universe of respondents asked these questions was different in 1999, that year is not included in the table.

Table 4.30.1 Numbers of Respondents Participating in Training Programs by Type of Training and Race: 1980–97

Year	On-the-Job Training			Other Vocational Training[1]		
	Total	Non-black	Black	Total	Non-black	Black
1980	589	450	139	416	334	82
1982	613	463	150	408	325	83
1983	807	632	175	465	367	98
1985	713	552	161	433	344	89
1987	754	593	161	419	343	76
1988	735	593	142	289	237	52
1991	933	734	199	400	335	65
1993	777	645	132	338	294	44
1995	780	619	161	290	244	46
1997	756	604	152	272	227	45

Note: This table is based on R00032. (race), R07505., R07509., R07977., R07981., R09304., R09308., R10529., R10536., R10988., R10996., R12165., R12172., R13478., R13486., R15219., R15230., R34786., R34795., R41948., and R41957.

[1] The 1980–91 surveys asked whether the other training program was part of an apprenticeship program. Small numbers of respondents reported participation in this type of training.

Related Variables: The 1968 "CPS" section included a question comparing the amount of skills required on the respondent's current job to those needed on the job held one year ago. The 1982 "CPS" section included a set of questions on the training methods used by the respondent to learn her current/last job; for those reporting more than one method, the most helpful method was specified. Coding categories included college courses, vocational school, company training, armed forces, apprenticeship, on-the-job training, promotion, relative/friend, informal training, etc.

Survey Instruments & Documentation: The "Education & Training" or "Education" sections of the questionnaires include the training questions. "Attachment 2: 1960 and 1980 Census Industrial & Occupational Classification Codes" in the *Codebook Supplement* provides the occupational codes used for the professional/trade certificate and the post-1983 on-the-job occupation and/or kind of work for which the respondent was being trained variables.

Reference

Shapiro, David and Carr, Timothy J. "Investments in Human Capital and the Earnings of Young Women." In *Years for Decision: A Longitudinal Study of the Educational, Labor Market and Family Experiences of Young Women 1968–1973.* Frank L. Mott, ed. R and D Monograph 24, vol. 4. Washington, DC: U.S. Government Printing Office, 1978.

4.31 Transfers

Many Americans have the responsibility of taking care of elderly parents or in-laws, while others are providing money to support their elderly parents. Additionally, many people help their children with education expenses, costs of weddings and new families, house purchases, child care, and so on. Recent surveys of the Mature and Young Women NLS cohorts have included questions about transfers of time and money to a respondent's parents and children.

Parents and Transfers

Prior to the 1993 survey, a limited amount of data was collected about parents or transfers. The 1968 survey started an occasional collection of information about the life status of the respondent's parents. In most surveys' "Income" sections, respondents are asked if they have received an inheritance and the inheritance's value. As part of the household chores series, the 1987 survey sought information on whether the respondent provided care to household members who were ill or disabled. Beginning with the 1991 survey, questions in the "Health" section determine whether the respondent regularly spends time helping or caring for household members who are chronically ill or disabled or for friends or relatives who do not reside in the respondent's household. Finally, in the "Current Labor Force Status" section of the questionnaires, respondents who are not working can state that they are caring for an ill family member. These sources, however, provided only a minimal picture of parents and transfers.

The "Parents and Transfers" section in the 1993 and 1997 surveys contained in-depth questions about parental health, marital status, income, housing, and transfers to and from the respondent. The section began with biographical and health information about the respondent's parents and in-laws, living and deceased. Information was then collected about the parents' residence, including whether the parent lived in a nursing home, and the distance the parent lived from the respondent. In 1997, if one or more of the respondent's or her husband's parents lived in the same household as the respondent, the survey asked whether the parent(s) contributed to the running of the household. During both surveys, respondents also provided information about the financial situation of their parents and in-laws by answering questions about parental income, the value of the parents' home (1993 only), and the net worth of the parents' assets. Residence and financial information was gathered for the surviving parents of the respondent as well as for her husband's parents; stepparents were included when married to a biological parent.

User Notes: The transfers questions referred to the mother and father identified by the respondent as the people who played the most important role in raising her. The parents could be biological, step-, or adoptive parents. The same selection criteria applied to her husband's parents.

In addition to this basic background information, the 1993 and 1997 surveys collected extensive data about transfers of time and money to the respondent's living parents and parents-in-law. The respondent first reported transfers to her father and his current wife, whether that was the respondent's mother or another person. If the respondent's parents were not currently married, she next reported transfers to her mother and her current husband. This process was repeated for the respondent's husband's father and his wife and finally, if applicable, for the husband's mother and her husband. Transfers were not reported separately for a married couple; for example, money given to a father and his wife was reported as one amount. In 1993, the Young Women answered similar questions about transfers of time and money from their parents as well, enabling researchers to examine transfers in both directions.

In 1997, questions about time transfers asked about two types of assistance: help with personal care (defined in the survey as help with dressing, eating, cutting hair, or any other care involving the body) and help with household chores and errands (activities such as house cleaning, yard work, cooking, house repairs, car repairs, shopping, and trips to doctors). Respondents first reported whether they had spent any time in the past 12 months helping each parent or couple with personal care and stated how many hours over the past 12 months they had spent helping each parent. The same questions were repeated for time spent helping with household chores or running errands. The 1993 survey combined both types of assistance into one question; it also asked about transfers of time received from the respondent's parents.

The 1997 Young Women survey then collected information about financial transfers to each parent or couple in the previous 12 months. Regarding loans, the first type of financial assistance, respondents stated whether they had made any loans, the value of the loan, and whether they expected the amount to be repaid. Respondents then reported the total value of gifts given in the past 12 months, if the gifts had a total value of at least $100. The last question about money transfers asked about the value of other financial support, such as paying bills or expenses without the expectation of being paid back. As with time transfers, the 1993 survey asked about all the financial transfers in one question, rather than breaking them into separate categories, but included questions about money received from the respondent's parents.

In 1997, the transfers section added new questions about whether deceased parents had a will and the amount of the estate. If the estate was not divided evenly among the surviving children, the respondent was asked to explain the reason.

User Notes: In 1997, the Mature Women survey included a special set of questions asked only of respondents who had a daughter in the Young Women cohort. These respondents provided information about transfers of time and money received from each daughter and her spouse. This information can be compared to the Young Woman's 1997 report of transfers provided to her mother. This reciprocal collection allows researchers to evaluate differences in perceptions about transfers and the quality of these data, using information from both sides of the transfer.

Survey Instruments: The parental transfer information was collected in the "Parents and Transfers" section of the 1993 and 1997 questionnaires.

Children and Transfers

To capture complementary information about intergenerational transfers in the opposite direction, the 1999 survey asked Young Women about transfers involving the respondent's children. Included in the data collection were biological, step-, and adopted children of both the respondent and her husband. This new section supplements the fertility data periodically collected since the 1960s.

The 1999 transfers section initially collected demographic data, including gender, age or date of birth, highest grade completed, and relationship to the respondent for all children not residing in the household (these data are in the household record for children residing in the household). Residence questions for children outside the household asked about the distance each child lived from the respondent, whether the child owned his or her home, and the home's value.

The rest of the transfers questions referred only to children age 19 or older and to children ages 14 to 18 who were married or had a child. If any of the respondent's children lived with her and met these universe requirements, a series of residence questions asked about the child's financial and time contributions to the household. If the respondent lived in her child's household, these questions asked her to report her financial and time contributions to the shared household. The respondent then answered questions about the assets and debts of each eligible child.

After collecting this preliminary information, the survey asked the respondent to report transfers of time and money to and from up to five children meeting the universe requirements described above. Included were separate questions regarding loans, gifts, and other financial assistance, as well as time transferred for child care, personal care, chores, and errands. These questions were very similar to the parental series described above, although additional categories of time transfers were included. If the respondent had more than five children, additional information was collected about the remaining children as a group. The selection of children for these questions is described in Figure 4.31.1.

Figure 4.31.1 Children Included in the Transfers Data Collection

	Total # of Children	# Inside the Household	# Outside the Household	Children Included in the Survey
Situation 1	5 or fewer	Any number	Any number	Each child asked about individually
Situation 2	6 or more	4 or fewer	Any number	Each child in HH asked about individually; children outside HH asked about as a group
Situation 3	6 or more	5 or more	4 or fewer	Children in HH asked about as a group; each child outside HH asked about individually
Situation 4	6 or more	All	None	All children asked about as a group
Situation 5	6 or more	None	All	All children asked about as a group
Situation 6	6 or more	5 or more	5 or more	All children in HH asked about as a group; all children outside HH asked about as a group

Respondents then provided information about their estates. If the respondent had a will, she first stated whether or not she would leave everything to her husband if she died before he did. She then stated whether any of her children would be the beneficiaries if her husband was not alive; if not, the respondent was asked to explain. If the estate would not be divided equally among the children, she was asked to give a reason.

User Notes: The 1999 Young Women survey included a special set of questions for respondents who had a mother in the Mature Women cohort. These Young Women described transfers of time and money to and from their mothers and reported the amount of their mothers' assets and debts. Like the similar series of 1997 questions addressed to Mature Women with daughters in the Young Women cohort, this reciprocal collection of data provides researchers with an opportunity to assess the quality of the 1999 transfers data.

Survey Instruments: The child transfer information was collected in the "Intra-Family Transfers" section of the 1999 questionnaire.

Table 4.31.1 provides basic information about the number of respondents in the universe for each major topic in the 1997 and 1999 transfers sections. These totals do not imply that all respondents answered every question on a given topic; they are shown to give researchers a general idea of the amount of data available.

Table 4.31.1 Universe Information for the 1997 and 1999 Transfers Sections

1997 Parents and Transfers Item	# of Resp.	1999 Children and Transfers Item	# of Resp.
Total respondents interviewed	3049	Total respondents interviewed	2900
Number of respondents:		Number of respondents:	
With at least one living parent (R's or husband's)	2312	With at least one living child	2392
Providing time transfers to any parent	1049	Providing time transfers to any child	747
Providing financial transfers to any parent	1083	Providing financial transfers to any child	1483
Providing any transfer to any parent	1521	Providing any transfer to any child	1586
		Receiving time transfers from any child	884
		Receiving financial transfers from any child	1263
		Receiving any transfer from any child	1481
Answering questions on estate of father or mother	1672	Answering questions on own estate	1024

Note: The parental transfers information is based on R42031., R42032., R42044. R42045., R42066., R42067., R42079., R42080., R42138., R42141., R42144., R42147., R42149., R42167., R42170., R42173., R42176., R42178., R42196., R42199., R42202., R42205., R42207., R42224., R42227., R42230., R42233., R42235., R42091., and R42107. The child transfers information is based on a number of variables from the 1999 transfers section; researchers who need more information should contact NLS User Services.

4.32 Wages

This section overviews the rate of pay information collected for one or more jobs held by the respondent since the last interview (e.g., the current or last job, a second or dual job, or various intervening jobs). Data are also available for some survey years on reservation wages (i.e., the minimum wage required to accept a job by those not in the labor force) and on rates of pay associated with hypothetical job offers; these questions are described in the "Job Search" section of this guide. Related variables not discussed here include whether and under what conditions extra pay was received, how such overtime work was compensated, whether wages were set by a collective bargaining agreement, the hours or shift usually worked, and the respondent's preference for working different hours for different pay.

Rate of Pay: Earnings, periodicity, and usual hours worked per week data have been collected during each survey year for those respondents whose current or past job was in the private or governmental sector. From this information, a set of variables was created for all survey years except 1975 and 1977 based on a common hourly time unit, 'Hourly Rate of Pay at Current Job *KEY*' or 'Hourly Rate of Pay at Current or Past Job *KEY*.' Excluded from the 1968–88 universes of these variables were those respondents reporting earnings by "day" or "(an)other" time unit, self-employed respondents, and those working without pay in the family business or farm. In addition, the 1988 and 1991 surveys gathered information on the number of hours a respondent worked at home for her current/last employer. This "at home" series was expanded beginning in 1993 to include (1) confirmation that the hours worked at home had been included in the already-reported usual number of hours worked per week, (2) the number of hours worked at home for not only the current/last job but also for a dual job (and intervening jobs in 1995–99), and (3) the number of hours worked at home by those who owned their own business or who were working without pay during the survey week. In 1991 and 1993, modifications were made to the program generating these *KEY* variables; respondents reporting daily earnings are included and the separate time period information collected for those respondents working as teachers was factored in. In addition to earnings data for respondents' current or last job, rates of pay were collected for multiple intervening jobs during post-1969 personal surveys and for dual jobs during post-1971 personal interviews.

Survey Instruments & Documentation: Rate of pay information was collected in the "Current Labor Force Status," "Current Labor Force Status and Work History," "Work Experience and Attitudes," "Employment," "Work Attitudes," "Retrospective Work History," or "Respondent's Employer Supplement" sections of the questionnaires. Derivations for most created hourly rate of pay variables are presented within the Young Women *Codebook Supplement*.

User Notes: Derivations for select hourly rate of pay variables contain statements that set values above and below designated extreme values to "NA." This truncation is not consistently applied across survey years; for example, the *KEY* pay variables for the Young Women are truncated for only the 1968–73 and 1978 survey years. Derivations for certain created rate of pay variables do not appear within the public codebook or *Codebook Supplement*; users needing this information should contact NLS User Services. "At home" work hours are incorporated within the creation procedures for the hourly rate of pay *KEY* variables beginning with post-1991 releases.

References

Bureau of Labor Statistics. *Work & Family: Changes in Wages and Benefits Among Young Adults*. Report No. 849. Washington, DC: U.S. Department of Labor, July 1993.

Olsen, Randall J. "Labor Market Behavior of Women 30–44 in 1967 and Women 14–24 in 1968: The National Longitudinal Surveys." Columbus, OH: CHRR, The Ohio State University, 1987.

4.33 Work Experience

Although the NLS has collected information on labor force behavior since its inception, only partial work histories can be constructed for respondents for certain survey years. The degree of completeness of the work history data varies by survey year.

For those wishing to measure labor force attachment over time, three approaches are available. One can examine (1) the amount of time in weeks that a respondent spent working, unemployed (looking for work), or out of the labor force; (2) the start and stop dates of each job a respondent has held (i.e., a continuous job history); or (3) the start and stop dates associated with each employer for whom a respondent worked (i.e., a continuous employer history).

In general, summary weeks data (i.e., information on the number of weeks working, weeks unemployed, and weeks out of the labor force) were collected during each interview for either the previous 12 months or the previous calendar year. The term "summary weeks data" refers to the respondent's answers (in weeks) to the following types of questions: "During the past 12 months, in how many different weeks did you do any work at all?" Respondents who worked 52 weeks were asked: "Did you lose any full weeks of work during the past 12 months because you were on layoff from a job or lost a job?" Respondents who worked less than 52 weeks were asked: "In any of the remaining weeks, were you looking for work or on layoff from a job?" Those responding "yes" were asked: "How many weeks?" Respondents who did not work during the past 12 months were asked if they had spent any time looking for work or on layoff and if they had, how many weeks. While placement and wording of the individual questions have varied, this core set of summary questions is always present in each interview.

Unfortunately, such data collection consistency did not occur in obtaining information to track all job and/or all employer changes. The gaps in information collected on weeks worked (see discussion below) are minor compared to the gaps in information on jobs held and employment spells. Due to the fact that personal and telephone interviews used different time reference periods, it is only possible to construct a complete job and/or employer record for the later years of the survey.

There are three different ways to construct a summary measure for number of weeks worked, seeking work, or out of the labor force. Users can examine the start and stop dates associated with each job, especially in the personal interview years, when the questionnaire included a detailed work history in a column format. (The titles for these variables can be found on the CD-ROM by searching for the words "Most Recent Job.") When the information about start and stop dates is combined, a fairly complete picture of total number of weeks in the labor force can be pieced together. This is the usual procedure that has been used at CHRR to create the *KEY* weeks variables. Users attempting to create number of weeks worked themselves instead of using the created *KEY* variables need to pay close attention to the skip patterns followed in the early survey years. Many check items send respondents to different parts of the questionnaire to respond to questions worded specifically for their particular situations. When constructing number of weeks worked, users should pay particular attention to the dates in the detailed work history section. During the early survey years, the Census Bureau truncated the date the respondent started the job to the preceding interview date if it started before then, so the actual starting date may not be available; in the later years, when an interviewer inadvertently went back before the date of the last interview and gathered information before that date, this information was sometimes left on the data file instead of being blanked out and eliminated.

Two alternatives to this time-consuming procedure of piecing the record together from start and stop dates include (1) use of information from the summary weeks questions present in the questionnaire for all years through 1993 or (2) a combination of data from (a) the *KEY* summary weeks variables for those years in which they were constructed and (b) information from the summary weeks questions for those years in which no *KEY* variable is available. The *KEY* variables (e.g., those variables with titles of '# of Weeks Worked [reference period] *KEY*,' '# of Weeks Unemployed [reference period] *KEY*,' and '# of Weeks OLF [reference period] *KEY*') were created for those survey years in which respondents were personally interviewed. Care should be taken to check that the number of cases on the summary weeks variables is reasonably close to the number of respondents interviewed (since all respondents should have a value on these variables). If this is not the case, the user needs to make sure that the desired information is not present in another part of the questionnaire or to adjust for the fact that in some years respondents who had not worked since the last interview are assigned to "NA" or missing instead of being assigned a "zero" for zero weeks of work, as one would expect.

Gaps in the reference periods for the summary week variables occur in the early 1970s when the project phased in an alternating personal and telephone interview pattern. The regularly fielded personal interviews conducted during the early survey years gave way to a 2-2-1 interview pattern (i.e., two telephone interviews occurring two years apart followed by a personal interview at the end of the five-year period). The intent of the telephone interview was to obtain a brief update of information on each respondent and to maintain sufficient contact such that the lengthier personal interview could be completed. Due to the fact that the reference period for the summary weeks questions within a telephone interview was the previous 12 months and that no interview was conducted the year before each telephone survey, gaps in the summary weeks record occurred.

The discussion below reviews the types of summary weeks information that are available from the questionnaire. Included is information on changes in the reference periods for which these data were collected. The weeks worked accounting is not completely accurate due to the slight over- or under-counting of weeks that occurs when a respondent is not interviewed exactly one year from the date of the last interview. If the respondent accurately answers the question on how many weeks in the last 12 months she worked and it has been 13 months since the last interview, the summary weeks variables would miss four weeks of employment status information. Census was asked in the early years to interview each respondent as close as possible to the date of the previous interview; the actual dates of interview can and should be checked.

The 1968 survey collected information from respondents not currently working on the specific year that they last worked. Responses were coded into the following categories: "never worked at all," "never worked two or more weeks," the (specific) month and year if the date was 1963 or later, or a residual category indicating that the last time worked was before 1963. The current or last job is that job held after January 1, 1963. All respondents were asked the summary weeks questions on number of weeks worked, weeks unemployed, and weeks out of the labor force for the previous calendar year (i.e., 1967). If the respondent was not enrolled in school or was working 35 hours or more a week, she was asked about the first job she had held for at least one month after she stopped attending school full-time.

In 1969, those respondents who were currently working or who had held a job since January 15, 1968, were asked about that job; summary weeks questions refer to the last 12-month period. Also, respondents were asked for information on any intervening job (or the longest intervening job, if more than one).

In 1970, the detailed work history column section asked respondents who were currently working or who had held a job since January 1, 1969, about that job (current or last) and about all other jobs. An expanded set of summary weeks questions is present, with a reference period of January 1, 1969.

The 1971 interview repeated the 1970 pattern, with the work history section referring to the date of the previous interview. The 1972 and 1973 surveys repeated the 1971 pattern. Except for respondents who were not interviewed in all years, fairly accurate total number of weeks worked, unemployed, or out of the labor force variables can be created for 1968–73.

The gaps in the summary weeks information began with the 1975 telephone interview. The current or last job questions refer back to the date of the last interview; the summary weeks questions only asked about the last 12 months. The 1977 telephone interview followed the 1975 pattern.

The 1978 personal interview collected data for respondents who had worked since the date of the 1977 interview (or January 3, 1977, if the respondent was not interviewed in 1977). The rest of the survey follows the 1970 pattern. Respondents were also asked for information about the longest job held since January 1973 and for the number of years, out of the past five, that they worked for at least 6 months.

The 1980 telephone interview referred to the date of the 1978 interview (or to January 2, 1978, if the respondent was not interviewed in 1978) for the current or last job and to the previous 12 months for the summary weeks questions. Item 19c obtained information on the number of weeks worked for the 12-month period previous to the last 12 months. Answer categories were "1" through "4" with "1" meaning that the respondent worked most of the year (46–52 weeks), "2" meaning that she had worked more than half a year (26–45 weeks), "3" meaning that she had worked less than half a year (1–25 weeks), and "4" meaning she had not worked at all. By using the midpoint and assigning zero weeks to those respondents who did not work at all, users can approximate the number of weeks worked, although one cannot distinguish between those unemployed and those out of the labor force. The 1982 telephone interview repeats the 1980 telephone pattern using the date of the last interview or January 2, 1980.

The 1983 personal interview collected data for those respondents who had worked since the date of the 1982 interview (or since January 1, 1982, if the respondent was not interviewed in 1982). Respondents were asked for information on their current or last job and on all other jobs held since 1982. The summary weeks questions were asked of all respondents; however, the pattern was slightly different from that used in 1978. If the *KEY* variables are not being used, the user will need to pick up the inputs from different places in the questionnaire in order to create one variable for all respondents.

The 1985 telephone interview referred to the date of the 1983 interview (or to January 2, 1983, if the respondent was not interviewed in 1983) for the current or last job and to the last 12 months for the regular summary weeks questions. The information obtained on weeks worked in the 12 month period prior to the previous 12 months is coded in actual weeks, rather than in a range as in 1980 and 1982. However, it is not possible to distinguish between those respondents who are unemployed and those out of the labor force for the intervening year (i.e., 1983 to 1984). The 1987 telephone interview repeated the 1985 pattern, using the date of the previous interview or January 2, 1985, as the reference point.

The 1988 personal interview collected data for those respondents who had worked since the date of the 1987 interview (or since January 1, 1987, if the respondent was not interviewed in 1987).

Respondents were asked for information on their current or last job and all employers (not jobs) for whom they had worked since the 1987 interview. The focus of the work history questions shifted from jobs to employers for whom the respondent had worked three or more consecutive months.

The 1991 interview was conducted in person rather than by telephone, due to the BLS decision to eliminate the 2-2-1 interview pattern and field a personal interview every other year. (The next personal interview was scheduled for 1990, but the survey was delayed a year due to the demands of the 1990 decennial census.) This interview asked respondents about their current or last job and about all employers (not jobs) for whom they had worked since the date of the 1988 interview (or the most recent interview if the respondent was not interviewed in 1988). Due to the fact that this change in the reference date back to the last interview coincided with changes in rules about dropping respondents after two years of noninterview, Census interviewed some respondents whose last interview took place in the mid-1980s. Certain respondents will consequently have work histories that go back past 1988. The summary weeks questions cover the three-year gap in one-year increments. The 1993 interview repeats the 1991 pattern, except that there is only a two-year gap.

The 1995–99 personal interviews asked respondents about the start and stop dates of their current/last job and any intervening jobs. These start and stop dates were used—in conjunction with their reason for not working—to create summary weeks variables.

Survey Instruments: The work experience data are collected in the "Work History," "Employment," "Work Experience," "On Jobs," or "Employer Supplement" questionnaire sections in various surveys.

Created Work History Variables

The 1999 data release includes a new set of week-by-week employment status variables for the CAPI interview years. Beginning with the first week of 1994 and continuing through the respondent's most recent interview date, a variable for each week indicates whether the respondent was working (coded "1") or not working (coded "0") that week. A summary variable for each year totals the number of weeks that the respondent worked. These variables can be located on the CD-ROM by searching for their question names as follows:

> NCV-WORK-xx-01 to NCV-WORK-xx-52 (working/not working each week of year 19xx)
> NCV-WORKxx (total weeks working in year 19xx)

Missing data are treated in the following manner: If the job start or end year is provided, an unknown or missing day is set to 15, and an unknown or missing month is set to 1 (January). Missing years are not imputed. If days provided are inconsistent for a given month (e.g., April 31), the day is reset to the closest consistent day (April 30). More information is available in Appendix 41 in the *Young Women Codebook Supplement*.

Descriptive Tables

The tables below present information on sample sizes by race and interview year for weeks worked and number of employers. For the purposes of these tables, the racial category "non-blacks" includes both whites and all other non-black races. Labels in the year columns refer to the survey year in which these data were collected, not to the reference period of the variable. "AVG WKS" means average number of weeks; "NO WORK" means the respondent reported no weeks of work; and "MISSING" means the respondent is a noninterview or an invalid skip for that particular survey year.

Table 4.33.1 reports the average number of weeks worked for individuals interviewed at each survey point. In Table 4.33.2, this information is broken down by the number of survey years the respondent reported a positive number of weeks worked. Table 4.33.3 gives the average number of weeks worked for each survey. Finally, Table 4.33.4 provides the average number of employers the respondents reported for each survey period.

A number of decisions were made during the construction of these tables. The tables are not weighted and should not be used to make inferences about populations. The universe for the first two tables is all respondents who were interviewed in all years. Years in which the *KEY* or summary week variables were found to have an upper range greater than 52 were truncated to 52. In those years that a *KEY* variable covers a two-year period, the total number of weeks was divided by two.

The weeks tables do not take into account whether or not the respondent was really in the labor force; if a respondent was interviewed and did not report any weeks worked, she was assigned a "zero" even if, for example, she was permanently handicapped and would not have been in the labor force under normal conditions. The number of respondents in the "NO WORK" categories in the third and fourth tables are similar although not identical. There was no attempt to eliminate respondents who did not have information available for both weeks and employers.

The last table presents information on the number of employers reported each survey year; however, the reference period varies across survey years (i.e., "survey year" could refer to the last twelve months, or to a period since the last interview that was one, two, three, or more years ago). Examining information on the total number of employers across time is difficult and time-consuming. Although it is possible to find information for most detailed work history years on the same and different employers within the survey period, the main linkage across years is the one for the current employer in the "CPS" section. In other words, it is not possible in the early survey years to know that the intervening employer in the second column of the detailed work history section is the same employer as that entered two years later in the third column of the work history without making a number of assumptions based on matching the job and/or employer characteristics. In later survey years, it is possible to link an employer in a work history column to the employer at the time of the last interview. However, use of this extra information was beyond the scope of these tabular presentations.

Table 4.33.1 Average Number of Weeks Worked in All Survey Years by Race (Unweighted): 1968–99

Race	Number of Cases	Average Weeks[1]
Non-black	1533	33.0
Black	379	32.2
Total	1912	32.8

Universe: Individuals who have been interviewed in all survey years (1968–99).
Note: This table is based on R00032. (race), R00734., R01036., R01366., R02210., R03297., R04118., R04980., R05253., R05559., R07033., R07240., R07649., R09447., R09573., R10759., R12300., R13618., R15792., R25502., R36368., and R44385.
[1] Zeros are included in calculating averages.

Table 4.33.2 Average Number of Weeks Worked by the Number of Years Reported Working and Race (Unweighted): 1968–99

# Years Reported Work	Non-black		Black		Total	
	# of Cases	Average Weeks[1]	# of Cases	Average Weeks[1]	# of Cases	Average Weeks[1]
0	11	–	8	–	19	–
1–5	42	31.3	16	17.2	58	27.4
6–10	169	36.2	43	31.3	212	35.2
11–15	412	40.3	81	39.0	493	40.1
16–19	899	44.5	231	44.2	1130	44.5

Universe: Individuals who have been interviewed in all survey years (1968–99).
Note: Reference numbers used for this table are the same as Table 4.33.1.
[1] Zeros are not included in calculating averages.

Table 4.33.3 Number of Weeks Worked by Survey Year and Race (Unweighted): 1968–99

	# of Respondents Working			Ave. # of Weeks Worked			# of Resp. Not Working			# of Respondents Missing		
Year	Total	Non-black	Black	Total	Non-black	Black	Total	Non-black	Black	Total	Non-black	Black
1968	3312	2398	914	32.0	33.2	28.9	1847	1302	545	–	–	–
1969	3355	2432	923	32.0	33.2	29.1	1618	1132	486	229	170	59
1970	3333	2444	889	33.9	34.6	31.7	1433	991	442	393	265	128
1971	3202	2345	857	34.3	35.1	32.1	1512	1040	472	445	315	130
1972	3134	2286	848	34.8	35.5	33.2	1491	1042	449	534	372	162
1973	3153	2284	869	36.3	36.9	34.6	1271	910	361	735	506	229
1975	3081	2209	872	39.0	39.1	38.8	1162	859	303	916	632	284
1977	2921	2095	826	40.4	40.5	40.2	1187	879	308	1051	726	325
1978	2704	1958	746	42.0	41.9	42.2	1198	880	318	1257	862	395
1980	2809	2040	769	41.8	41.5	42.5	992	729	263	1358	931	427
1982	2757	2006	751	43.3	43.0	44.3	893	653	240	1509	1041	468
1983	2387	1730	657	44.9	44.8	45.2	1160	855	305	1612	1115	497
1985	2868	2157	711	44.8	44.6	45.4	852	610	242	1439	933	506
1987	2918	2214	704	45.3	45.1	45.9	721	505	216	1520	981	539
1988	2900	2200	700	48.0	48.0	47.9	608	428	180	1651	1072	579
1991	2809	2124	685	44.6	44.6	44.7	591	428	163	1759	1148	611
1993	2645	2034	611	49.3	49.4	48.8	542	383	159	1972	1283	689
1995	2496	1903	593	43.4	43.3	43.5	523	365	158	2140	1432	708
1997	2497	1920	577	48.8	48.8	48.5	552	367	185	2110	1413	697
1999	2428	1883	545	50.1	50.0	50.2	472	306	166	2259	1511	748

Note: Reference numbers used for this table are the same as Table 4.33.1.

Table 4.33.4 Average Number of Employers per Survey Period by Race (Unweighted): 1968–99

	# of Respondents Working			Average # of Employers[1]			# of Resp. Not Working			# of Respondents Missing		
Year	Total	Non-black	Black	Total	Non-black	Black	Total	Non-black	Black	Total	Non-black	Black
1968	3265	2373	892	1.4	1.4	1.4	1894	1327	567	–	–	–
1969	3361	2446	915	1.8	1.8	1.7	1569	1084	485	229	170	59
1970	3424	2511	913	1.5	1.5	1.5	1342	924	418	393	265	128
1971	3413	2474	939	1.4	1.4	1.4	1301	911	390	445	315	130
1972	3347	2441	906	1.4	1.4	1.3	1278	887	391	534	372	162
1973	3228	2335	893	1.5	1.5	1.4	1196	859	337	735	506	229
1978	2835	2055	780	1.3	1.3	1.2	1067	783	284	1257	862	395
1983	2689	1961	728	1.2	1.2	1.1	858	624	234	1612	1115	497
1988	3052	2302	750	1.8	1.8	1.6	456	326	130	1651	1072	579
1991	3011	2274	737	1.5	1.6	1.4	389	278	111	1759	1148	611
1993	2759	2118	641	1.4	1.4	1.2	428	299	129	1972	1283	689
1995	2595	1974	621	1.4	1.4	1.3	424	294	130	2140	1432	708
1997	2572	1977	595	1.4	1.4	1.4	477	310	167	2110	1413	697
1999	2429	1884	545	1.4	1.4	1.3	471	305	166	2259	1511	748

[1] Averages reflect the sum of responses to class of worker on current/last job, class of worker on current/last dual job, and the class of worker on all intervening jobs. For 1995 and 1997, the following additional variables were used: R16014., R18199.–R18207., R34985., R36380., R36587., R36782., R36982., R37175., R37361., R37526., R37688., R37848., R37955., and R38035. In 1999, variables similar to those in 1997 were used (e.g., R44404., R44627., R44827.).

Appendices

Appendix A: Quick Reference Guide

This appendix summarizes some key pieces of information regarding this *User's Guide* and other documentation products for the Young Women, the NLS surveys, and the NLS CD-ROMs. It also provides answers to some common questions about the Young Women and tells users how to get additional help when necessary.

A.1 Guide to NLS Documentation

The *User's Guide* provides in-depth information about the Young Women data. Users requiring general information about the history, administration, or other cohorts of the NLS project should consult the following table for the most appropriate NLS document.

Table A.1 List of NLS Documentation

NLS Handbook	This comprehensive introduction to the NLS gives readers general information about all NLS cohorts and the main topics of investigation for each.
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	The complete set of survey instruments used with the cohort in each survey year allows researchers to view questions, supplemental information, and household interview forms.
Flowcharts	Schematic diagrams depict universe information and skip patterns for many survey instruments.
Codebook Supplements	Supplementary attachments and appendices contain variable creation, description, and coding information not present in the questionnaires.
Compact Disc User's Guides	These guides provide installation, usage, and maintenance instructions for the CD-ROMs.
NLS Web Homepage http://stats.bls.gov/nlshome.htm	This internet site offers an overview of the NLS programs.

With the exception of the bibliography and homepage, which are provided on-line, users may order any of the documents listed above by contacting NLS User Services. Contact information for NLS User Services is provided under "Additional Support" at the end of this appendix.

A.2 About the Young Women CD-ROM

The Young Women survey is a panel data collection—specifically, the same persons are interviewed year after year. Young Women respondents are often asked the same or similar questions in different surveys to gauge the change in behavior over time.

The database is organized by respondent. Information on each respondent is stored in a record. In each respondent-specific record, the variables are arranged in chronological sequence. Users are provided with data extraction software, called CHRRDBA, on each CD-ROM to search this large database and extract the specific variables needed.

Search Strategies

Variables can be selected for extraction either using a Search List (reference number or question number) or Search Index (year or any word in context). The following is a brief description 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—even when waves of data are added and the database is revised. The reference number is the equivalent of a unique variable name.

Question number: Each year, a separate survey instrument is used to collect data. A questionnaire item (or question number) refers to the location of a given variable in the printed or electronic questionnaire.

Any word: The database retrieval software allows the user to search for and select those variables whose titles contain any single word or combination of words.

Area of interest: Each variable is assigned to a topical area of interest. For example, questions on a respondent's health and medical insurance are grouped in the "Health" area of interest. Researchers should be aware that an individual question can be linked to only one area of interest, so questions that apply to a common research topic may appear in different areas of interest.

Year: The user can select a specific survey year and choose variables collected in that specific year.

Accessing the Data

This section briefly describes how to access the data from the Young Women CD-ROM. The reader should consult the *NLS Original Cohort Databases Compact Disc User's Guide* for more detailed information about the DOS-based database retrieval system.

Hardware Requirements. Minimum hardware requirements for using the CHRRDBA software to access the Young Women data are (1) an IBM compatible personal computer (PC), running MS-DOS, and (2) a CD-ROM drive connected to the PC.

Extract Instructions. Following is a simplified list of steps to retrieve data:

(1) Run the DOS Program. If accessing the data from the CD-ROM, double click on CHRRDBA.EXE from the file manager.
(2) Specify output file path.
(3) Select "Younger Women 14–24 in 1968."
(4) Specify a name for the Extract Specification File.
(5) Select data by either Search Index (word, year) or Search List (reference number, question number).
(6) Perform an extract. Produce a codebook and/or a SAS or SPSS format extract file.
(7) Exit the Menu (and software).

Extract Outcomes. Users can extract data for specific subsamples and in various formats. The following is an abbreviated list:

(1) Delimited or formatted ASCII files for SAS or SPSS
(2) DBASE formatted file
(3) Codebook of extracted variables
(4) Summary of extract
(5) Subsample data by user-specified equation

A.3 Glossary of NLS Survey Terms

Any word search. This CD-ROM search function allows users to select any word or words and to view all variables which contain those words in their titles.

Area of interest. Variables are grouped by common topical areas. The CD-ROM includes a search function so that users can view variables in an area of interest.

Bureau of Labor Statistics (BLS). This agency of the U.S. Department of Labor sponsors and oversees the National Longitudinal Surveys project.

Center for Human Resource Research (CHRR). A research unit at The Ohio State University, CHRR is responsible for the management of the Original Cohorts, documentation and dissemination of the data, and user services.

Children of the NLSY79. This survey group comprises all children born to female NLSY79 respondents. The group was first surveyed in 1986 and has been reinterviewed biennially. Since 1994, a separate survey has been administered to the children age 15 and older, referred to as the "Young Adults."

Codeblock. Information about each variable is presented in a consistent form called a codeblock. Most codeblocks provide users with the variable title, reference number, question number, survey year, coding information, and a frequency distribution.

Codebook. The codebook contains complete information about all the variables in a data set and is included electronically on the CD-ROM. It comprises a number of codeblocks presenting information about individual variables.

Computer-assisted personal interview (CAPI). These interviews, used since 1995 for both women's cohorts, are administered using a survey instrument on a laptop computer. CAPI allows for more complex questionnaire programming, bounded interviewing, and faster data dissemination than with PAPI interviews.

Household Record Card. This survey instrument was used during PAPI interviews to collect information about members of the respondent's household. During the interview, demographic information was transferred from the cards to the "Household Roster" section of the main questionnaire, so data from the *Household Record Cards* contain "Household Roster" as part of their variable titles.

Household Screener. This survey instrument was used in 1966 to identify respondents eligible for the Young Women cohort and the other Original Cohorts. It collected demographic information about all members of each surveyed household.

Mature Women cohort. This group of 5,083 respondents, ages 30–44 on March 31, 1967, was first interviewed in 1967 and has been surveyed 19 times through 1999. The Mature Women cohort is one of the four NLS Original Cohorts.

National Longitudinal Survey of Youth 1979 (NLSY79). This group of 12,686 male and female respondents was first interviewed in 1979 and has been reinterviewed 18 times through 2000. Respondents in this cohort were ages 14–21 as of December 31, 1978.

National Longitudinal Survey of Youth 1997 (NLSY97). Respondents ages 12–16 as of December 31, 1996, were selected for inclusion in the newest NLS cohort. The NLSY97 numbers 8,984 respondents, and three interviews have been conducted with the cohort to date.

Older Men cohort. This group of 5,020 respondents, ages 45–59 on March 31, 1966, was first interviewed in 1966 and subsequently surveyed 12 additional times before its discontinuation in 1990. The Older Men cohort is one of the four NLS Original Cohorts.

Original Cohorts. The four cohorts (Older Men, Mature Women, Young Men, and Young Women) selected during the 1966 household screening and first surveyed between 1966 and 1968.

Paper-and-pencil interview (PAPI). Traditional paper-and-pencil instruments were used with the Young Women's cohort for each survey through 1993.

Primary Sampling Unit (PSU). A Primary Sampling Unit consists of one or more Standard Metropolitan Statistical Areas (SMSAs), counties (or parishes in some states), parts of counties (parishes), or independent cities. PSUs were the basis for sampling Young Women respondents.

Reference number. A reference number is a unique identifying number beginning with "R," which is assigned to each variable in the data set. Reference numbers never change after they are assigned to the variables from an interview even as additional information is added to the data set from later surveys.

Young Men cohort. This group of 5,225 respondents, ages 14–24 on March 31, 1966, was first interviewed in 1966 and subsequently surveyed 11 additional times before its discontinuation in 1981. The Young Men cohort is one of the four NLS Original Cohorts.

Young Women cohort. This group of 5,159 respondents, ages 14–24 on December 31, 1967, was first interviewed in 1968 and has been surveyed 20 times through 1999. The Young Women cohort is one of the four NLS Original Cohorts.

A.4 How to Get Help

Sometimes users have questions about the Young Women 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 on 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 help includes the *NLS of Young Women User's Guide*, the *NLS Handbook*, the *NLS Original Cohort Databases Compact Disc User's Guide*, and assorted supplemental hard copy documentation (see Table A.1). The paper documentation contains the answers to most questions.

Frequently Asked Questions. Table A.2 provides answers to commonly asked questions about the Young Women data and accessing the 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

Table A.2 Frequently Asked Questions

Question	Answer
Is there a distinction between valid and invalid skips? What do the missing value codes mean?	In PAPI interview years (1967–92), there is no distinction between valid and invalid skips in the data. Noninterviews, valid skips, and invalid skips are lumped together as NAs (not applicable) in the codebook. If you wish to separate valid skips from invalid skips, you must design your own program by using the questionnaires and following the skip patterns. In the data, a code of -5 is used to represent NAs and a code of –2 indicates DKs (don't know). In CAPI interviews (1995–present), invalid skips are coded as -3, valid skips are coded as -4, and noninterviews are coded as -5. A code of -1 represents a refusal and -2 signifies a response of don't know. More information on the coding of missing responses is presented in section 3.3 of this guide.
Do the sampling weights correct for oversampling?	Yes, the first year weights correct for oversampling. The weights for each subsequent survey year correct for attrition and oversampling.
How can multiple respondent households be identified?	Use the "search any word" feature of the Search Engine to search for all occurrences of the words "identification" and "code." This search will result in a listing of variables which identify other members of the Young Women's cohort who are related to the respondent; it will also provide identification codes for members of other NLS Original Cohorts who are related to the respondent.
In trying to calculate actual work experience for each woman, how can missing years be accounted for?	A complete work history covering all time intervals between surveys for the Young Women cannot be constructed. Details about work experience coverage across survey years and potential gaps in coverage are provided in the "Work Experience" section of this guide.
How can an employer tenure variable be created?	Tenure with an employer can be constructed with information on start and stop dates of the current/last job and intervening jobs between surveys in conjunction with reports on weeks unemployed or out-of-the-labor force. Consult the "Work Experience" section of this guide for further details and possible limitations of the data.
Is there any interview that provides a geographic residence variable smaller than region?	No. This database does not contain a residence variable smaller than region. The regional distinction is South/non-South. However, the surveys through 1988 provide some general information about the respondent's residence (is it in an SMSA, local unemployment rate, etc.) and all surveys include an indicator of whether the respondent moved since the previous interview. For more information, refer to the "Geographic Residence & Environmental Characteristics" section of this guide.
Why is the 'Total Family Income' variable not available in all years?	'Total Family Income' is a KEY variable which is only created for survey years in which a personal interview is conducted. See Table 2.4.1 for a listing of the type of interview by survey year.

Appendix B: Original Cohort Dictionary of Key Words

On the original data tapes, the Young Women's data were searchable by "keyword"—that is, the user could select from a predetermined list of key common words in variable titles. Although this search option has been replaced by the any word search, the keywords remain in the variable titles. This list of keywords used for the Young Women's cohort is provided to help researchers focus their any word searches by employing common words included in variable titles for a given topic.

KEY
1st Job
2 or More
35
5 Years
6 or More Months
Absent
ADA
AFDC
Age
Age 14
Age 34
Age 35
Age 50
Alimony
Alternative Job
Answered
Apartment
Assets
Assistance
Attended
Attending
Attitude
Attitudes
Automobile
Benefits
Birth
Birthplace
Bonds
Books
Bose
Census Division
Certificate
Child
Child Care
Children
Class of Worker
Collective Bargaining
College
College Degree
College Survey
Colleges
Commitment to Work
Company Training
Comparative Job Status
Contact
Correctional Institution
Counseling
Counselors
Cultural Exposure
Current Job XX (For each survey 68–87)
Current or Last Dual Job
Current or Last Job XX (For each survey 68–87)
Current School
Curriculum
Days per Week
Debt
Dependents
Desire

Desired
Different Area
Diploma
Disability
Discrimination
Disliked Most
District Wide
Dual Job
Dual Jobs
Duncan
Duncan Index
Education
Educational
Employee Association
Employer
Employers
Employment
Employment Status
Employment Status Recode
Enrolled
Enrollment
Enrollment Status
Expected
Expelled
Expenditure per Pupil
Extra-Curricular
Faculty
Family
Family Member
Family Members
Farm
Father
Field of Study
Financial Aid
Financial Position
Food Stamps
Foreign Language
Full-Time
GED
GED Score
Goal
Grade Attended
Grade Attending
Grade Completed
Graduate
Graduated
Grandfather
Grandmother
Guidance
Head of Household
Health
Height
Helping
Helping Others
High School
High School Subject
Homework
Hourly
Hours
Hours per Day
Hours per Week
Hours Worked
House
Household
Household Chores
Household Record
Housework
Husband
Hypothetical Job Offer
Identification Code
Income
Index of Demand
Industry
Interfirm

Interruption
Interview Date
Interview Length
Interview Method
Interview Status
Intrafirm
IQ Category
IQ Score
IQ Test Name
Job
Job Characteristics
Job Satisfaction
Job Supervision
Jobs
Knowledge
Labor Force
Labor Force Status
Labor Market
Last Interview
Last Job
Last Year in High School
Layoff
Leisure
Liability
Library
Library Card
Liked Most
Limit
Limitations
Locate
Location
Longest Job
Loss of Current Job
Magazines
Marital Status
Market Value
Marriage
Marriages
Medical
Medical Insurance
Method of Finding
Method of Seeking
Mortgages
Most Recent College
Most Recent Job
Mother
Motivation
Move
Moved Backward
Mutual Funds
Nationality
Newspapers
Noninterview
Not Empld XX (For each survey 68–87)
Occupation
Occupation Desired
Occupational
OLF
OLF XX (For each survey 68–87)
On the Job
On the Job Training
Out of School
Overtime
Overtime Pay
Parents
Part-Time
Partner
Pension
Plan to Seek
Plans
Probation
Progressed
Promotion
Property

Public Assistance
Race
Rate of Pay
Reading Material
Real Estate
Religion
Rent
Residence
Responsibility
Restrictions
Retirement
Return to College
Return to High School
Return to School
Returned to School
Rotter Scale
Round Trip
Same Area
Sampling Weight
Savings
Savings Bonds
School Quality
School Survey
Seek
Seeking
Self-Employed
Separation
Services
Sex
Sibling
Siblings
SMSA
Social Security
Spell Not Working
Spells of Unemployment
SSI
Stocks
Study
Summer
Survey Week
Survey Week XX (For each survey 68–87)
Suspended
Teacher
Teachers
Tenure
Training
Transfer
Transportation
Travel
Tuition
Typing or Shorthand
Unemployed
Unemployed XX (For each survey 67–87)
Unemployment
Unemployment Compensation
Union
Vocational
Volunteer
Wages
Weeks in Labor Force
Weeks Not Working
Weeks OLF
Weeks Unemployed
Weeks Worked
Weight
Welfare
Wife
Women Working
Work Schedule

Appendix C: Unpacking Multiple Entries

Responses to multiple entry questions found in early years of the surveys of the four Original Cohorts were coded in a geometric progression format to conserve space on the tape. Variables such as 'Method of Seeking Employment,' 'Method of Finding Current or Last Job,' 'Type of Financial Aid Received,' 'Type of Child Care Arrangement,' and numerous health-related questions have been formatted in this way since the surveys began. Multiple entry items are identified by an asterisk under the source code box in the questionnaire and by a special detailed codeblock in the documentation. These responses need to be "unpacked" before they can be used in analysis. Although the example below pertains specifically to the Mature Women's cohort, it is applicable to the Young Women as well.

Example: Codes for the variable R03380., 'Fringe Benefits at Current Job 77,' range from 1 (the respondent reported only one such benefit, "medical insurance") to 259 (the respondent reported "medical insurance," "life insurance," and "paid sick leave") to 1023 (the respondent reported that she had access to all of the benefits listed). Although there are several different ways to sort out which respondent has positive answers on which components, this appendix provides one example in SAS and one example in SPSS.

Program 1: Unpacking Fringe Benefits Data in SAS

This SAS program unpacks fringe benefits from the variable "fringe." It creates 10 (dichotomous) dummy variables indicating the presence or absence of each of the 10 benefits. Each dummy is set to missing if fringe is missing (coded at -998 or -999). Note that the variables are created in reverse order from the codeblock, i.e., MEDICAL is code 1 on the tape and FRINGE10 in the program. The program statements listed below can be modified by the user to include the expanded set of fringe benefits available in later survey years as well as to unpack other multiple entry variables by extending the dummy, the counter, and the number of variables to agree with the total number of responses listed in the codeblock in the documentation.

```
data benefits;
infile 'D:\documents\requests\unpack.dat' lrecl=4;
input
 R0338000  4.;
  if R0338000 = -998 then R0338000 = .;
  if R0338000 = -999 then R0338000 = .;
label R0338000 = "FRINGE BNFTS CUR_JOB_77";
array fringe fringe01-fringe10;
do over fringe; if R0338000 ne . then fringe=0; end;
all=R0338000;
```

```
if all ge 512 then do; fringe10=1; all=all-512; end;
if all ge 256 then do; fringe09=1; all=all-256; end;
if all ge 128 then do; fringe08=1; all=all-128; end;
if all ge   64 then do; fringe07=1; all=all-  64; end;
if all ge   32 then do; fringe06=1; all=all-  32; end;
if all ge   16 then do; fringe05=1; all=all-  16; end;
if all ge     8 then do; fringe04=1; all=all-    8; end;
if all ge     4 then do; fringe03=1; all=all-    4; end;
if all ge     2 then do; fringe02=1; all=all-    2; end;
if all ge     1 then do; fringe01=1; all=all-    1; end;

label fringe01='medical,surgi';
label fringe02='life insuranc';
label fringe03='a retirement  ';
label fringe04='training/educ';
label fringe05='profit sharin';
label fringe06='stock options';
label fringe07='free….meals';
label fringe08='free…..mdse';
label fringe09='paid sick lea';
label fringe10='paid vacation';
run;
```

Program 2: Unpacking Fringe Benefits Data in SPSS

The SPSS program works in the same way as the SAS program. Users of this alternative package can follow this template.

```
/* UNPACKING 1981 YOUNG MEN FRINGE BENEFITS: SPSS/

compute FB1=0
variable labels FB1 ‘81 NONE’
compute FB2=0
variable labels FB2 ‘81 FLEX HRS’
compute FB3=0
variable labels FB3 ’81 PAID VACATION’
compute FB4=0
variable labels FB4 ’81 PD SICK’
compute FB5=0
variable labels FB5 ’81 FR MERCH’
compute FB6=0
variable labels FB6 ’81 FR MEALS’
compute FB7=0
variable labels FB7 ’81 STOCK’
compute FB8=0
variable labels FB8 ’81 PROFT’
compute FB9=0
variable labels FB9 ’81 TRED’
compute FB10=0
variable labels FB10 ’81 RETR’
compute FB11=0
variable labels FB11= ’81 LIFE’
compute FB12=0
variable labels FB12 ’81 HLTH’
```

```
compute FB81a=FB81
variable labels FB81a 'variable for none'

do if (2048 le FB81)
compute FB1=1
compute FB81=FB81-2048
else
compute FB1=-4
end if

do if (1024 le FB81)
compute FB2=1
compute FB81=FB81-1024
else
compute FB2=-4
end if

do if (512 le FB81)
compute FB3=1
compute FB81=FB81-512
else
compute FB=-4
end if

do if (256 le FB81)
compute FB4=1
compute FB81=FB81-256
else
compute FB4=-4
endif

do if (128 le FB81)
compute FB5=1
compute FB81=FB81-128
else
compute FB5=-4
end if

do if (64 le FB81)
compute FB6=1
compute FB81=FB81-64
else
compute FB6=-4
end if

do if (32 le FB81)
compute FB7=1
compute FB81=FB81-32
else compute FB7=-4
end if

do if (16 le FB81)
compute FB8=1
compute FB81=FB81-16
else
compute FB8=-4
end if

do if (8 le FB81)
compute FB9=1
compute FB81=FB81-8
else
compute FB9=-4
end if

do if (4 le FB81)
compute FB10=1
compute FB81=FB81-4
else
compute FB10=-4
end if

do if (2 le FB81)
compute FB11=1
compute FB81=FB81-2
else
compute FB11=-4
end if

do if (1 le FB81)
compute FB12=1
compute FB81=FB81-1
else
compute FB12=-4
end if
```

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