# National Longitudinal Surveys

U.S. Department of Labor
Bureau of Labor Statistics

# Mature Women User's Guide 2001

# NLS of Mature Women User's Guide

A Guide to the 1967–1999

National Longitudinal Survey of Mature 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 Mature Women cohort's current Principal Investigator, Randall Olsen.

Special thanks go to the other members of the documentation and archival teams: Linda Boyer, Tiffany Chase, Pat Rhoton, Cheryl Segrist, Evelyn Walker, and Jay Zagorsky.

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## 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 Mature 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 Young 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 Mature Women Cohort

Comprising 5,083 women ages 30–44 in 1967, the NLS of Mature 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 the employment patterns of women who were reentering the workforce and balancing the roles of homemaker, mother, and labor force participant.

In the three decades since the original survey, Mature 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, such as child care issues in the earlier years of the survey and extensive health, pension, and retirement data in more recent interviews. The newest section of the questionnaire asks about 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 early middle age through 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 Mature 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 | 1997/2000 | 3 | 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:

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This detailed guide is designed for researchers who are either working or planning to work with the National Longitudinal Survey of Mature 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 Mature Women

In 1967, 5,393 women ages 30 to 44 as of March 31, 1967, were designated to be interviewed for the Mature 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 5,083 (94.3 percent) of the designated women.

Including the first interview in 1967, the cohort has been interviewed 19 times. In the initial survey plan, respondents were to be interviewed yearly over a five-year period. However, due to cost considerations, it was decided to survey respondents biennially rather than annually. In order to permit a survey at the end of the five-year period, the respondents were interviewed in both 1971 and 1972. 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 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 1987, when the decision was made to conduct a personal interview every other year. In total, 12 of the 19 interviews were conducted in person, 6 were administered by telephone, and one was mailed to the respondents. 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 Mature 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 15; 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 highest grade attended or completed, attainment of a high school diploma or GED, type of high school curriculum, field of study at college, 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.

**Pension plan characteristic file.** Detailed pension plan characteristic information including identification of the type of plan, plan definitions, benefit formulas, and eligibility requirements has been collected. Characteristics of each plan, coded using a protocol developed by the *Survey of Consumer Finances*, are present on a separate data file; crosswalk variables enable researchers to link respondent-specific information with these plan-specific data.

**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 Mature 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 Mature 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 1967 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. Subsequent releases will be announced in *NLS News*, the quarterly NLS newsletter; users can also contact NLS User Services for more information.

In addition to the main file, detailed pension plan data for the Mature Women are contained as a separate file on the 1999 data release. The data include plan definitions, benefit formulas, and eligibility requirements for 815 pension plans under which respondents in the Mature Women cohort and/or their husbands reported coverage during the 1989 interview. These characteristics were gathered from employer descriptions of the various pension plans. This special file is described in more detail in the "Pension Benefits & Pension Plans" section of this guide.

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 Mature 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 Mature 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 Mature Women sample was designed to represent the civilian noninstitutionalized population of the United States ages 30–44 as of March 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 linking 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, 5,393 women ages 30-44 as of March 31, 1967, were designated to be interviewed for the Mature 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 1967, 5,083 (94.3 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. In order to permit a survey at the end of the five-year period, Mature Women respondents were interviewed in both 1971 and 1972. 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 biennial 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 1987 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; the scheduled 1991 Mature Women survey was conducted in 1992. The scheduled 1994 Mature Women survey was then delayed until the 1995 CAPI administration. 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] |
|---|---|---|---|---|---|
| 1967 | Personal | May–July | 5083 | 100.0% | 100.0% |
| 1968 | Mail | May–July | 4910 | 96.6 | 97.0 |
| 1969 | Personal | May–July | 4712 | 92.7 | 93.3 |
| 1971 | Personal | April–June | 4575 | 90.0 | 91.1 |
| 1972 | Personal | April–June | 4471 | 88.0 | 89.2 |
| 1974 | Telephone | April–June | 4322 | 85.0 | 86.8 |
| 1976 | Telephone | April–June | 4172 | 82.1 | 84.2 |
| 1977 | Personal | April–June | 3964 | 78.0 | 80.2 |
| 1979 | Telephone | April–June | 3812 | 75.0 | 77.7 |
| 1981 | Telephone | April–June | 3677 | 72.3 | 75.5 |
| 1982 | Personal | July–September | 3542 | 69.7 | 73.1 |
| 1984 | Telephone | April–June | 3422 | 67.3 | 71.3 |
| 1986 | Telephone | July–September | 3335 | 65.6 | 70.3 |
| 1987 | Personal | July–September | 3241 | 63.8 | 68.7 |
| 1989 | Personal | June–August | 3094 | 60.9 | 66.5 |
| 1992 | Personal | October–December | 2953 | 58.1 | 65.1 |
| 1995 | Personal | June–September | 2711 | 53.3 | 61.3 |
| 1997 | Personal | July–September | 2608 | 51.3 | 61.0 |
| 1999 | Personal | June–August | 2467 | 48.5 | 59.2 |

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, mail, 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 period since the 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 the 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, and noninstitutionalized.  (If a respondent had joined the Armed Forces, she would also have been excluded from interview during her enlistment, but no Mature Women respondents were members of the military during the survey period.)  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 1968, 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).  In 1982, Census ceased dropping individuals for these two reasons but did not attempt to reinterview those already dropped.  For example, a respondent who missed the 1979 and 1981 interviews, or any two consecutive interviews prior to that year, for a reason other than death or refusal would not be eligible to participate in 1982 or any subsequent year.  Similarly, a respondent who refused to participate in 1981 or any earlier survey would not be eligible in 1982 or any later survey.  However, respondents who refused to participate or missed their second consecutive interview in 1982 are retained in the sample and are eligible for all subsequent interviews, unless they have died or been institutionalized.  The User Notes after Table 2.6.2 describe how dropped respondents can be identified.

Table 2.6.1 below depicts reasons for exclusion from the eligible sample and the years each applied; Tables 2.6.3 and 2.6.4 later in this section present reasons for noninterview across survey years.

**Table 2.6.1 Reasons for Exclusion from the Eligible Sample**

| 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 | 1967–82. If interviewed in 1984, a respondent remained in the eligible sample for subsequent interviews. |
| Dropped due to two consecutive noninterviews for reasons other than refusal, death, or membership in the Armed Forces | 1971–82. If interviewed in 1984, a respondent remained in the eligible sample for subsequent interviews. |
| Congressional Refusal[1] | 1984–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 1968 to 1999 are: R00856., R00884., R01338., R02053., R02883., R03084., R03295., R04555., R04912., R05284., R06664.10, R07215.10, R07833.10, R08878.10, R10093.10, 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. For several surveys, CHRR released an additional variable reflecting the reasons for noninterview for only those respondents with whom interviews were attempted that year. This type of variable is available in 1974 (R07755.) and in 1992–99 (e.g., R10093.). 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 2.6.2 presents the raw coding categories present on the public data files and specifies the survey years during which each category was utilized.

## Table 2.6.2 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 (1967–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] | 1984–present |
| OUT OF SCOPE | In Armed Forces | [7] | All |
| | Institutionalized | [8] | All |
| | Moved outside U.S. (other than Armed Forces) | [13] | 1979–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 use of these coding categories can be found in the cohort-specific *Interviewer's Reference Manuals*.

2 Beginning in the 1979 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 1981 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 and assume that a respondent was dropped if she has a code of 9 for every survey since she first refused, if that first refusal was in 1981 or earlier. Respondents who have consistently refused in more recent surveys, but who did not refuse an interview before 1982, remain in the eligible sample.

The reason for noninterview coding categories depicted in Tables 2.6.3 and 2.6.4 below were constructed from the raw coding categories as shown in Table 2.6.2. For example, the conceptual category "can't locate" is the sum of codes "1" and "4." Tables 2.6.3 and 2.6.4 depict the number of respondents not interviewed by survey year, reason, and race.

### Table 2.6.3 Reasons for Noninterview: 1968–99

| Survey Year | Total Interviewed | Total Not Interviewed | Reason for Noninterview | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | Can't Locate | Interview Impossible | Refusal | Out of Scope[1] | Deceased | Dropped[2] |
| 1968 | 4910 | 173 | 49 | 25 | 76 | 1 | 22 | – |
| 1969 | 4712 | 371 | 50 | 69 | 210 | 7 | 35 | – |
| 1971 | 4575 | 508 | 56 | 65 | 292 | 6 | 60 | 29 |
| 1972 | 4471 | 612 | 39 | 49 | 389 | 2 | 72 | 61 |
| 1974 | 4322 | 761 | 41 | 31 | 479 | 5 | 101 | 104 |
| 1976 | 4172 | 911 | 34 | 40 | 580 | 7 | 131 | 119 |
| 1977 | 3964 | 1119 | 22 | 49 | 761 | 6 | 140 | 141 |
| 1979 | 3812 | 1271 | 21 | 27 | 867 | 11 | 176 | 169 |
| 1981 | 3677 | 1406 | 18 | 17 | 963 | 9 | 216 | 183 |
| 1982 | 3542 | 1541 | 15 | 26 | 1061 | 8 | 238 | 193 |
| 1984 | 3422 | 1661 | 31 | 25 | 1113 | 13 | 285 | 194 |
| 1986 | 3335 | 1748 | 38 | 35 | 1130 | 10 | 341 | 194 |
| 1987 | 3241 | 1842 | 30 | 45 | 1195 | 14 | 364 | 194 |
| 1989 | 3094 | 1989 | 29 | 49 | 1265 | 21 | 431 | 194 |
| 1992 | 2953 | 2130 | 62 | 18 | 1286 | 24 | 546 | 194 |
| 1995 | 2711 | 2372 | 69 | 91 | 1321 | 33 | 664 | 194 |
| 1997 | 2608 | 2475 | 96 | 49 | 1293 | 38 | 805 | 194 |
| 1999 | 2467 | 2616 | 81 | 68 | 1311 | 48 | 914 | 194 |

Note: This table is based on R00856., R00884., R01338., R02053., R02883., R03084., R03295., R04555., R04912., R05284., R06664.10, R07215.10, R07833.10, R08878.10, R10093.10, R16012., R34981., and R42670.

[1] Beginning with the 1979 survey, "moved outside the U.S." became a separate out-of-scope coding category. Respondents who could not be interviewed during the 1968–77 surveys 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-1979 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 the 1982 interview, no additional respondents were dropped based on this rule.

## Table 2.6.4 Reasons for Noninterview by Race: 1968–99

| Survey Year | Total Interviewed | | Total Not Interviewed | | Reason for Noninterview: Can't Locate | | Interview Impossible | | Refusal | | Out of Scope[1] | | Deceased | | Dropped[2] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Non-black | Black | Non-black | Black | Non-black | Black | Non-black | Black | Non-black | Black | Non-black | Black | Non-black | Black | Non-black | Black |
| 1968 | 3576 | 1334 | 117 | 56 | 26 | 23 | 16 | 9 | 60 | 16 | 1 | 0 | 14 | 8 | – | – |
| 1969 | 3418 | 1294 | 275 | 96 | 31 | 19 | 48 | 21 | 171 | 39 | 3 | 4 | 22 | 13 | – | – |
| 1971 | 3330 | 1245 | 363 | 145 | 29 | 27 | 52 | 13 | 228 | 64 | 1 | 5 | 33 | 27 | 20 | 9 |
| 1972 | 3264 | 1207 | 429 | 183 | 20 | 19 | 36 | 13 | 298 | 91 | 0 | 2 | 36 | 36 | 39 | 22 |
| 1974 | 3157 | 1165 | 536 | 225 | 19 | 22 | 24 | 7 | 369 | 110 | 3 | 2 | 55 | 46 | 66 | 38 |
| 1976 | 3049 | 1123 | 644 | 267 | 18 | 16 | 30 | 10 | 443 | 137 | 3 | 4 | 74 | 57 | 76 | 43 |
| 1977 | 2892 | 1072 | 801 | 318 | 12 | 10 | 36 | 13 | 583 | 178 | 3 | 3 | 79 | 61 | 88 | 53 |
| 1979 | 2781 | 1031 | 912 | 359 | 13 | 8 | 14 | 13 | 663 | 204 | 10 | 1 | 103 | 73 | 109 | 60 |
| 1981 | 2685 | 992 | 1008 | 398 | 9 | 9 | 13 | 4 | 738 | 225 | 6 | 3 | 126 | 90 | 116 | 67 |
| 1982 | 2583 | 959 | 1110 | 431 | 11 | 4 | 16 | 10 | 816 | 245 | 5 | 3 | 139 | 99 | 123 | 70 |
| 1984 | 2510 | 912 | 1183 | 478 | 16 | 15 | 16 | 9 | 855 | 258 | 11 | 2 | 161 | 124 | 124 | 70 |
| 1986 | 2453 | 882 | 1240 | 508 | 19 | 19 | 22 | 13 | 872 | 258 | 7 | 3 | 196 | 145 | 124 | 70 |
| 1987 | 2383 | 858 | 1310 | 532 | 18 | 12 | 34 | 11 | 915 | 280 | 10 | 4 | 209 | 155 | 124 | 70 |
| 1989 | 2277 | 817 | 1416 | 573 | 15 | 14 | 29 | 20 | 977 | 288 | 13 | 8 | 258 | 173 | 124 | 70 |
| 1992 | 2170 | 783 | 1523 | 607 | 38 | 24 | 13 | 5 | 1008 | 278 | 15 | 9 | 325 | 221 | 124 | 70 |
| 1995 | 2012 | 699 | 1681 | 691 | 36 | 33 | 65 | 26 | 1043 | 278 | 15 | 18 | 398 | 266 | 124 | 70 |
| 1997 | 1939 | 669 | 1754 | 721 | 67 | 29 | 35 | 14 | 1026 | 267 | 22 | 16 | 480 | 325 | 124 | 70 |
| 1999 | 1848 | 619 | 1845 | 771 | 53 | 28 | 56 | 12 | 1029 | 282 | 30 | 18 | 553 | 361 | 124 | 70 |

Note: This table is based on R00023. (race), R00856., R00884., R01338., R02053., R02883., R03084., R03295., R04555., R04912., R05284., R06664.10, R07215.10, R07833.10, R08878.10, R10093.10, R16012., R34981., and R42670.

[1] Beginning with the 1979 survey, "moved outside the U.S." became a separate out-of-scope coding category. Respondents who could not be interviewed during the 1968–77 surveys 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-1979 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 the 1982 interview, no additional respondents were dropped based on this rule.

## 2.7 Sample Representativeness and Attrition

The retention rate for the Mature Women as of the 1999 interview was 48.5 percent, or 2,467 of the original 5,083 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 2.6.2 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.

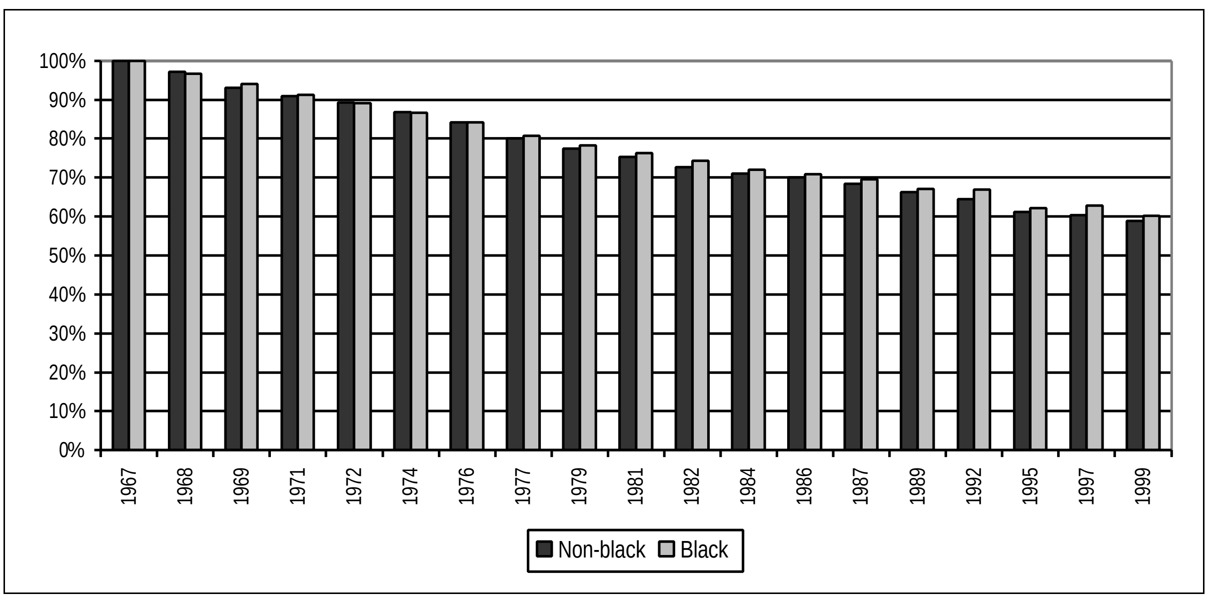
In Table 2.7.1, the percentage of sampled respondents of each race is presented for the base survey year (1967) and the most recent interview year for which data is available. This table also provides information on numbers of deceased respondents by race. Figure 2.7.1 characterizes the percentage of the original sample, by race, who have been interviewed at each survey point.

### Table 2.7.1 Sample Characteristics by Race: 1967 and 1999

| Race[1] | Number of Interviewed Respondents | | Retention (1999 as % of 1967) | Number of Deaths as of 1999[2] |
|---|---|---|---|---|
| | 1967 | 1999 | | |
| Non-black | 3693 (72.7 %) | 1848 (75.0%) | 50.0% | 553 |
| Black | 1390 (27.3 %) | 619 (25.0%) | 44.5% | 361 |

[1] See section on "Race, Ethnicity & Nationality" in this guide for details on race classifications. Respondent totals in this table are based on R00023.
[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 19 Surveys, by Race: 1967–99**

| Number of Surveys[1] | All Respondents | | Non-black Respondents | | Black Respondents | |
|---|---|---|---|---|---|---|
| | Number who completed | Cumulative % | Number who completed | Cumulative % | Number who completed | Cumulative % |
| 19 | 1890 | 37.2% | 1435 | 38.9% | 455 | 32.7% |
| 18 | 494 | 46.9 | 355 | 48.5 | 139 | 42.7 |
| 17 | 320 | 53.2 | 220 | 54.4 | 100 | 49.9 |
| 16 | 260 | 58.3 | 180 | 59.3 | 80 | 55.7 |
| 15 | 223 | 62.7 | 156 | 63.5 | 67 | 60.5 |
| 14 | 171 | 66.1 | 117 | 66.7 | 54 | 64.4 |
| 13 | 94 | 67.9 | 69 | 68.6 | 25 | 66.2 |
| 12 | 105 | 70.0 | 77 | 70.6 | 28 | 68.2 |
| 11 | 92 | 71.8 | 54 | 72.1 | 38 | 70.9 |
| 10 | 48 | 72.7 | 32 | 73.0 | 16 | 72.1 |
| 9 | 132 | 75.3 | 97 | 75.6 | 35 | 74.6 |
| 8 | 149 | 78.3 | 108 | 78.5 | 41 | 77.6 |
| 7 | 204 | 82.3 | 154 | 82.7 | 50 | 81.2 |
| 6 | 154 | 85.3 | 111 | 85.7 | 43 | 84.2 |
| 5 | 155 | 88.4 | 110 | 88.7 | 45 | 87.5 |
| 4 | 127 | 90.9 | 85 | 91.0 | 42 | 90.5 |
| 3 | 144 | 93.7 | 92 | 93.5 | 52 | 94.2 |
| 2 | 188 | 97.4 | 144 | 97.4 | 44 | 97.4 |
| 1 | 133 | 100.0 | 97 | 100.0 | 36 | 100.0 |
| **Total** | **5083** | **100.0** | **3693** | **100.0** | **1390** | **100.0** |

Note: This table is based on R00023. (race), R00002., R00856.10, R00884.10, R01338.10, R02053.10, R02883.10, R03084.10, R03295.10, R04565.10, R04912.10, R05284.10, R06664.20, R07215.20, R07833.20, R08878.20, R10093.20, 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 16 groupings for the Mature Women, based on the four Census regions (Northeast, North Central, South, and West), urban/rural residence, and race (non-black/black).

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 three 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 Mature 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 24 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 education (N/A, eight or fewer years, nine to eleven years, twelve or more years) reported in 1967. 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 Mature 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 30–44 as of March 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

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# Chapter 3: Guide to the Mature 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 describes the different survey instruments used to collect the raw Mature 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 each 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 Mature 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 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 (1967–92), 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.

### *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 the Mature 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 1967 for the Mature Women.

**Table 3.2.1 Mature Women Reference Numbers by Survey Year**

| Survey Year | Reference Numbers | Survey Year | Reference Numbers |
|---|---|---|---|
| 1967 | R00001.–R00813. | 1982 | R05270.–R06640. |
| 1968 | R00833.01–R00868. | 1984 | R06650.–R07192. |
| 1969 | R00868.01–R01333.01 | 1986 | R07203.–R07809. |
| 1971 | R01334.–R02047. | 1987 | R07820.–R08863. |
| 1972 | R02048.–R02876. | 1989 | R08865.–R10077. |
| 1974 | R02878.–R03067. | 1992 | R10080.–R13027. |
| 1976 | R03080.–R03273.50 | 1995 | R16007.–R34923. |
| 1977 | R03280.–R04540. | 1997 | R34950.–R42503. |
| 1979 | R04542.–R04892. | 1999 | R42527.–R54394. |
| 1981 | R04900.–R05267. | | |

## 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: ‘Reason for Being OLF, 77 (Not Empld, Have Worked)’
‘Reason for Being OLF, 77 (Not Empld, Not Worked)’

***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 (82 INT) or the year (e.g., 67) 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 SMSA, 82 INT’ refers to a residential move occurring in the period before the 1982 interview.

Example 3: ‘Number of Weeks Worked in Past Year, 67’ refers to the weeks worked in the 12-month period preceding the 1967 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 payments received in calendar year 1988 with data collected during the 1989 survey.

Example 4: ‘Income from Social Security Payments Based on R’s Work Record in 88? 89.’

***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 archivists 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. There was one attempt at a mail survey for the Older Men and Mature Women cohorts in 1968; however, the low response rate led to dropping that type of contact. 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 1989 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. However, the scheduled 1991 survey was delayed until 1992 due to the demands of the 1990 decennial census and the decision to interview the Young Women first, in 1991. The scheduled 1994 survey was then delayed until 1995 so that the women's cohorts could be interviewed at the same time using the same CAPI instrument. Biennial surveys have been conducted in 1997 and 1999.

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 Mature 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 these terms is described more completely below.

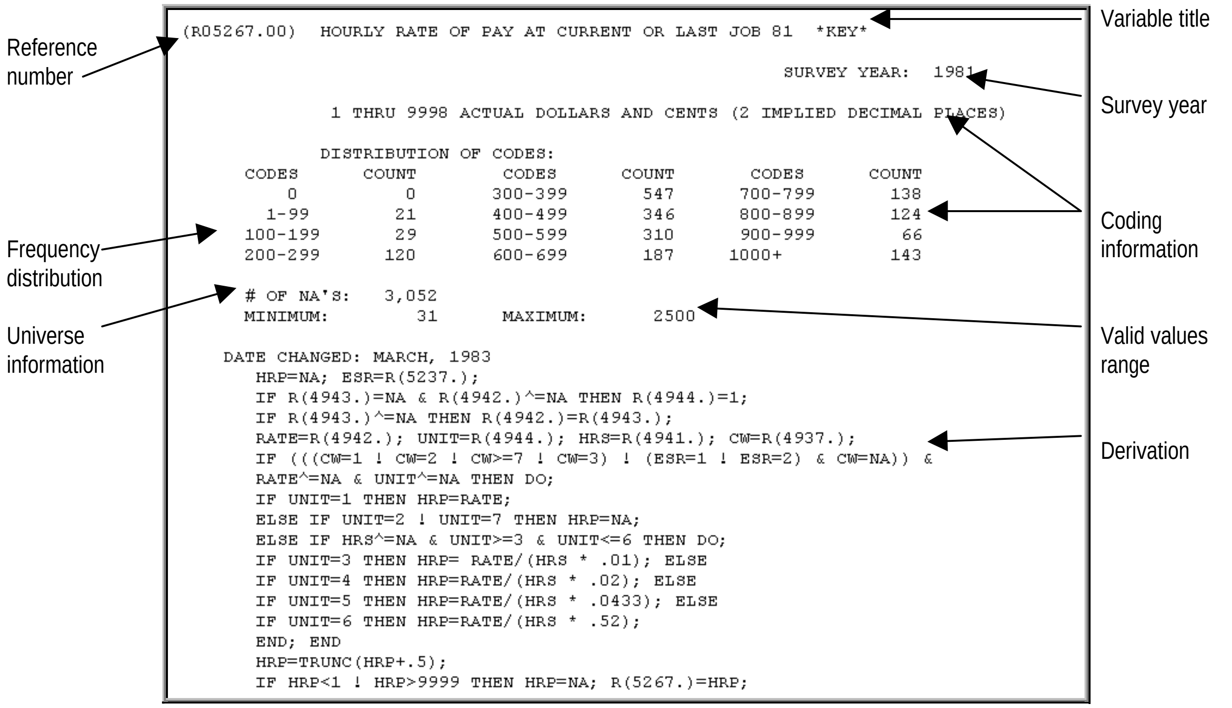
Codebooks are arranged by reference number. Variables are first grouped according to survey year. Within each survey year, those variables related to the interview (e.g., interview method, interview date, reason for noninterview, sampling weight, etc.) appear first, followed by variables picked up directly 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**

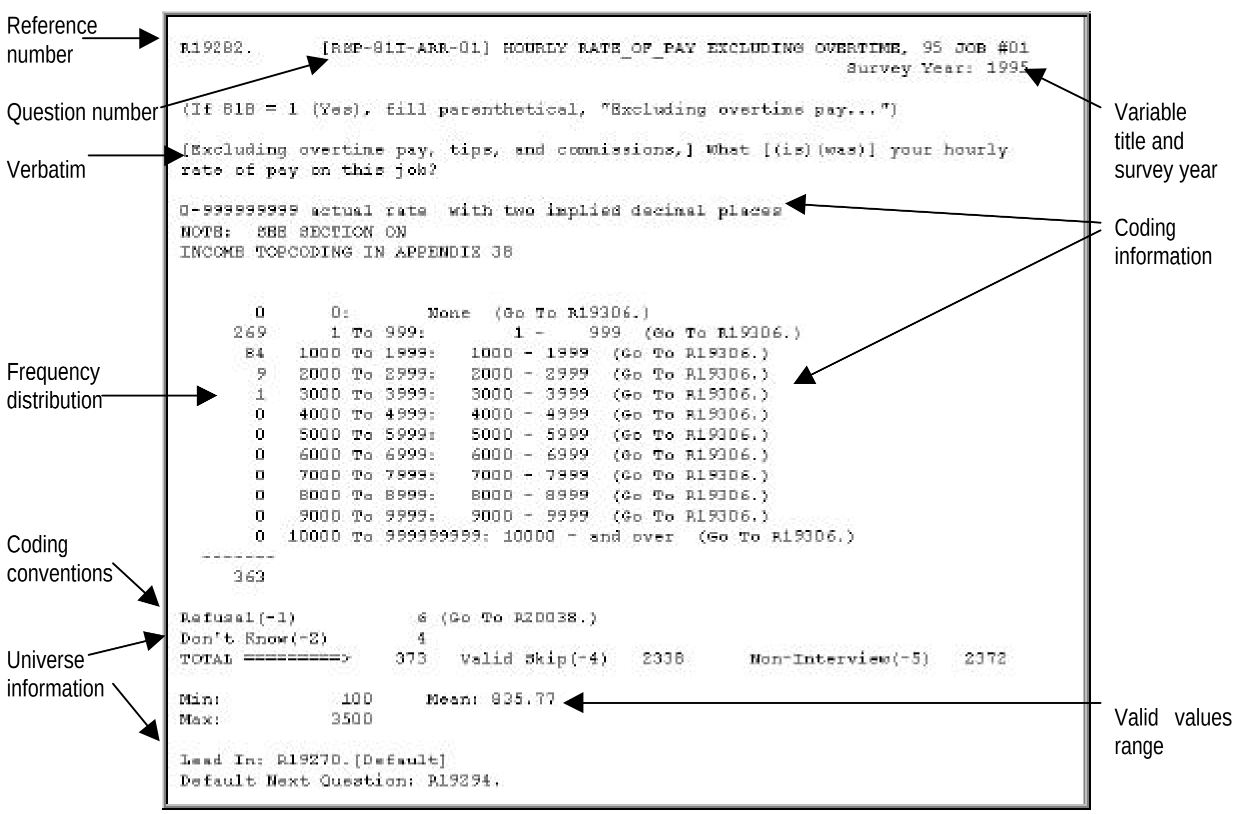
The following common types of information for each variable within a codeblock will be described in this section: coding information, multiple responses, missing responses, derivations, frequency distribution, questionnaire items (question numbers), universe information, valid values range, and verbatims. 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




```
(R05267.00)  HOURLY RATE OF PAY AT CURRENT OR LAST JOB 81   *KEY*
                                                          SURVEY YEAR:  1981

              1 THRU 9998 ACTUAL DOLLARS AND CENTS (2 IMPLIED DECIMAL PLACES)

             DISTRIBUTION OF CODES:
      CODES      COUNT         CODES       COUNT        CODES       COUNT
        0          0          300-399       547        700-799       138
       1-99       21          400-499       346        800-899       124
      100-199     29          500-599       310        900-999        66
      200-299    120          600-699       187       1000+          143

      # OF NA'S:    3,052
      MINIMUM:         31       MAXIMUM:       2500

    DATE CHANGED: MARCH, 1983
       HRP=NA; ESR=R(5237.);
       IF R(4943.)=NA & R(4942.)^=NA THEN R(4944.)=1;
       IF R(4943.)^=NA THEN R(4942.)=R(4943.);
       RATE=R(4942.); UNIT=R(4944.); HRS=R(4941.); CW=R(4937.);
       IF (((CW=1 ! CW=2 ! CW>=7 ! CW=3) ! (ESR=1 ! ESR=2) & CW=NA)) &
       RATE^=NA & UNIT^=NA THEN DO;
       IF UNIT=1 THEN HRP=RATE;
       ELSE IF UNIT=2 ! UNIT=7 THEN HRP=NA;
       ELSE IF HRS^=NA & UNIT>=3 & UNIT<=6 THEN DO;
       IF UNIT=3 THEN HRP= RATE/(HRS * .01); ELSE
       IF UNIT=4 THEN HRP=RATE/(HRS * .02); ELSE
       IF UNIT=5 THEN HRP=RATE/(HRS * .0433); ELSE
       IF UNIT=6 THEN HRP=RATE/(HRS * .52);
       END; END
       HRP=TRUNC(HRP+.5);
       IF HRP<1 ! HRP>9999 THEN HRP=NA; R(5267.)=HRP;
```

## 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 B1B = 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.)
     269       1 To 999:        1 -    999  (Go To R19306.)
      84    1000 To 1999:   1000 - 1999  (Go To R19306.)
       9    2000 To 2999:   2000 - 2999  (Go To R19306.)
       1    3000 To 3999:   3000 - 3999  (Go To R19306.)
       0    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.)
  -------
     363

Refusal(-1)            6 (Go To R20038.)
Don't Know(-2)         4
TOTAL =========>     373   Valid Skip(-4)   2338      Non-Interview(-5)   2372

Min:            100     Mean: 835.77
Max:           3500

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 92.'

| | | | |
|---|---|---|---|
| 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 81 *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 responses, utilize positive integers equaling the actual values for the quantitative responses and extreme positive numbers for the qualitative (categorical) responses. For example, 'Expected Age of Retirement' is coded as follows:

45 thru 99 actual age
999 already retired
998 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 (1967–92), 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 Mature 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 Mature 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 81 *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 143.

**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 at Current or Last Job' example (Figure 3.3.1), the maximum, or highest value recorded, is 2500 with two implied decimal places, or $25.00.

<u>Topcoding Income and Asset Values:</u> 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 1967 through 1972, upper limit dollar amounts were set to 999999. From 1974 through 1980, upper limit variables were set to maximum values of 50000, and from 1981 to 1984 the set maximum value was 50001. Beginning in 1986, 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 1977, assets exceeding one million were converted to a set maximum value of 999997. Starting in 1992, 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 3: State Names and State Codes by Census Division Listing*

*Appendix 4: Derivations for R02847. (Reason Left Current Job 1967)*

*Appendix 5: Source for Occupational Atypicality Codes*

*Appendix 6: Derivations for R02872.50 (Occupational Training 1967–1972)*

*Appendix 7: Derivations for R00792.50 (Training prior to 1972)*

*Appendix 8: Derivations for R00744.05 (Number of Years Worked before 1967 in Occupation)*

*Appendix 9: Derivations for 1977 *KEY* Variables*

*Appendix 10: New Geographical and Environmental Variables for the Mature Women's Cohort, 1967–1977*

*Appendix 11: Derivations for 1971 *KEY* Variables*

*Appendix 12: Derivations for 1972 *KEY* Variables*

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

*Appendix 19: Derivations for 1982 *KEY* Variables*

*Appendix 20: Derivations for 1987 *KEY* Variables*

*Appendix 21: Derivations for 1989 *KEY* Variables*

*Appendix 22: Derivations for 1992 *KEY* Variables*

*Appendix 23: Geometric Progression Coding*

*Appendix 24: Pension Plan Data Documentation*

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

*Appendix 37: Summary of 1995 Data Cleaning Issues*

*Appendix 38: Derivations for 1995 *KEY* and other Created Variables*

*Appendix 39: Summary of 1997 Data Cleaning Issues*

*Appendix 40: Derivations for 1997 *KEY* and Other Created Variables*

*Appendix 41: The Mature and Young Women 1999*

### 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 Mature 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 Mature 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 Mature 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, 'Age, 67,' was provided by the Census Bureau based on information collected during the 1966 household screening; complete information is available for most respondents. As age inconsistencies were discovered, Census made date of birth information available in the late 1970s. Additional age variables have been collected in the "Household Roster" section of the questionnaire for those interviewed in recent rounds (i.e., 'Age of Respondent, 87' and 'Age of Respondent, 89').

During the 1981 interview, respondents were asked whether the Census birth date information was correct. In 144 cases, the respondent reported a birth date different from that originally provided by Census; the 1981 variable contains revised birth dates for those cases. The 1987 and 1989 "Household Roster" collected additional date of birth information for the respondent. During the 1995–99 surveys, the respondent was asked to confirm or correct the most recent birth date information available.

Table 4.1.1 provides reference numbers for date of birth and age variables; Table 4.1.2 presents age distributions for the Mature 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 |
|---|---|---|
| **1967** | R00022.01–R00022.03 | R00022. |
| **1981** | R04916.–R04916.20 | – |
| **1987** | R08171.–R08173. | R08174. |
| **1989** | R09205.–R09207. | R09208. |
| **1995** | R16067.–R16070. | R16071. |
| **1997** | R35040.-R35043. | R35044. |
| **1999** | R42763.–R42766. | R42767. |

***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. Furthermore, a respondent may be inconsistent in different interviews in reporting her age. The date of birth inconsistencies are documented in the codebook. Birth date corrections were made in 1981. The birth date corrections should be used carefully and users are advised to make any additional corrections on a case-by-case basis.

There are varying numbers of out-of-scope cases in the Mature 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.

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.

***Notes on Table 4.1.2:*** Table 4.1.2 presents age distributions for the Mature Women. In order to construct the most accurate ages possible, ages were created using the most recent date of birth information available. That is, information from the 1999 interview was used first, then 1997 data, then 1995, etc.

In some cases, the date of birth was incomplete. If the respondent did not report a year of birth in any of the three interview years, then no age was calculated. There are two respondents for whom this applies. If no month of birth was recorded for a respondent, then the respondent was assigned a birth month of June. If no day of birth was recorded, then the respondent was assigned to be born on the 30th of the month. This method of calculating ages places a number of respondents out of range for the age requirements for the sample. Respondents should have been aged 30 to 44 as of March 31, 1967. Calculating ages as of this date indicates that 16 of the respondents were younger than 30 and 44 of the respondents were over the age of 44.

## Table 4.1.2 Ages of Interviewed Respondents by Survey Year: 1967–99

| | Survey Year | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age[1] | 67 | 68 | 69 | 71 | 72 | 74 | 76 | 77 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 92 | 95 | 97 | 99 |
| = 29 | 16 | 7 | 5 | 3 | 2 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 30 | 241 | 9 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 31 | 302 | 233 | 9 | 1 | 1 | 2 | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 32 | 352 | 293 | 223 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 33 | 310 | 343 | 282 | 8 | 1 | 1 | 2 | – | – | – | – | – | – | – | – | – | – | – | – |
| 34 | 311 | 298 | 324 | 222 | 9 | 1 | 1 | 2 | – | – | – | – | – | – | – | – | – | – | – |
| 35 | 265 | 299 | 288 | 270 | 215 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – | – |
| 36 | 295 | 257 | 291 | 313 | 262 | 9 | 1 | 1 | 2 | – | – | – | – | – | – | – | – | – | – |
| 37 | 331 | 287 | 248 | 279 | 311 | 208 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – |
| 38 | 352 | 324 | 277 | 282 | 270 | 249 | 8 | – | 1 | 2 | – | – | – | – | – | – | – | – | – |
| 39 | 357 | 342 | 308 | 243 | 273 | 301 | 207 | 7 | 1 | – | 1 | – | – | – | – | – | – | – | – |
| 40 | 353 | 343 | 330 | 269 | 239 | 259 | 249 | 195 | 1 | 1 | – | – | – | – | – | – | – | – | – |
| 41 | 350 | 335 | 326 | 300 | 266 | 265 | 296 | 242 | 7 | – | 1 | 1 | – | – | – | – | – | – | – |
| 42 | 365 | 336 | 317 | 315 | 294 | 232 | 247 | 284 | 188 | 1 | 1 | – | – | – | – | – | – | – | – |
| 43 | 378 | 353 | 326 | 311 | 313 | 254 | 261 | 239 | 236 | 7 | 1 | 1 | 2 | – | – | – | – | – | – |
| 44 | 373 | 365 | 333 | 316 | 305 | 284 | 223 | 243 | 275 | 186 | 7 | 1 | – | 2 | – | – | – | – | – |
| 45 | 97 | 357 | 354 | 316 | 306 | 306 | 246 | 214 | 231 | 229 | 179 | 1 | 1 | – | – | – | – | – | – |
| 46 | 9 | 94 | 344 | 326 | 310 | 301 | 273 | 228 | 239 | 266 | 221 | 7 | 1 | – | 1 | – | – | – | – |
| 47 | 11 | 9 | 91 | 345 | 317 | 293 | 287 | 257 | 202 | 225 | 256 | 172 | 1 | – | – | – | – | – | – |
| 48 | 7 | 11 | 9 | 332 | 338 | 300 | 286 | 278 | 219 | 231 | 216 | 215 | 7 | 1 | – | – | – | – | – |
| 49 | 1 | 7 | 11 | 88 | 316 | 303 | 282 | 280 | 248 | 194 | 218 | 245 | 163 | 6 | 1 | 2 | – | – | – |
| 50 | – | 1 | 7 | 8 | 88 | 323 | 282 | 266 | 267 | 210 | 186 | 211 | 210 | 162 | 1 | – | – | – | – |
| 51 | 2 | – | 1 | 11 | 9 | 308 | 298 | 274 | 270 | 238 | 203 | 212 | 248 | 201 | 7 | – | – | – | – |
| 52 | 1 | 2 | – | 7 | 10 | 86 | 304 | 284 | 256 | 262 | 234 | 177 | 204 | 237 | 163 | 1 | 1 | – | – |
| 53 | – | 1 | 2 | 1 | 7 | 9 | 298 | 276 | 260 | 261 | 257 | 197 | 207 | 198 | 191 | 1 | – | – | – |
| 54 | – | – | 1 | – | 1 | 11 | 84 | 279 | 272 | 246 | 249 | 230 | 178 | 203 | 236 | 6 | 1 | 2 | – |
| 55 | 1 | – | – | 2 | – | 7 | 9 | 79 | 261 | 245 | 235 | 248 | 186 | 172 | 192 | 155 | 1 | – | – |
| 56 | 1 | 1 | – | 1 | 2 | 1 | 11 | 9 | 266 | 260 | 234 | 241 | 224 | 181 | 199 | 187 | 1 | – | 2 |
| 57 | – | 1 | 1 | – | 1 | – | 7 | 11 | 76 | 252 | 248 | 226 | 241 | 222 | 163 | 225 | 6 | 1 | – |
| 58 | – | – | 1 | – | – | 2 | 1 | 7 | 9 | 255 | 249 | 228 | 239 | 236 | 168 | 185 | 143 | 1 | 1 |
| 59 | – | – | – | 1 | – | 1 | – | 1 | 11 | 74 | 244 | 238 | 224 | 238 | 201 | 192 | 160 | 6 | 1 |
| 60 | 1 | – | – | 1 | 1 | – | 2 | – | 6 | 9 | 72 | 232 | 221 | 217 | 226 | 163 | 207 | 135 | 1 |
| 61 | – | 1 | – | – | – | – | 1 | 2 | 1 | 11 | 8 | 240 | 227 | 212 | 223 | 166 | 169 | 158 | 5 |
| 62 | – | – | 1 | – | – | 1 | – | 1 | – | 6 | 11 | 70 | 223 | 218 | 213 | 190 | 176 | 211 | 129 |
| 63 | – | – | – | – | – | 1 | – | – | 2 | 1 | 5 | 7 | 229 | 214 | 193 | 213 | 159 | 163 | 153 |
| 64 | – | – | – | 1 | – | – | 1 | – | 1 | – | 1 | 11 | 70 | 224 | 213 | 219 | 148 | 178 | 201 |
| 65 | – | – | – | – | 1 | – | 1 | 1 | – | 2 | – | 5 | 7 | 68 | 203 | 198 | 175 | 150 | 155 |
| 66 | – | – | – | – | – | – | – | 1 | – | – | 2 | 1 | 11 | 7 | 210 | 181 | 197 | 148 | 158 |
| 67 | – | – | – | – | – | 1 | – | – | 1 | – | – | – | 5 | 10 | 62 | 202 | 197 | 175 | 143 |

Note: This table is based on R00022.01–R00022.03 (1967), R04916.00–R04916.20 (1981), R08171.–R08173. (1987), R09205.-R09207. (1989), R16068.-R16070. (1995), R35041.-R35043. (1997), and R42763.–R42766. (1999), with the most recent date of birth variables used when available.
[1] Age of respondent is calculated as of June 30 of the interview year.

## Table 4.1.2 (Continued) Ages by Survey Year: 1967–99

| | Survey Year | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Age[1] | 67 | 68 | 69 | 71 | 72 | 74 | 76 | 77 | 79 | 81 | 82 | 84 | 86 | 87 | 89 | 92 | 95 | 97 | 99 |
| 68 | – | – | – | – | – | – | – | – | 1 | – | – | 2 | 1 | 6 | 6 | 188 | 188 | 184 | 146 |
| 69 | – | – | – | – | – | – | 1 | – | – | 1 | – | – | – | 1 | 11 | 196 | 177 | 190 | 163 |
| 70 | – | – | – | – | – | – | – | 1 | – | 1 | 1 | – | 2 | – | 5 | 57 | 181 | 176 | 180 |
| 71 | – | – | – | – | – | – | – | – | – | – | 1 | – | – | 2 | 1 | 6 | 172 | 162 | 173 |
| 72 | – | – | – | – | – | – | – | – | 1 | – | – | 1 | – | – | – | 10 | 175 | 172 | 171 |
| 73 | – | – | – | – | – | – | – | – | – | – | – | 1 | – | – | 2 | 5 | 54 | 151 | 157 |
| 74 | – | – | – | – | – | – | – | – | – | 1 | – | – | 1 | – | – | 1 | 6 | 173 | 167 |
| 75 | – | – | – | – | – | – | – | – | – | – | 1 | – | 1 | 1 | – | – | 10 | 51 | 140 |
| 76 | – | – | – | – | – | – | – | – | – | – | – | – | – | 1 | – | 2 | 5 | 5 | 157 |
| 77 | – | – | – | – | – | – | – | – | – | – | – | 1 | – | – | 1 | – | 1 | 9 | 47 |
| 78 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 1 | – | – | 5 | 3 |
| 79 | – | – | – | – | – | – | – | – | – | – | – | – | 1 | – | – | – | 1 | 1 | 9 |
| 80 | – | – | – | – | – | – | – | – | – | – | – | – | – | 1 | – | – | – | – | 4 |
| 81 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 1 | – | 1 | 1 |
| 82 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 1 | – | – | – | – |
| 83 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 84 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 85 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | 1 | – | – | – |
| 86 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| 87 | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – | – |
| Total Int'd | 5083 | 4910 | 4712 | 4575 | 4471 | 4322 | 4172 | 3964 | 3812 | 3677 | 3542 | 3422 | 3335 | 3241 | 3094 | 2953 | 2711 | 2608 | 2467 |
| Not Int'd | – | 173 | 371 | 508 | 612 | 761 | 911 | 1119 | 1271 | 1406 | 1541 | 1661 | 1748 | 1842 | 1989 | 2130 | 2372 | 2475 | 2616 |
| Birth Year n/a | 1 | 1 | 1 | 1 | 1 | 1 | 1 | – | – | – | – | – | – | – | – | – | – | – | – |

Note: This table is based on R00022.01–R00022.03 (1967), R04916.00–R04916.20 (1981), R08171.–R08173. (1987), R09205.-R09207. (1989), R16068.-R16070. (1995), R35041.-R35043. (1997), and R42763.–R42766. (1999), with the most recent date of birth variables used when available.
[1] Age of respondent is calculated as of June 30 of the interview year.

## 4.2 Alcohol Use

Questions on the use of alcohol were asked in the 1989 and 1995-99 surveys of the Mature Women. For those respondents who currently consumed alcoholic beverages, the 1989 survey included questions on the number of days in the past month/week that they used alcohol as well as the quantity and type of alcohol usually consumed per day. The 1995–99 surveys asked respondents if they had consumed any alcoholic beverages since the last interview; if so, respondents were asked about their use in the past 30 days. Table 4.2.1 shows the reference numbers for the alcohol use questions in the various surveys.

**Table 4.2.1 Reference Numbers of Alcohol Use Questions**

| Question | Reference Numbers | | | |
|---|---|---|---|---|
| | 1989 | 1995 | 1997 | 1999 |
| Do you drink beer, wine, or liquor now? | R09619. | – | – | – |
| Have you had any alcoholic beverages since the date of your last interview? | – | R33655. | R41339. | R50911. |
| Have you had any alcoholic beverages during the last 30 days? | – | R33656. | R41340. | R50912. |
| During the last 30 days, on how many days did you drink any alcoholic beverages? | R09620., R09621. | – | – | – |
| 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? | R09623.–R09625. | R33658. | R41342. | R50914. |

***Survey Instruments:*** The "Health" sections of the 1989 and 1995–99 surveys contain the questions about alcohol use.

## 4.3 Attitudes & Expectations

Respondents have answered questions about their attitudes and expectations on a wide variety of topics. Many questions refer to attitudes about work and retirement. Periodically, the surveys ask about satisfaction with life in general, housework, and child care.

**Attitudes toward retirement:** As this cohort has aged, the surveys have begun eliciting attitudes and expectations about retirement (see Table 4.3.1 for reference numbers). In 1979, 1982, 1984, and 1986, respondents were asked at what age they expected their husbands to retire; those who were participating in the labor market at the time of the survey were also asked at what age they expected to retire. Additionally, these women were asked if they intended to continue working after their husband's retirement. The 1989 and 1995–99 surveys included questions on attitudes toward retirement in general. For example, respondents were asked 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."

**Table 4.3.1 Reference Numbers for Questions on Attitudes and Expectations toward Work**

| Year | Husband's attitude toward R working | Expected age of retirement | Expected age of husband's retirement | General attitude toward retirement |
|---|---|---|---|---|
| 1967 | R00339. | – | – | – |
| 1972 | R02448. | – | – | – |
| 1977 | R03678. | – | – | – |
| 1979 | – | R04805. | R04820. | |
| 1982 | R06074. | R06438. | R06459. | – |
| 1984 | – | R07089. | R07099. | – |
| 1986 | – | R07660. | R07687. | – |
| 1987 | R08395. | – | – | – |
| 1989 | – | – | – | R09892.–R09896. |
| 1995 | – | – | – | R34878.–R34882. |
| 1997 | – | – | – | R42013.-R42017. |
| 1999 | – | – | – | R51505.–R51509. |

**Attitudes toward women working:** To capture societal sentiment about women participating in the labor force, the survey has asked a wide variety of questions about working women/mothers. In select years, respondents were asked how their husbands felt about the respondents' working (see Table 4.3.1). There was also a series of questions which elicited attitudes about the circumstances under which respondents felt it was acceptable for married women with young children to hold jobs outside the home. Table 4.3.2 lists reference numbers for questions about women's roles in the labor market. Although these questions have not been asked in every survey year, a pattern of changing attitudes about working mothers can be observed in Table 4.3.3.

## Table 4.3.2 Reference Numbers for Attitudes toward Wives Working Questions

| Statements | Survey Year 72 | 77 | 82 | 87 |
|---|---|---|---|---|
| Wife can work without neglecting her family | R02435. | R03664. | R06058. | R08379. |
| Women's place is in the home | R02436. | R03665. | R06059. | R08380. |
| Job gives wife interesting outside contacts | R02437. | R03666. | – | – |
| Wife with a family doesn't have time for employment | R02438. | R03667. | R06060. | R08381. |
| A working wife feels more useful | R02439. | R03668. | R06061. | R08382. |
| Employment of wives leads to juvenile delinquency | R02440. | R03669. | R06062. | R08383. |
| Employment of parents needed to keep up with cost of living | R02443. | R03672. | R06063. | R08384. |
| Working wives raise the standard of living | R02441. | R03670. | – | – |
| Working wives lose interest in home and family | R02442. | R03671. | – | – |
| It is better for all if man is outside achiever and woman takes care of family | – | – | R06064. | R08385. |
| Men should share the work around the house with women | – | – | R06065. | R08386. |
| Working mothers can have as secure relationship with child as non-working mothers | – | – | R06066. | R08387. |
| Women are happier if they stay home and take care of kids | – | – | R06067. | R08388. |
| Rearing children should not inhibit career | – | – | R06068. | R08389. |

## Table 4.3.3 Attitudes toward Married Women's Participation in the Labor Market (Unweighted)

| Conditions[1] | probably or definitely not all right: Survey Year 67 | 72 | 77 | 82 | 87 | no opinion, undecided: Survey Year 67 | 72 | 77 | 82 | 87 | probably or definitely all right: Survey Year 67 | 72 | 77 | 82 | 87 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ...if necessary to make ends meet | | | | | | | | | | | | | | | |
| number | 314 | 270 | 222 | 128 | 113 | 39 | 18 | 22 | 10 | 18 | 4716 | 4077 | 3662 | 3359 | 3065 |
| percentage[2] | 6.2 | 6.0 | 5.6 | 3.6 | 3.5 | 0.8 | 0.4 | 0.6 | 0.3 | 0.6 | 92.8 | 91.2 | 92.4 | 94.8 | 94.6 |
| ...if she wants & husband agrees | | | | | | | | | | | | | | | |
| number | 1116 | 661 | 403 | 241 | 207 | 68 | 19 | 30 | 28 | 25 | 3886 | 3684 | 3472 | 3228 | 2956 |
| percentage[2] | 22.0 | 14.8 | 10.2 | 6.8 | 6.4 | 1.3 | 0.4 | 0.8 | 0.8 | 0.8 | 76.5 | 82.4 | 87.6 | 91.1 | 91.2 |
| ...if she wants & husband disagrees | | | | | | | | | | | | | | | |
| number | 4105 | 3292 | 2532 | 1830 | 1514 | 140 | 67 | 123 | 113 | 161 | 822 | 1004 | 1247 | 1554 | 1510 |
| percentage[2] | 80.1 | 73.6 | 63.9 | 51.7 | 46.7 | 2.8 | 1.5 | 3.1 | 3.2 | 5.0 | 16.2 | 22.5 | 31.5 | 43.9 | 46.6 |

Source: Table is based on responses to the following questions: R00335.–R00337. in 1967; R02444.–R02446. in 1972; R03673.–R03675. in 1977; R06069.–R06071. in 1982; and R08390.–R08392. in 1987.

[1] The question asked respondents the following: How do you feel about a married woman with children between the ages of 6 and 12 taking a full-time job outside the home under the following conditions?

[2] This refers to the percentage of the total interviewed population in that survey year giving the indicated response. This total was 5083 in 1967, 4471 in 1972, 3964 in 1977, 3542 in 1982, and 3241 in 1987.

**Attitudes toward life:** In addition to attitudes about work and working, respondents provided data on their feelings about life in general. In each survey since 1979, respondents have answered to a global life satisfaction question on how they were feeling these days (e.g., R04856.). They are 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. In 1967 (R00341.), 1979 (R04676.), 1982 (R06076.), and 1987 (R08397.), the women were asked for their general attitudes (i.e., "How do you feel about keeping house in your own home?").

At select survey points, the women were asked more detailed questions about their responsibility for a variety of household tasks. Beginning in 1974 and continuing until 1989, 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 1981 survey, respondents were asked how they felt about performing each task (like, dislike, or don't mind). Table 4.3.4 summarizes this series of items.

Additional questions regarding the respondent's general attitudes toward taking care of children (R00342. in 1967) and her attitude toward the use of child care centers specifically (R01686.–R01688. and R01707. in 1971) have been collected irregularly. See the "Child Care" section of this guide for more information about child care arrangements.

## Table 4.3.4 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]** | | | | | | | | | |
| 1974 | R03022. | R03024. | R03025. | R03023. | – | R03021. | – | R03026. | R03027. |
| 1976 | R03229. | R03231. | R03232. | R03230. | – | R03228. | – | R03233. | R03234. |
| 1981 | R04996. | R05002. | R05005. | R04999. | R05014. | R04993. | – | R05008. | R05011. |
| 1982 | R06095. | R06101. | R06104. | R06098. | R06113. | R06092. | – | R06107. | R06110. |
| 1984 | R06799. | R06808. | R06811. | R06805. | R06820. | R06796. | R06802. | R06814. | R06817. |
| 1987 | R08416. | R08425. | R08428. | R08422. | R08437. | R08413. | R08419. | R08431. | R08434. |
| 1989 | R09405. | R09414. | R09417. | R09411. | R09426. | R09402. | R09408. | R09420. | R09423. |
| **Relationship of other person sharing/performing task** | | | | | | | | | |
| 1981 | R04997. | R05003. | R05006. | R05000. | R05015. | R04994. | – | R05009. | R05012. |
| 1982 | R06096. | R06102. | R06105. | R06099. | R06114. | R06093. | – | R06108. | R06111. |
| 1984 | R06800. | R06809. | R06812. | R06806. | R06821. | R06797. | R06803. | R06815. | R06818. |
| 1987 | R08417. | R08426. | R08429. | R08423. | R08438. | R08414. | R08420. | R08432. | R08435. |
| 1989 | R09406. | R09415. | R09418. | R09412. | R09427. | R09403. | R09409. | R09421. | R09424. |
| **Frequency respondent performs task** | | | | | | | | | |
| 1982 | R06097. | R06103. | R06106. | R06100. | R06115. | R06094. | – | R06109. | R06112. |
| 1984 | R06801. | R06810. | R06813. | R06807. | R06822. | R06798. | R06804. | R06816. | R06819. |
| 1987 | R08418. | R08427. | R08430. | R08424. | R08439. | R08415. | R08421. | R08433. | R08436. |
| 1989 | R09407. | R09416. | R09419. | R09413. | R09428. | R09404. | R09410. | R09422. | R09425. |
| **Respondent's attitude toward performing task** | | | | | | | | | |
| 1981 | R04998. | R05004. | R05007. | R05001. | R05016. | R04995. | – | R05010. | R05013. |

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

***Related Variables:*** The "Job Satisfaction" section of this guide describes questions about the respondent's attitude toward her current job. The "Job Search" section discusses questions on 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 are found in various questionnaire sections, including "Attitudes about Work," "Attitudes," and "Health."

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

## 4.4 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 1967, 1969, 1971, 1972, 1977, and 1995 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 survey 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. In 1995, the survey 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.

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 1974, 1976, 1981, 1982, 1984, 1987, and 1989 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 (see also the "Attitudes & Expectations" section of this guide). 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

Parnes, Herbert S.; Jusenius, Carol L.; and Shortlidge, Jr., Richard L. *Dual Careers, Volume 3: A Longitudinal Study of the Labor Market Experience of Women.* Manpower Research Monograph 21, vol. 3. Washington, DC: U.S. Government Printing Office, 1975.

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

Waite, Linda J.; Suter, Larry E.; and Shortlidge, Jr., Richard L. "Changes in Child Care Arrangements of Working Women from 1965 to 1971." *Social Science Quarterly* 58,2 (September 1977): 302–11.

## 4.5 Cigarette Use

Information on the use of cigarettes was collected only in the 1989 and 1995–99 surveys. The 1989 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 1995–99 surveys simply asked whether or not respondents currently smoked. Table 4.5.1 provides reference numbers for the cigarette use questions.

**Table 4.5.1 Reference Numbers of Cigarette Use Questions**

| Question | Reference Numbers | | | |
|---|---|---|---|---|
| | 1989 | 1995 | 1997 | 1999 |
| Do you smoke cigarettes now? | R09608. | – | – | – |
| Do you smoke cigarettes? | – | R33654. | R41338. | R50910. |
| On the average, how many cigarettes do you usually smoke in a day (present smoker)? | R09609., R09610. | – | – | – |
| How old were you when you first started smoking regularly (present smoker)? | R09612. | – | – | – |
| Did you ever smoke cigarettes? | R09613. | – | – | – |
| On the average, how many cigarettes did you usually smoke in a day (past smoker)? | R09614., R09615. | – | – | – |
| How old were you when you last smoked regularly (past smoker)? | R09617. | – | – | – |
| How old were you when you first smoked regularly (past smoker)? | R09618. | – | – | – |

***Survey Instruments:*** The "Health" sections of the 1989 and 1995–99 surveys contain the questions on cigarette use.

## 4.6 Class of Worker

In each survey year, respondents provided data on their class of worker status. In the 1967–92 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 4.6.1.

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 is the series of class of worker variables for the longest job held between/after certain life course events (school, marriage, birth of child), which was collected for select universes during the 1967 fielding of the survey.

***Survey Instruments & Documentation:*** Questions relating to class of worker can be found in the "Current Labor Force Status," "Work Experience," or "Work History" sections of the questionnaires. The method of creating the collapsed class of worker variables is provided within the codebook.

*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 4.6.1 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.

## 4.7 Discrimination

Questions on work-related discrimination were fielded in 1972, 1977, 1982, 1987, 1989, 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).

As Table 4.7.1 indicates, information on the various types of work-related discrimination and discriminatory practices has been collected across survey years. The reference period for 1972–89 was the five-year period preceding each interview. In 1995, the reference period was since the date of last interview.

**Table 4.7.1 Types of Work-Related Discrimination Data by Survey Year**

| | Survey Year | | | | | |
|---|---|---|---|---|---|---|
| Type of Discrimination | 72 | 77 | 82 | 87 | 89 | 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," "Work Attitudes," and "Attitudes" sections of the questionnaires.

> ***User Notes:*** From 1982–89, 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, "Mature 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.

## 4.8 Educational Status & Attainment

Data on the educational status and attainment of respondents were collected at select survey points as part of the broader collection of information on respondents' training investments. An overview of education-specific variables both for the respondent and for family members not residing in her household is presented below by topic. Information about the educational status and attainment of family members residing in the respondent's household is also available; see the "Household Composition" section of this guide for more information.

### Educational Attainment

1. ***Highest Grade Completed.*** Highest grade completed variables are available for the entire cohort in several years. In 1967, a 'Highest Grade Completed' variable (R00790.) was created from a series of questions eliciting information on the highest grade of regular school the respondent had attended, whether that grade had been completed, and whether additional coursework in which the respondent had been enrolled after full-time school ended had resulted in a diploma. In the 1977 (R03815.) and 1989 (R09897.) surveys, respondents directly reported their attainment level. In each survey since 1979, all respondents reporting school enrollment since the last interview have been asked to state the highest grade they have completed. These variables are "update" variables and are available for less than the full universe of respondents. For the 1979–92 surveys, researchers needing data on educational attainment for a more complete universe of respondents than those to whom the update questions are administered should locate the last summary variable available and use the update information to supplement that variable. Beginning in 1995, a created variable, 'Highest Grade Completed, xx (Revised),' provides the highest grade completed for all interviewed respondents.

2. ***High School Enrollment and Date of Diploma.*** The 1977 survey elicited information about high school enrollment dates and the date the high school diploma was received. The 1981 survey asked respondents whether they had ever attended high school, if they had received a high school diploma or General Equivalency Diploma (GED), which they had received, and when.

3. ***College Enrollment and College Degree.*** The 1977 survey asked whether respondents had ever attended college. For those reporting college enrollment, information was collected on the highest degree ever received and the date the degree was received. Each subsequent survey except 1992 has asked whether the respondent has attended college since the last interview. Respondents reporting college enrollment state the number of weeks and hours per week in attendance, whether a college degree was received, and the type of degree received. The 1986 questionnaire also included two questions on educational expenses incurred by the respondent or her husband in the past 12 months.

## High School and College Curricula

1. ***High School.*** Respondents have provided retrospective information about their high school curricula during three interviews. The 1967 survey collected information on the type of vocational or commercial curriculum taken in high school. In 1972, the survey asked respondents how well they had done in their English courses in high school. Finally, the 1981 survey included a series of questions on whether the respondent had been enrolled in high school mathematics courses, the type of course (e.g., algebra, geometry, trigonometry), the length of time the course lasted, and how well the respondent had done in these courses.

2. ***College.*** Information about major field of study in college has been gathered at numerous survey points. The 1977 survey asked all respondents who had ever been enrolled in college about their field of study. This information was updated in each subsequent survey except 1992 for all respondents reporting college enrollment since their last interview.

## Location of Schools

The only location information available for this cohort is a 1971 variable providing the state of the last high school attended.

***Related Variables:*** The 1977 survey obtained enrollment information and highest grade attended/ completed for all natural and adopted children as well as the husband's children. In addition, information on the highest grade attended/completed of the respondent's four eldest living children was collected during the 1986 survey. The 1982, 1984, and 1987–97 interviews asked the respondent if any of her children had attended college in the past 12 months. All of these interviews except 1984 followed up by asking how much she and her husband had contributed toward college expenses each year.

***Survey Instruments & Documentation:*** The variables described above can be found in the "Education and Training" sections of the 1967, 1977, and 1982–99 questionnaires and the "Education Expenses" section of the 1986 instrument. The question on the location of the high school is located in the "Family Background" section of the 1971 questionnaire. The 1977 series of questions about the children is located in the "Marital History, Fertility & Other Family Background" section of the questionnaire. Appendices of the *Codebook Supplement* present the fields of study classification systems and Census division/state codes.

## 4.9 Family Background

The Mature 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 15.

### Parent Background

In the 1967 interview, the women were asked about the birth countries of their parents and grandparents; Table 4.9.1 depicts the results.

**Table 4.9.1 Birth Country of Parents and Grandparents**

| Country | Mother | Father | Maternal Grandfather | Maternal Grandmother | Paternal Grandfather | Paternal Grandmother |
|---|---|---|---|---|---|---|
| U.S. or Canada | 4409 | 4356 | 3622 | 3696 | 3588 | 3633 |
| N or W Europe[1] | 190 | 212 | 332 | 378 | 346 | 310 |
| C or E Europe[2] | 137 | 160 | 65 | 70 | 55 | 67 |
| S Europe[3] | 136 | 179 | 32 | 31 | 41 | 37 |
| Latin America[4] | 69 | 67 | 8 | 8 | 9 | 9 |
| Other | 82 | 91 | 10 | 9 | 12 | 10 |
| Not available | 60 | 18 | 1014 | 991 | 1032 | 1017 |

Note: This table is based on R00504.–R00509. from the 1967 survey.

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.

Information on the life status of the respondent's and her husband's parents was collected in 1967, 1969, 1971, 1972, 1981, 1984, 1989, and 1997. The 1981 survey also asked how frequently respondents had contact with their parents and parents-in-law, as well as the distance they lived from each. In 1984, 1989, and 1997, respondents were again asked about the distance they lived from their parents and parents-in-law. These surveys also collected information on whether the respondent's or her husband's parents needed help for health reasons and, if so, who provided the care. The 1992 and 1997 surveys collected additional information on the respondents' biological parents including their current ages (if they were still alive) or the ages when they died. For all deceased parents, the survey collected information on the main cause of death. In 1981, 1984, 1989, and 1997, information was collected about the distance each parent lived from the respondent. The 1997 survey also asked about each parent's overall health condition. Other information from this detailed 1997 series of questions is discussed in the "Transfers" section of this guide.

### Siblings

The Mature Women surveys collected data about siblings in two survey years. The first collection, in 1977, asked respondents to provide the name, sex, birth date, and highest grade completed of up to 10 siblings who were not living in their home on the date of the survey. Respondents were also asked to count how many brothers and sisters lived in their home currently; information about these siblings is on the 1977 "Household Roster." In 1981, the survey asked how many living brothers and how many living sisters the respondent had. The respondent also answered questions about how often she contacted her closest sibling and the distance that sibling lived from the respondent's home.

> ***User Notes:*** The sampling design for the Original Cohorts produced a number of multiple respondent households. A small number of Mature Women have a sister in the Mature Women cohort or a brother in the Older Men cohort. These multiple respondent households provide a great deal of data about a respondent's 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 15

The 1967 survey asked respondents where they were born and how long they had lived at their current residence. Of the 5,083 respondents, 4,836 (95.1%) 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 15 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 respondent's parents; these findings are reported in Tables 4.9.2 and 4.9.3 below.

***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.

### Table 4.9.2 Occupation of Mother and Father of Respondent at Age 15

| Occupation | Mother | Father |
|---|---|---|
| Professional, Technical & Kindred | 101 | 234 |
| Managers, Officials & Proprietors | 55 | 446 |
| Clerical & Kindred | 129 | 155 |
| Sales Workers | 109 | 115 |
| Craftsmen, Foremen & Kindred | 22 | 663 |
| Operatives & Kindred | 384 | 866 |
| Private Household Workers | 437 | 134 |
| Service Workers, Except Private Household | 204 | 231 |
| Farmers & Farm Managers | 58 | 1089 |
| Farm Laborers & Foremen | 248 | 125 |
| Laborers, Except Farm & Mine | 17 | 376 |
| Armed Forces | 1 | 33 |
| No Job | 2760 | 216 |
| Not Available | 558 | 400 |
| Total | 5083 | 5083 |

Note: This table is based on R00515. and R00809. (mother) and R00512. and R00811. (father/head of household) from the 1967 survey. In households without a father, mother information is found under the father/head of household variables. R00511. can be used to determine the respondent's relationship to the head of the household.

### Table 4.9.3 Highest Grade Completed by Mother and Father of Respondent at Age 15

| Grade Level | Mother | Father |
|---|---|---|
| None | 137 | 145 |
| 1–2 | 76 | 89 |
| 3–5 | 445 | 548 |
| 6–8 | 1536 | 1343 |
| 9–11 | 603 | 373 |
| 12 | 752 | 478 |
| 1–3 years of college | 226 | 148 |
| 4 years of college | 106 | 104 |
| 5+ years of college | 15 | 65 |
| Don't Know | 857 | 992 |
| NA | 330 | 798 |
| **Total** | **5083** | **5083** |

Note: This table is based on R00517. and R00514. from the 1967 survey. In households without a father, mother information is found under the father/head of household variables. R00511. can be used to determine the respondent's relationship to the head of the household.

## 4.10 Fertility

The Mature 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, date of birth, and sex. Post-1976 surveys specified whether the child was an adopted son or daughter or an adopted son or daughter by marriage. 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 series of questions asked in the 1977 survey reviewed each respondent's total fertility. This series collected detailed information about each of up to 19 children ever born to the respondent and about each of up to 5 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; the child's school enrollment status; and the highest grade he or she had completed.

To ensure that researchers can create a complete fertility record for each respondent, the 1982 survey asked for information about any children born or adopted since the 1977 questions were fielded. Since the women were ages 45–59 in 1982, combining these two sections likely provides a complete record of child bearing and rearing for each respondent; any additional new children should be included on the household record.

To provide researchers with a clearer picture of the socio-economic status of the respondent's children, a special set of questions was fielded in 1986. These questions asked the respondent to describe the marital and fertility history of her four oldest biological or adopted children. The series provides information for each child on sex, age, age at first marriage, number of marriages, the way the first marriage ended, number of children, highest grade attended, and highest degree received.

In addition to these large sections, information was gathered during select surveys on the total number of children ever born to the respondent, the number of children of specific age ranges living with her at the time of the interview, and the number of children she had either adopted or who had come to live in her household from her husband's previous marriage.

***User Notes:*** While it is difficult to construct a complete fertility history for the Mature 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 88A (R04180.) in the 1977 interview. If the respondent had any children between 1977 and 1982, the additional number of children is reported in Question 92A (R06343.) in the 1982 survey.

***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.

## 4.11 Fringe Benefits

This section reviews the fringe benefit data collected for the Mature 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 1977, 1982, 1987, 1989, and 1995–99. At each survey point, information was gathered about the following fringe benefits: (1) medical, surgical, and hospital insurance; (2) life insurance; (3) a retirement pension program; (4) paid sick leave; (5) paid vacation; (6) training/educational opportunities; (7) profit sharing; and (8) stock options. In addition, select surveys collected data on the availability of paid and unpaid maternity leave, flexible work hours, child day care, paid personal time, time off for child care, time off for elder care, a flexible menu of benefits, free/discounted meals or merchandise, or dental insurance. Table 4.11.1 below summarizes by survey year the numbers of employed respondents reporting the availability of each type of fringe benefit.

***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 in 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 coded as geometric progressions through 1989. Program statements to unpack such variables are presented in Appendix C of this guide. Beginning in 1992, 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 4.11.1 Numbers of Employed Respondents Reporting the Availability of Various Types of Fringe Benefits at Their Current Job

| Reporting Availability[1] | 1977 | 1982 | 1987 | 1989 | 1995 | 1997 | 1999 |
|---|---|---|---|---|---|---|---|
| One or More Benefits | 1445 | 1703 | 1315 | 1229 | 356 | 246 | 166 |
| No Benefits | 313 | 265 | 246 | 246 | 238 | 195 | 175 |
| **Type of Benefit** | | | | | | | |
| Medical/Surgical/Hospital Insurance | 1184 | 1304 | 966 | 875 | 314 | 216 | 140 |
| Dental Insurance | – | – | – | – | 205 | 156 | 86 |
| Life Insurance | 975 | 1049 | 769 | 710 | 248 | 179 | 104 |
| Retirement Pension Program | 1033 | 1044 | 796 | 729 | 262 | 196 | 127 |
| Training/Education Opportunities | 545 | 674 | 534 | 517 | 191 | 127 | 70 |
| Profit Sharing | 215 | 242 | 204 | 197 | 79 | 51 | 26 |
| Stock Options | 176 | 168 | 153 | 134 | – | 42 | 22 |
| Free or Discounted Meals | 200 | 292 | 215 | 214 | – | – | – |
| Free or Discounted Merchandise | 240 | 291 | 211 | 176 | – | – | – |
| Paid Sick Leave | 1129 | 1230 | 947 | 816 | 241[2] | 173[2] | 105[2] |
| Paid Vacation Leave | 1208 | 1366 | 1003 | 910 | 269[2] | 173[2] | 113[2] |
| Paid Maternity Leave | – | – | – | 319 | 212 | 149 | 89 |
| Unpaid Maternity Leave | – | – | – | 133 | – | – | – |
| Flexible Work Hours | – | 471 | 420 | 374 | 142 | 108 | 74 |
| Child Day Care | – | – | – | 36 | 26 | 15 | 4 |
| Paid Personal Time | – | – | – | 376 | – | – | – |
| Time off for Child Care | – | – | – | 72 | – | – | – |
| Time off for Elder Care | – | – | – | 60 | – | – | – |
| Flexible Menu of Benefits | – | – | – | 143 | – | – | – |
| Other | – | 123 | 115 | 147 | – | – | – |

Universe: Respondents who were working, at the survey date, within a private company or as a government worker.
Note: For 1978-95, this table is based on R03380., R05369., R07918., R08978., and R20074.–R20259. 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.

## 4.12 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 1989 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 4.12.1 depicts the years for which various created variables are available.

**Table 4.12.1 Created Variables for Geographic Residence and Mobility by Survey Year**

| Created Variables | Survey Years | | | | |
|---|---|---|---|---|---|
| | 1967 | 1968 | 1969–89 | 1992 | 1995–99 |
| 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 state; different state, same region; different region, with the region identified; and outside the U.S. Birthplace information is also available for each respondent's mother, father, and maternal/paternal grandparents; see Table 4.9.1 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 3 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 3 of 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 these variables 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 1967. 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 1967 county would again be coded "1." "Appendix

10: 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 1989 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 1982 and 1989–97. 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 reason(s) she moved. The 1982 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 1992 and 1995 interviews. 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 1967 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 1967–77, 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 1967–89.

***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 (CPS)*, for the unemployment rate of the respondent's labor market of current residence. These variables are present for the 1967 and 1969–89 surveys. 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. 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.

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## 4.13 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-1981 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, with questions in most interviews about whether the respondent's health limited her work activity or prevented her from working altogether. Information was collected in four surveys regarding whether any of the health problems were the result of an accidental injury and whether the most serious injury occurred on the job. Respondents were also asked at multiple survey points to identify one or more specific workplace characteristics that they would have trouble working under because of their health (e.g., places that were hot, damp, or that had fumes or noise).

Most surveys have also asked respondents about their current health status and perceived health changes over time. Each respondent was asked during the 1967, 1986, and 1992–99 surveys to rate her health as excellent, good, fair, or poor compared to other women her age. Periodic questions have also 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). Self-reported height and weight data are available for respondents interviewed during 1992, 1997, and 1999; 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 1989 and 1992 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. In 1997 and 1999, a similar series of questions asked all respondents about high blood pressure, cancer, and heart disease, including some limited information about treatment.

In 1971, 1977, 1982, 1987, and 1989, respondents who reported that health limited the amount or kind of work 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 and 1999, a similar set of activity questions was addressed to all respondents. During each of these surveys except 1999, 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, two additional sections expanded the health module's focus. First, a new menopause 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 in 1995–99 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 1981, 1986, and 1989–99 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). Table 4.13.1 depicts respondents reporting health care coverage by provider.

The 1992–99 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. In these interviews, respondents who had employer-provided health care also stated whether they contributed toward the cost of the policy.

**Table 4.13.1 Medical Insurance Coverage of Respondent by Provider (Unweighted): 1981–99**

| Source of Insurance | 1981 | 1986 | 1989 | 1992 | 1995 | 1997 | 1999 |
|---|---|---|---|---|---|---|---|
| Total respondents interviewed | 3677 | 3335 | 3094 | 2953 | 2711 | 2608 | 2467 |
| R or any member of R's household covered by medical insurance | 3023 | 2980 | 2791 | 2741 | 2520 | 2385 | 2285 |
| R's provider: | | | | | | | |
| From R's job | 1045 | 1015 | 718 | 522 | 304 | 194 | 135 |
| From husband's/partner's job[1] | 1392 | 1007 | 486 | 258 | 179 | 129 | 89 |
| Directly from insurance company | 369 | 452 | 416 | 475 | 265 | 255 | 229 |
| Medicaid | – | 171 | 212 | 217 | 278 | 80 | 90 |
| Veterans benefits | – | 40 | 22 | 12 | 4 | 6 | 8 |
| From R's former job | – | – | 233 | 267 | 207 | 199 | 191 |
| From husband's/partner's former job | – | – | 438 | 437 | 367 | 312 | 275 |
| From other family member's job | – | – | 9 | 5 | 2 | 5 | 6 |
| Medicare | – | – | – | 404 | 736 | 1063 | 1141 |
| Other | 107 | 172 | 129 | 34 | 49 | 44 | 41 |
| Don't know/Refused | 5 | 13 | 8 | 16 | 17 | 6 | 10 |
| Total Rs covered | 2918 | 2870 | 2671 | 2647 | 2408 | 2293 | 2215 |

Source: This table is based on R05142., R05144., and R05146. in 1981; R07374. and R07376. in 1986; R09440. and R09442. in 1989; R10776. and R10778. in 1992; R33708., R33711., and R33764. in 1995; and R41396., R41399., R41401. in 1997; and R50972., R50975., and R50978. in 1999.

[1] Partner was added to this question beginning with the 1989 survey.

## Psychological Well-being

In 1989, the full 20-item CES-D (Center for Epidemiological Studies Depression) scale was administered to the Mature Women respondents (R09791.–R09810.). 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."

The complete 10-item Affect Balance Scale developed by Norman Bradburn (1969) was administered to the Mature Women respondents in 1981 (R05226.–R05235.). This measure of positive and negative feelings in the weeks before the interview provides an indication of the respondent's general psychological well-being. The statements ask, for example, whether the respondent felt particularly excited or interested in something in the past few weeks, whether she was so restless she could not sit long in a chair, and whether she felt that things were going her way.

At three survey points, the Mature 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 1969, 1972, and 1977, 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).

***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 for 1989 can be found in the "Retirement and Pension" section of the survey instrument. In 1995–99, the reduced CES-D scale items are located in the "Health" section of the questionnaire. Components of the Rotter scale can be found in the "Work Attitudes" section of the appropriate survey year questionnaires.

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## 4.14 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 1982, 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 1982. 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 1987. 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 4.14.1 summarizes the survey years and universes for which the various types of information have been collected.

### Table 4.14.1 Mature Women Household Roster Questions 1967–99

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 only) | Highest grade completed | Expected educational attainment | Work last week? | Weeks worked last year | Usual hours per week worked | Occupation (if worked in past year) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1967 | F | F age | – | F 6-24 | F ≥ 6 | F ≥ 6 | F 6-24 | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1969 | F | F age | – | F 6-24 | 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 6-24 | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1972 | F | F age | – | F 6-24 | F 6-24 | F 6-24 | F 6-24 | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1974 | F | F age | – | F 6-24 | – | – | – | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1976 | F | F age | – | F 6-24 | – | – | – | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1977 | F | F DoB | – | F ≥ 3 | F ≥ 3 | F ≥ 3 | – | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1979 | F | F age | – | F 6-24 | – | – | – | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1981 | F | F age | – | F ≥ 3 | – | – | – | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1982 | F | F DoB | – | F ≥ 3 | F ≥ 3 | F ≥ 3 | – | – | F ≥ 14 | F ≥ 14 | F ≥ 14 |
| 1984 | H | H both | – | H ≥ 3 | – | – | – | – | H ≥ 14 | H ≥ 14 | H ≥ 14 |
| 1986 | H | H both | – | H ≥ 3 | – | – | – | – | H ≥ 14 | H ≥ 14 | H ≥ 14 |
| 1987 | H | H both | – | H ≥ 3 | – | – | – | – | H ≥ 14 | H ≥ 14 | H ≥ 14 |
| 1989 | H | H both | – | – | – | – | – | H ≥ 14 | H ≥ 14 | H ≥ 14 | H ≥ 14 |
| 1992 | 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 1984, the 1982 questionnaire asked for the relationship, age, and sex of up to six unrelated household members in a separate series of questions.

**Household Residence:** Data on the type of residence in which the respondent lived are only available for 1995–99. In these surveys, 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 1992, 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 1967–76, 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." The 1977–92 surveys used an expanded set of codes, with sex usually identified, that included grandparents; children by marriage; adopted, step-, and foster children; partners; and boarders and other nonrelatives. 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 half of the respondents from the Mature 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 4.14.2 and 4.14.3). 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 4.14.2 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 Respondents | 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 data gathered during the household screening. Reference numbers are 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 4.14.3 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 records 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 4.14.4 depicts the numbers and types of pairs that existed during the initial survey years among members of the four Original Cohorts.

**Table 4.14.4 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.

## 4.15 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 the 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 4.15.1 presents the broad range of income questions asked since 1967, 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 1987, 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 1987–99 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 4.15.1 Income Questions: 1967–99

| Question[1] | Survey Year | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 67 | 68 | 69 | 71 | 72 | 74 | 76 | 77 | 79, 81 | 82 | 84 | 86 | 87 | 89, 92 | 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 4.15.2 depicts the questions pertaining to assets by survey year; note that mail and 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.

Respondents have been asked a number of times (1967, 1969, 1971, 1972) about their ownership of specific types of physical assets (not included in Table 4.15.2 due to space). Respondents stated in these years if they had purchased in the last year a new or used washing machine, dryer, stove, refrigerator, freezer, air conditioner, television, garbage disposal, stereo, or dishwasher, and if they had spent money on any major remodeling.

**Table 4.15.2 Asset Questions: 1967–99**

| Question | Survey Year | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 67 | 69 | 71 | 72 | 77 | 82, 87 | 89 | 92 | 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 Vehicles | * | | * | | | | | | |
| 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 the 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 4.15.3 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 95 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 19 percent.

**Table 4.15.3 Response Rates to Income Questions (Unweighted): 1997**

| Respondent's Income | Receive Income from Source? | Amount[1] |
|---|---|---|
| Wages/Salaries/Tips | 95.8% | 86.9% |
| Business/Farm | 95.5 | 76.3 |
| Unemployment Benefits | 96.1 | 90.9 |
| Social Security | 95.8 | 89.5 |
| Retirement Pension | 95.5 | – |
| Private Pension | – | 88.5 |
| Military Pension | – | 77.8 |
| Federal Gov. Pension | – | 89.5 |
| State/Local Pension | – | 88.7 |
| Union Pension | – | 88.9 |
| IRA/KEOGH | – | 70.6 |
| Other | – | 81.4 |

Note: This table is calculated from R41534.–R41538., R41540., R41544., R41546., and R41556.–R41570.
[1] Universe is restricted to individuals who receive income from the relevant source.

Table 4.15.4 provides information on response rates to questions on wealth in the 1997 survey. The table again shows high response rates on the ownership questions, averaging around 95 percent. 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 4.15.4 Response Rates to Questions on Wealth (Unweighted): 1997**

| Type of Wealth | | Ownership | Amount[1] |
|---|---|---|---|
| **Assets:** | Money Assets[2] | 93.1% | 67.6% |
| | Securities[2] | 92.6 | 50.5 |
| | Trusts | 94.6 | 47.6 |
| | Primary Residence | 96.6 | 85.2 |
| | Vehicles | 95.9 | 75.5 |
| **Liabilities:** | Mortgage | – | 92.7 |
| | Vehicle Debt | 98.9 | 85.2 |

Note: This table is calculated from R41463.–R41465., R41473.–R41474., R41483.–R41484., R41501.–R41502., and R41528.–R41531.

1 Universe is restricted to individuals who have the relevant asset or debt.

2 In addition, 26.3% of respondents answered the stepladder questions for money assets and 37.0% for securities.

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 1967 through 1972, upper limit dollar amounts were set to 999999. From 1974 to 1980, upper limit amounts were set to maximum values of 50000, and from 1981 to 1984 the set maximum value was 50001. Beginning in 1986, 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 1977, assets exceeding one million were converted to a set maximum value of 999997. Starting in 1992, the Census Bureau also topcoded selected asset items if it considered that 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.

**Created Values and Summary Statistics:** CHRR staff have created a small number of summary income and asset variables for this cohort. The standard variable, 'Total Family Income' or 'Total Net Income of Family,' was created only in years when personal interviews were conducted: 1967, 1969-72, 1977, 1982, and 1987–99. 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 1977, when nine individuals fell into this category.

The data set also includes a standard summary variable for wealth entitled 'Total Net Family Assets,' created in 1967, 1971, 1972, 1977, 1982, 1987, 1989, and 1995–99. '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:*** The 1989–99 questionnaires include a large number of detailed questions about the respondent's and her spouse's pension and pension income. These surveys provide information on the income from specific types of pension income, instead of grouping all pension payments together as in earlier surveys. For further information on pensions, see the "Pension Benefits & Pension Plans" section of this guide. Income sources are also discussed in the "Public Assistance Support Sources" and "Social Security & Disability" sections of this guide.

***Survey Instruments:*** Each year's questionnaire has a section on "Income" or "Assets & Income" where the variables described above are located.

***User Notes:*** A number of respondents have husbands or children 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 mother-child pairs provide researchers with information on how income and assets are propagated across generations.

## 4.16 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 4.16.1 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 Census/CHRR editing and creation procedures that affect the industry variables.

**Table 4.16.1 Industry Coding Systems Used by Survey Year**

| Coding System | 1967–82 | 1984, 1986 | 1987, 1989 | 1992 | 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-current/last job and dual job only | | | | * | |
| 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 1966, which asked about the industry of the longest job ever held and the longest job held between or since certain life cycle events (e.g., between stopping school and first marriage, between first marriage and first child, since the birth of first child, or since first marriage). These life cycle events questions were presented to varying universes (e.g., ever married, married with no children, never married with children, and never married with no children). A five-year retrospective fielded in 1977 included a question on the industry of the longest job held since June 1972. Related variables present for single survey years are (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 (1971) and (2) the industry of the employer from whom the respondent receives or will receive a pension and the type of industry providing a pension for her husband (1989).

Present for each survey year through 1992, edited variables from the Occupation & Industry (O & I) Rewrite provide one-, two-, and three-digit versions of the raw current/last job variables. 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 4.16.2 Industrial Sector of Respondents' Current/Last Job by Survey Year: 1967–99**

| 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 | Professional & Related Services | Public Administration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 67 | 4855 | 184 | 7 | 24 | 1086 | 182 | 1047 | 233 | 95 | 726 | 50 | 1023 | 198 |
| 68 | 4638 | 175 | 6 | 25 | 1048 | 183 | 983 | 208 | 91 | 665 | 46 | 1012 | 196 |
| 69 | 4487 | 186 | 5 | 29 | 998 | 161 | 907 | 204 | 101 | 635 | 40 | 1042 | 179 |
| 71 | 4382 | 177 | 5 | 27 | 891 | 159 | 897 | 211 | 90 | 614 | 33 | 1089 | 189 |
| 72 | 4306 | 169 | 6 | 26 | 837 | 161 | 888 | 206 | 86 | 606 | 32 | 1106 | 183 |
| 74 | 4162 | 172 | 6 | 35 | 818 | 148 | 813 | 187 | 94 | 549 | 23 | 1130 | 187 |
| 76 | 4033 | 158 | 4 | 34 | 750 | 134 | 815 | 195 | 105 | 530 | 27 | 1091 | 190 |
| 77 | 3821 | 159 | 3 | 39 | 698 | 127 | 743 | 181 | 116 | 529 | 20 | 1029 | 177 |
| 79 | 3692 | 145 | 6 | 38 | 669 | 122 | 701 | 184 | 93 | 513 | 20 | 1018 | 183 |
| 81 | 3557 | 134 | 1 | 40 | 635 | 115 | 670 | 186 | 89 | 495 | 21 | 986 | 185 |
| 82 | 3429 | 137 | 4 | 35 | 607 | 103 | 638 | 187 | 98 | 459 | 18 | 966 | 177 |
| 84 | 3309 | 133 | 5 | 35 | 549 | 92 | 625 | 193 | 96 | 444 | 19 | 939 | 179 |
| 86 | 3232 | 122 | 5 | 35 | 525 | 92 | 595 | 178 | 111 | 438 | 24 | 944 | 163 |
| 87 | 3143 | 115 | 4 | 34 | 504 | 87 | 571 | 175 | 111 | 445 | 22 | 901 | 174 |
| 89 | 3005 | 111 | 4 | 32 | 447 | 82 | 537 | 166 | 126 | 438 | 24 | 878 | 160 |
| 92 | 2866 | 97 | 2 | 31 | 413 | 71 | 524 | 150 | 128 | 406 | 23 | 872 | 149 |
| 95 | 1131 | 29 | 1 | 13 | 109 | 26 | 192 | 81 | 56 | 117 | 21 | 428 | 58 |
| 97 | 851 | 27 | – | 11 | 79 | 21 | 150 | 57 | 50 | 98 | 13 | 312 | 33 |
| 99 | 667 | 22 | – | 13 | 45 | 16 | 121 | 48 | 42 | 66 | 10 | 248 | 36 |

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 R00713., R00860., R01312., R01999., R02826., R03053., R03270.20, R04515., R04887., R05263., R06631., R07188., R07806., R08861., R10075., R13027., and R18995.-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 1992, industries were coded using the 1960 Census classification system. The 1995–99 data are based on the 1990 classification system.

***Survey Instruments & Documentation:*** Questions about industry affiliation can be found in the regularly fielded "Current Labor Force Status," "Work Experience," "Work Experience & Attitudes," "Retrospective Work History," "Employment," and "Respondent's Employer Supplement" sections of the questionnaire. Industry questions can also be found in the special 1967 "Work Experience Before 1966," 1989 "Pension & Retirement," and 1992–99 "Husband's Current Labor Force

Status"/"Husband's Retrospective Work History" sections of the questionnaires. 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.

> ***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 enables 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 4.16.3.

**Table 4.16.3 Occupation & Industry Variables from the O & I Rewrite**

| Variable Title | Version | Question # |
|---|---|---|
| Class of Worker at Current or Last Job | Collapsed | |
| Occupation of Current or Last Job | 3-digit | |
| Occupation of Current or Last Job | Duncan Index | [Always Blank– |
| Occupation of Current or Last Job | 1-digit | Created Variables] |
| 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 1992 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.

## 4.17 Job Satisfaction

During most survey years, respondents rated how they felt about their jobs on a scale from "like it very much" to "dislike it very much." For the early survey years, the question pertained only to the current job, thus restricting the universe to those respondents who reported working during the survey week. For the 1982 and 1987–92 interviews, the question was asked about the current or the most recent job, thereby expanding the universe to include respondents reporting work since the date of last interview. In 1995–99, respondents were asked this question in reference to all jobs since their last interview. Following this global satisfaction question, most surveys elicited information on the specific factors that the respondent liked and disliked about the job. Global job satisfaction information is available for all survey years except 1968, 1974, and 1976.

Data comparing the respondent's attitude toward her current job with her attitude toward her job in a previous survey year were collected during some of the early years of the survey. In addition, respondents were asked in select survey years whether a higher wage or liking the job was more important toward motivating them to work. Consult Table 4.17.1 for availability by survey year and reference numbers.

During the 1992 survey, respondents were asked a series of questions about the effort and concentration level required by their current or last job. In addition, the women agreed or disagreed with a series of statements about the satisfaction and importance of their jobs/work. The reference numbers for these questions are R10188.–R10197.

***Survey Instruments:*** These job satisfaction questions are located within the "Current Labor Force Status" sections of the questionnaires.

> ***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.

## Table 4.17.1 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 | Motivation to work | Things liked / disliked about job | Commitment to work |
|---|---|---|---|---|---|
| **1967** | R00095., R00721. | – | R00102., R00139. | R00096.–R00101. | R00103.–R00106., R00140.–R00143., R00729. |
| **1969** | R00967., R01014., R01327.50 | R01015., R01016. | R01037. | R00968.–R00973. | R01033.–R01036., R01327. |
| **1971** | R01611. | R01626., R01627. | – | R01612.–R01617. | – |
| **1972** | R02414. | R02429., R02430., R02853. | R02469. | R02415.–R02420. | R02465.–R02468. |
| **1974** | – | – | – | – | R02928. |
| **1976** | – | – | – | – | R03135. |
| **1977** | R03638. | R03646., R03647. | R03814. | R03639.–R03644. | R03810.–R03813. |
| **1979** | R04631. | – | – | R04632.–R04637. | – |
| **1981** | R04946. | – | – | R04947.–R04952. | R04978. |
| **1982** | R05342. | – | R06207. | R05343.–R05348. | R06206. |
| **1984** | R06724. | – | – | R06725.–R06730. | R06761. |
| **1986** | R07276. | – | – | R07277.–R07279., R07281.–R07283. | R07350. |
| **1987** | R07890. | – | R08538. | R07891.–R07893., R07895.–R07897. | R08537. |
| **1989** | R08937. | – | – | R08938.–R08940., R08942.–R08944. | – |
| **1992** | R10153., R13008. | – | – | – | – |
| **1995** | R25476.–R25481. | – | – | – | – |
| **1997** | e.g., R36578. (job #01) | – | – | – | – |
| **1999** | e.g., R44618. (job #01) | – | – | – | – |

[1] Attitude toward current job was asked in the 1967, 1969–72, 1977–81, and 1984–86 surveys. In 1982 and 1987–92, the survey inquired about the respondent's current or last job. In 1995–99, the survey asked each job the respondent held since the last interview.

## 4.18 Job Search

Most surveys of the Mature Women include 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

Basic CPS questions, used to determine a respondent's labor force status, were included in every survey except 1968 (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, retired), 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, Mature 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, last 12 months). 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).

Characteristics of the job a respondent is searching for can be found in the personal surveys between 1967 and 1982; in personal interviews from 1971–82, similar questions were asked of respondents who expected to look for work in the next year. The various details collected in these question sets include the kind of work, search methods used, the number of hours per week and amount of pay desired, and any restrictions (hours or location) that would be a factor in accepting a position.

Respondents who were not working and not looking for work in 1967 or 1969–72 were asked if they would accept a job if offered one. If they answered yes, a follow-up question asked why they were not looking for such a job now. Similarly, the 1977 and 1982 surveys asked respondents in the same group for a reason why they were not looking for work at this time. The 1995–99 surveys simply asked if a respondent intended to begin looking for work during the next 12 months.

The surveys also include the reasons behind starting or stopping a job search. These can be instrumental in understanding why a respondent's labor force status has changed from one survey to another. For those who were looking for work at the time of the last interview, questions from the 1969 survey asked how they found their current job (if now working) or why they stopped looking for work (if currently not employed and not looking). During that same survey, respondents who were not employed and not looking last year, but were now searching for work, reported what prompted their decision. In 1969, 1972, and 1977, respondents who were not working and not looking but switched to working sometime during the year between interviews were asked why they decided to take their current job and how they found it.

***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. In several years, 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 1972 Mature Women interview included an extensive series of questions concerning any job search activities respondents conducted while otherwise employed. These started by asking how often the respondent conducted this type of job search, the year when this search occurred, and what prompted the decision to look for other work at that time. The other details gathered include the search methods used, the kind of work she looked for, and whether the search was conducted in the same area where the respondent lived. If she found a job she could have had, a group of questions asked for specific characteristics of that position (i.e., kind of industry, location, salary).

Respondents who did not look for another job while employed are surveyed on whether they ever received a definite full-time job offer that they did not accept. If so, detailed questions concerning the offer then follow; if not, these respondents were asked whether they ever thought of looking for other work during this time. If the respondent considered it but never conducted a search, or never considered looking at all, she is asked about the reasons for her decision.

### Geographic Mobility

Personal surveys from 1969–82 asked respondents who had moved since a specific time (date of last interview or during the past calendar year) whether they had a job lined up at the time of their move or were looking before or afterwards. In 1971, 1972, and 1977, relocated respondents who had no job arrangements beforehand answered questions about the number of weeks spent looking until they found a job before or after the move. A 1982 question asked respondents who had moved since the 1972 interview whether they were looking for work right before or after the move. This same survey included questions for the respondent concerning whether her husband had a job lined up at the time of their move or was looking for work before or 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 1967 and 1969 questionnaires asked working respondents what they would do if they lost their current job tomorrow. One answer, "look for work," led to other questions that asked about the kind of work the respondent would look for, any specific companies where she would apply, and a reason for mentioning those employers. The 1967 survey also inquired as to the respondent's future plans after she stops her current job. If her response was "look for work," she was asked about the kind of work she would look for and whether it would be a part- or full-time position.

Respondents who were not working and not looking for work during the 1967 and 1969 interviews were asked about the possibility of accepting a job if one was offered to them. Those who answered that they would take it or that it depends were then asked if they expect to look for work within the next year. Similarly, in 1977 and 1982 respondents were asked if they would accept a job offer in the same area where they lived, at the same rate of pay that they currently received. Possible answers varied from a definite yes or no to several reasons in between: it depends on the type of work, it depends on whether she is satisfied with the company, no—the pay is not enough, etc.

Beginning in 1967 and continuing through the 1986 survey, respondents were queried 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., unemployed or out of the labor force); component questions usually 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 Mature Women questionnaires. CPS job search questions are part of the various "Current Labor Force Status," "Work Experience," and "Work History" sections. The "Retrospective Work History" questionnaire section includes the job search while employed questions. Job search questions related to geographic mobility are found in "Family Background," "Attitudes Toward Work," and "Geographic Mobility" sections. All the hypothetical job series are in the sections "Attitudes Toward Work," "Work Experience," and "Current Labor Force Status and Work History."

## 4.19 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 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 1992. Due to the redesign of the *Current Population Survey* in 1994 and the subsequent redesign of the comparable Mature Women questions, only the second set is present in 1995 and later surveys.

1. ***Activity Most of Survey Week:*** The 1967–92 '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 1982. 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 inconsistency 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 1967–92 surveys; due to changes in the *Current Population Survey* which were reflected in the Mature Women "Current Labor Force Status" section, MLR is constructed for 1995 and subsequent surveys. A series of decision rules, depicted in Table 4.19.1 below, clusters information collected from twelve core 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 except 1984 and 1986. Information on creation inconsistencies can be found in the User Notes section below.

### Table 4.19.1 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<br>2. 15+ hours worked<br>3. Class of worker entry other than "never worked"<br>4. 1–14 hours worked combined with class of worker entry other than "without pay" | 1. Absent from job or business<br>2. Class of worker entry other than "without pay" or "never worked"<br>3. Reason for absence from work other than "layoff" or "new job to begin in 30 days" | 1. Absent from job or business<br>2. Reason for absence is "layoff" or "new job to begin in 30 days"<br>3. Looking for work<br>4. Any entry in class of worker (including "never worked" and "without pay")<br>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"<br>2. Working last week<br>3. Any hours worked<br>4. Class of worker is "without pay" | 1. Method of looking for work is "nothing"<br>2. Not available for work<br>3. Reason for absence from work is "other" (not "layoff" or "new job to begin in 30 days")<br>4. Working last week<br>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 4.19.2 presents the coded values by survey year for the ESR/MLR variables.

**Table 4.19.2 Employment Status Recode/Monthly Labor Recode Codes**

| | 67–72 | 74, 76 | 77 | 79, 81 | 82, 87, 89 | 92 | 95–99 |
|---|---|---|---|---|---|---|---|
| Working | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| With a Job, Not at Work | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Unemployed | 3 | 3 | 3 | 3 | 3 | 3 | |
| Unemployed, Layoff | | | | | | | 3 |
| Unemployed, Looking | | | | | | | 4 |
| In School[1] | 4 | 4 | 4 | 4 | 4 | 4 | |
| Keeping House | 5 | 5 | 5 | 5 | 5 | 5 | |
| Retired | | | | | 8 | 7 | 5 |
| Unable to Work | 6 | 6 | 6 | 6 | 6 | 6 | |
| Disabled | | | | | | | 6 |
| (Code Not Used) | 7 | | | | | | |
| Other | 8 | 7 | 8 | 7 | 7 | 8 | 7 |
| Never Worked | 0 | 8 | | | | | |
| Noninterview | (Blank all years) | | | | | | |

[1] Although this code is present in the codebook, no information was actually collected on respondent's educational status in this survey.

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 1974, 1976, 1979, 1981, and 1987 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 4.19.3, 4.19.4, and 4.19.5 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 4.19.3 Labor Force Status: Civilian Respondents 1967–99 (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 |
| **1967** | 5083 | 2671 | 2525 | 146 | 2412 | – | 26 | 2386 | – |
| **1968** | 4910 | 2430 | 2338 | 92 | 2480 | – | 70 | 2410 | 173 |
| **1969** | 4712 | 2611 | 2499 | 112 | 2101 | – | 31 | 2070 | 371 |
| **1971** | 4575 | 2620 | 2511 | 109 | 1955 | – | 47 | 1908 | 508 |
| **1972** | 4471 | 2568 | 2471 | 97 | 1903 | – | 46 | 1857 | 612 |
| **1974** | 4322 | 2600 | 2483 | 117 | 1722 | – | 90 | 1632 | 761 |
| **1976** | 4172 | 2486 | 2347 | 139 | 1686 | – | 147 | 1539 | 911 |
| **1977** | 3964 | 2397 | 2282 | 115 | 1567 | – | 92 | 1475 | 1119 |
| **1979** | 3812 | 2291 | 2202 | 89 | 1521 | – | 158 | 1363 | 1271 |
| **1981** | 3677 | 2215 | 2109 | 106 | 1462 | – | 138 | 1324 | 1406 |
| **1982** | 3542 | 2063 | 1947 | 116 | 1479 | 15 | 95 | 1369 | 1541 |
| **1987** | 3241 | 1637 | 1572 | 65 | 1604 | 91 | 108 | 1405 | 1842 |
| **1989** | 3094 | 1441 | 1401 | 40 | 1653 | 156 | 126 | 1371 | 1989 |
| **1992** | 2953 | 1106 | 1059 | 47 | 1847 | 339 | 137 | 1371 | 2130 |
| **1995** | 2711 | 760 | 731 | 29 | 1951 | 1255 | 233 | 463 | 2372 |
| **1997** | 2604 | 598 | 584 | 14 | 2006 | 1522 | 241 | 243 | 2479[3] |
| **1999** | 2467 | 480 | 471 | 9 | 1987 | 1442 | 319 | 226 | 2616 |

Note: This table is based on 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 four interviewed respondents for whom MLR data are unavailable.

## Table 4.19.4 Labor Force Status: Non-black Civilian Respondents 1967–99 (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] | |
| **1967** | 3693 | 1763 | 1689 | 74 | 1930 | – | 15 | 1915 | – |
| **1968** | 3576 | 1654 | 1604 | 50 | 1922 | – | 31 | 1891 | 117 |
| **1969** | 3418 | 1755 | 1691 | 64 | 1663 | – | 12 | 1651 | 275 |
| **1971** | 3330 | 1836 | 1768 | 68 | 1494 | – | 21 | 1473 | 363 |
| **1972** | 3264 | 1822 | 1757 | 65 | 1442 | – | 19 | 1423 | 429 |
| **1974** | 3157 | 1848 | 1771 | 77 | 1309 | – | 52 | 1257 | 536 |
| **1976** | 3049 | 1777 | 1687 | 90 | 1272 | – | 72 | 1200 | 644 |
| **1977** | 2892 | 1727 | 1653 | 74 | 1165 | – | 48 | 1117 | 801 |
| **1979** | 2781 | 1661 | 1607 | 54 | 1120 | – | 79 | 1041 | 912 |
| **1981** | 2685 | 1627 | 1566 | 61 | 1058 | – | 80 | 978 | 1008 |
| **1982** | 2583 | 1502 | 1426 | 76 | 1081 | 11 | 43 | 1027 | 1110 |
| **1987** | 2383 | 1207 | 1166 | 41 | 1176 | 66 | 50 | 1060 | 1310 |
| **1989** | 2277 | 1073 | 1050 | 23 | 1204 | 122 | 62 | 1020 | 1416 |
| **1992** | 2170 | 841 | 810 | 31 | 1329 | 253 | 75 | 1001 | 1523 |
| **1995** | 2012 | 590 | 569 | 21 | 1422 | 985 | 109 | 328 | 1681 |
| **1997** | 1937 | 468 | 459 | 9 | 1469 | 1198 | 108 | 163 | 1756[3] |
| **1999** | 1848 | 374 | 368 | 6 | 1474 | 1150 | 150 | 174 | 1845 |

Note: This table is based on R00023. (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 in each racial group for whom MLR data are unavailable.

## Table 4.19.5 Labor Force Status: Black Civilian Respondents 1967–99 (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] | |
| **1967** | 1390 | 908 | 836 | 72 | 482 | – | 11 | 471 | – |
| **1968** | 1334 | 776 | 734 | 42 | 558 | – | 39 | 519 | 56 |
| **1969** | 1294 | 856 | 808 | 48 | 438 | – | 19 | 419 | 96 |
| **1971** | 1245 | 784 | 743 | 41 | 461 | – | 26 | 435 | 145 |
| **1972** | 1207 | 746 | 714 | 32 | 461 | – | 27 | 434 | 183 |
| **1974** | 1165 | 752 | 712 | 40 | 413 | – | 38 | 375 | 225 |
| **1976** | 1123 | 709 | 660 | 49 | 414 | – | 75 | 339 | 267 |
| **1977** | 1072 | 670 | 629 | 41 | 402 | – | 44 | 358 | 318 |
| **1979** | 1031 | 630 | 595 | 35 | 401 | – | 79 | 322 | 359 |
| **1981** | 992 | 588 | 543 | 45 | 404 | – | 58 | 346 | 398 |
| **1982** | 959 | 561 | 521 | 40 | 398 | 4 | 52 | 342 | 431 |
| **1987** | 858 | 430 | 406 | 24 | 428 | 25 | 58 | 345 | 532 |
| **1989** | 817 | 368 | 351 | 17 | 449 | 34 | 64 | 351 | 573 |
| **1992** | 783 | 265 | 249 | 16 | 518 | 86 | 62 | 370 | 607 |
| **1995** | 699 | 170 | 162 | 8 | 529 | 270 | 124 | 135 | 691 |
| **1997** | 667 | 130 | 125 | 5 | 537 | 324 | 133 | 80 | 723[3] |
| **1999** | 619 | 106 | 103 | 3 | 513 | 292 | 169 | 52 | 771 |

Note: This table is based on R00023. (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 in each racial group for whom MLR data are unavailable.

## 4.20 Marital Status & Marital Transitions

**Marital Status:** Questions on marital status have been asked of respondents in each survey year except for the 1968 mail survey. In general, the resulting 'Marital Status' variable includes six coding categories: married—spouse present, married—spouse absent, widowed, divorced, separated, and never married.

Other marital status variables include: (1) A 'Marital Status and Family Status' variable (which combines marital status with the presence of children), created in 1967 and 1969–76; (2) a 'Marital Status and Labor Force Group' variable (which combines marital status with labor force participation), created in 1967 and 1972; and (3) marital status of the children, available in 1986 (e.g., 'Living Children Born or Adopted - #1 - Current Marital Status'). Age at first marriage, number of times married, and way first marriage ended were also collected for daughters of respondents in 1986.

**Marital Transitions:** It is possible to construct a fairly comprehensive marital history using the Mature 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: 1969–72, 1977, 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. For instance, in the first survey, although marital transition questions were asked, only the dates of the first and most recent marriage were recorded; if the respondent was married more than twice, the dates of the "middle" marriages are missing.

*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 Mature Women survey (1967–99). 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 *Mature 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 1979, was a noninterview in 1981, then was interviewed again in 1982, her marital history was updated since a specified date in 1981 (not 1979). If she was married in 1979 but divorced and remarried before 1981, her marital status would be married for both 1979 and 1982, with no marital transitions recorded. Her husband, however, would be a different person with different characteristics than in 1979. 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 Mature 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 except the 1968 mail survey; data are collected about the partners of respondents beginning with the 1987 survey. Spouse/partner topics 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 1992 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 (1992 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:*** 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 is collected in the "Marital History," "Family Members," "Family Background," "Marital Status," or "Household Record" questionnaire sections.

## 4.21 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 4.21.1 shows which coding systems have been used in various survey years.

**Table 4.21.1 Occupation Coding Systems Used by Survey Year**

| Coding System | 1967–82 | 1984, 1986 | 1987, 1989 | 1992 | 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-current/last job and dual job only | | | | * | |
| 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 editing and creation procedures utilized for certain occupation variables. This series ended in 1992 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 Mature Women.

***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.

***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 system 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 1992 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, an employer change, or both.

### References

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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.

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## 4.22 Pension Benefits & Pension Plans

This section reviews information on receipt of pension benefits and on pension plans for which the respondent is eligible. It also describes the special pension plan matching project conducted in conjunction with the 1989 survey. For details on income from Social Security/Railroad Retirement or disability insurance, see the "Social Security & Disability" section of this guide.

### Pension Income

One focus of the Mature Women pension data collection has been receipt of various entitlements by the respondent and/or other members of the respondent's household over a twelve-month period. The 1967–72 and 1977 surveys gathered information on whether income had been received in the past calendar year from any local, state, or federal governmental pensions or from any other retirement pensions and, if so, the pension benefit amount received from each. The universe for the 1967–72 survey years was any (unspecified) family member; during 1977, receipt and amount information was collected separately for the respondent, her husband, and other family members. The 1974, 1976, and 1981 surveys fielded questions which did not distinguish the source of the pension benefit, combining Social Security and other pension income.

The 1982 and subsequent surveys included a set of pension income questions that asked, in a separate series, whether the respondent or her husband had received any pension income in the past calendar year/last 12 months and, if so, the amount. Beginning in 1982, coding categories consistently identified plan providers as one of the following: private employer, the military, the federal government, state or local government, a union, a personal plan (e.g., IRA, Keogh, or 401k), or another source.

***Survey Instruments & Documentation:*** Questions on pension income are found in the "Assets & Income" questionnaire sections. Each year's *Interviewer's Reference Manual* contains detailed instructions on the specific types of monies to be included and excluded when recording each income source.

### Pension Plans

In the late 1970s, the Mature Women surveys began to ask respondents about their expected retirement income. A series fielded in 1979 included questions about working respondents' eligibility for a pension plan—other than Social Security/Railroad Retirement—from their employers, the age at which eligibility for full or reduced benefits would be attained should they remain with their employer, and the age at which benefits could be drawn should they leave their current job today. Also collected was information on the eligibility of the respondent's spouse for other pension benefits from one or more of the following sources: a personal plan, a private employer, a government employer, or the military.

The 1982 and 1986 questionnaires included similar sets of questions designed to explore current/expected pension coverage of the household from current or past employment. Questions included: (1) whether the respondent or her spouse was eligible for or already receiving pension benefits from a current employer or from another job held in the past; (2) whether the respondent was eligible for or already receiving survivor benefits or other benefits from a husband's or ex-husband's employment or military service; and (3) whether the respondent or husband had a personal retirement (IRA or Keogh) plan.

More detailed data were collected beginning in 1989. This survey included questions designed to identify the most important pension plan for which a respondent was eligible through her own employment, the most important pension plan of a spouse, and any other benefits for which a respondent was eligible through a spouse's or ex-spouse's employment or military service. During this fielding, information was gathered on:

(1) characteristics of the pension provider (whether the source of the pension was a private employer; the military; another federal, state, or local governmental unit; a union; etc.)
(2) the industry of the provider and corresponding occupation of the respondent or spouse
(3) characteristics of each plan (age/service year requirements and estimated pension benefit amounts for full versus reduced benefits; method of determining benefits; vesting rules; and for those already receiving benefits, actual monthly benefit amounts)

Information collected in 1989 about the respondent's pension plans was used to contact the plan providers and gather additional data. This special pension matching project is described below.

In 1992 and each subsequent survey, extensive data have been collected regarding multiple employer-provided pension plans; coverage under pension plans obtained through self-employment is not included. Separate questionnaire sections collect information for both the respondent and her husband on: (1) future pensions from current employers, (2) current pensions from previous employers, and (3) future pensions from previous employers. Each series gathers details on participation in defined benefit and/or defined contribution pension plans offered by an employer. For those participating in a defined benefit plan, data are collected on the number of years included in the plan, the amount of money contributed, the age at which full or reduced benefits would be/were being received, and expected/actual benefit amounts at retirement. For those participating in a defined contribution plan, information is gathered on the type(s) of account plan (e.g., thrift or savings, 401k, 403b, Supplemental Retirement Account, profit sharing, stock purchase), amounts both employer and respondent contributed, the total dollar amount of contributions ever made, and how the dollars were invested. All respondents providing pension plan information are asked whether an early retirement option with incentives had been offered and, if so, the type(s) (credit for extra years of service, increased benefits, early benefits, lump sum settlement, etc.). Additional information is collected from those covered under a pension plan from a previous employer on type of employer, years worked for that employer, years included in the pension plan, and employment stop date. Those currently receiving a pension from a previous employer report the year they started receiving this pension, the amount received, cost of living adjustments, and changes in the pension benefit amount over time.

***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 1982 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 & Documentation:*** Early questions on eligibility for pension benefits are found in the "Retirement," "Retirement and Pension," and "Current Labor Force Status & Work History" sections of the questionnaires. The 1992 pension data questions are located in the following sections of the 1992 questionnaire: "Respondent Employed: Future Pensions from Current Employer," "Respondent's Current Pension(s) from Previous Employers," "Respondent's Future Pension(s) from Previous Employers," "Husband Employed: Future Pensions from Current Employer," "Husband's Current Pension(s) from Previous Employers," and "Husband's Future Pension(s) from Previous Employers." The pension questions for 1995–99 are located in the "Respondent Employer Supplement," "Husband Employer Supplement," and "Income and Assets" sections. The interviewer's reference manuals *(Field Representative's Manuals)* provide definitions of the various types of pension plans. See "Appendix 24: Pension Plan Data Documentation" in the *Codebook Supplement* for additional information.

### Pension Matching Project (1989)

Address information collected during the regular 1989 survey permitted the Census Bureau to contact pension providers identified during the 1989 survey for the subsequent Pension Matching Project. Copies of the relevant Summary Plan Descriptions (SPD), actual pension plans, and Internal Revenue Forms-5500 were obtained. Details on each defined benefit or defined contribution plan were systematically coded by the Institute for Survey Research (ISR) at the University of Michigan using the protocol developed for the *Survey of Consumer Finances (SCF)*. Respondents eligible for the pension-matching project were those who provided, during administration of the main questionnaire, pension plan and provider locator information for one or more of the pension sources listed below. Of the approximately 1,900 respondent households reporting pension eligibility from one or more sources, plan information was linked to respondent information for 1,329 respondents. Use the series of 'ISR Pension Plan Matching' variables on the Mature Women main data file to locate the correct pension plan.

**Table 4.22.2 Key Questions: 1989 Mature Women Pension Matching Project**

| Source of Pension Plan | Question Numbers | Reference |
|---|---|---|
| (1) the most important pension plan for which a respondent was eligible through her own employment | Q79a<br>Q79b | R09812. = 1 or<br>R09813. = 1 or 3 |
| (2) the most important pension plan for which a spouse of a married or separated respondent was eligible through his own employment | Q80a<br>Q80b | R09846. = 1 or<br>R09847. = 1 or 3 |
| (3) survivor's benefits or any other benefit from the employment or military service of a spouse or ex-spouse for which a respondent–of any marital status except 'never married'– was eligible | Q81c<br>Q82c | R09880. = 1 or 3 or<br>R09886. ≥ 1 |

Of the 815 unique pension plans, 538 (66.0 percent) are defined benefit plans, 259 (31.8 percent) are defined contribution plans, and 18 (2.2 percent) are plans with combined characteristics. Users should note that coverage under multiple and different types of pension plans is possible. For example, a household may receive or be eligible to receive pension benefits from one defined benefit and three defined contribution plans. The source of the four plans could be solely from one household member's (e.g., the spouse's) employment, or from more than one member.

The *SCF*-based instruments recorded data on plan definitions, benefit formulas, and other provisions applicable to six different retirement conditions: early retirement, normal retirement, late retirement, employment termination prior to retirement, disability retirement, and death or survivor's benefits. Each record contains the identification, linkage, and plan characteristic variables listed below in Figure 4.22.1.

***Data Files:*** The data on pension plan characteristics are available on a supplementary data set. This pension plan file contains a pension plan number and the detailed plan characteristic information listed above for each of the 815 plans coded by ISR. This data set is included in the 1999 data release; the series of ISR Pension Plan Matching variables on the main data file can be used to locate the correct plan.

**Figure 4.22.1 Identification, Linkage, and Plan-Specific Variables: Pension Plan Data (1989)**

CODING ID#: the unique number assigned by ISR to each pension plan. Incorporated within the plan number is information on type of pension plan. Plans with ID#s below 3000 are defined benefit plans; those with ID#s from 3000–4999 are defined contribution plans; and those with ID#s 5000 and over are combination defined benefit and defined contribution plans.

SEQ#: the unique number identifying the pension plan/provider combination.

PPID#: the identification number of the pension provider. Identical numbers mean the same pension provider; however, different numbers do not necessarily mean different providers.

PLAN#: an identification number of the pension plan or plans reviewed. The 997/998/999 series indicates that multiple plans from the same provider were examined.

HHID#: the identification number of the individual(s) covered under the pension plan. Each individual in a household has been assigned a different HHID#. Up to 52 eligible individuals can be covered under a given pension plan.

OTHER SEQ HHID#: the SEQ# of another plan under which the same individual is covered.

INTEG SEQ HHID#: the SEQ# of the plan containing information on how benefits are integrated for this individual.

**General Plan Provisions** (for definitions of terms, see Appendix 24 in the *Codebook Supplement* )

| Defined Benefit Plans: | Defined Contribution Plans: |
|---|---|
| Variable Definitions | General |
| Benefit Formulas | Participant & Employer Contributions |
| Eligibility Requirements | Retirement Benefits |
| Special Features | Early, Late, Mandatory Retirement Requirements |
| | Disability, Death & Survivor Benefits Provisions |
| | Payment Options |
| | Classification and Miscellaneous Provisions |

***Survey Instruments & Documentation:*** Documentation for this separate pension plan file consists of the following ISR-produced materials:

(1) Overview: a description of the *Survey of Consumer Finances* including a helpful list of acronyms and definitions of some of the more commonly used terms found within both the ISR and NLS coding documents

(2) Coding Reference Manual: a document containing instructions to coders of the NLS Pension Coding Instruments

(3) NLS Pension Coding Instruments: copies of the three coding instruments that were used to record, from each SPD, General Plan Provision items (Part I), Defined Benefit Pension

Plan items (Part II), and Defined Contribution Pension Plan items (Part III) of the NLS pension plans

(4) NLS Pension Provider Coding Sheets: a summary instrument which combined the characteristics of each plan with identification of each household eligible for that plan

## Reference

Gustman, Alan L. and Steinmeier, Thomas L. "Retirement in a Family Context: A Structural Model for Husbands and Wives." NLS Discussion Paper 94-17. Washington, DC: Bureau of Labor Statistics, 1994.

## 4.23 Public Assistance Support Sources

Data on public assistance income sources have been collected during all survey years 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 4.23.1 outlines these variations.

Beginning in 1982, data were collected on the number of months in the past year the respondent or husband/partner received each type of assistance. In 1982 and 1987–99, respondents also reported the monthly average welfare (AFDC) income and monthly average SSI income they received. Monthly average variables are available for welfare/public assistance in 1979, 1981, 1984, and 1986.

***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 4.23.1 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 | | |
| 1967 | R00468. | R00469. | R00472. | – | – | Past Calendar Year | Family Members |
| 1969 | R01099. | R01100. | R01102. | – | – | Past Calendar Year | Family Members |
| 1971 | R01776. | R01777. | R01779. | – | – | Past Calendar Year | Family Members |
| 1972 | R02601. | R02602. | R02604. | – | – | Past Calendar Year | Family Members |
| 1974 | – | R03037. | – | – | – | Previous 12 Months | Family Members |
| 1976 | – | R03247. | R03254. | – | – | Previous 12 Months | Family Members |
| 1977 | – | R04121. | R04123. | R04114. | – | Past Calendar Year | Family Members |
| 1979 | – | R04793. | R04789. | – | – | Previous 12 Months | R/Husband |
| 1981 | – | R05132. | R05129. | – | – | Previous 12 Months | R/Husband |
| 1982 | R06326. | – | R06323. | R06329. | R06212. | Past Calendar Year | R/Husband |
| 1984 | – | R07076. | R07073. | – | – | Previous 12 Months | R/Husband |
| 1986 | – | R07637. | R07634. | – | – | Previous 12 Months | R/Husband |
| 1987 | R08657. | – | R08654. | R08660. | R08543. | Past Calendar Year | R/Husband/Partner |
| 1989 | R09766. | – | R09763. | R09769. | R09631. | Past Calendar Year | R/Husband/Partner |
| 1992 | R10692. | – | R10689. | R10695. | – | 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 |

## 4.24 Race, Ethnicity & Nationality

**Race:** One race variable (R00023.) 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 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 4.24.1 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 4.24.1 Number of Respondents by Race and Nationality**

| Nationality | Total | White | Black | Other |
|---|---|---|---|---|
| Total | 5083 | 3606 | 1390 | 87 |
| U.S. or Canada[1] | 3302 | 1985 | 1294 | 23 |
| North or West Europe | 832 | 825 | 6 | 1 |
| Central or East Europe | 255 | 254 | 0 | 1 |
| South Europe | 233 | 229 | 2 | 2 |
| Latin America | 85 | 80 | 1 | 4 |
| Other | 113 | 35 | 24 | 54 |
| NA | 263 | 198 | 63 | 2 |

Note: This table is based on R00023. and R00808.

[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' (R00625.), created in 1967, 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 4.24.2.

**Table 4.24.2 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 1995 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 1997 for respondents who were not interviewed in 1995 and in 1999 for respondents who had not been interviewed in either of the prior two surveys.

***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 1967 questionnaire. Birthplace was recorded in the "Family Background" section of the 1967 questionnaire. The 1995–99 ethnicity question can be found in the "Other Family Background" section. 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.

## 4.25 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:** All survey years except 1968 included a set of income questions on whether one or more family members had received Social Security or Railroad Retirement payments during the past year. Receipt by the respondent, her husband, or another family member was specified during most survey years. During four interviews (1974, 1976, 1979, and 1981), household income from Social Security was not separated from income received from other pension sources, nor were the specific family members receiving such payments identified.

Beginning with the 1979 survey, separate questions address the current/future eligibility of the respondent and, during select years, that of her husband, for Social Security benefits. Respondents interviewed in the 1979, 1982, 1986, and 1989 surveys were asked whether they would be eligible for Social Security based on their own work record when they reached retirement age. Information on the eligibility of the respondent for benefits from her husband's or ex-husband's account was collected during 1982, 1986, and 1989. The total number of years the respondent was employed in jobs covered by Social Security or Railroad Retirement was gathered during 1984, 1986, and 1989. The 1989 and 1992 surveys included a question asking whether the respondent was covered by Social Security or Railroad Retirement in her current/last job.

**Social Security Disability/Other Disability Payments:** Information on receipt of and amount of benefit payments received as a result of a disability was collected during each survey year except 1968. Separate questions that differentiate income received from Social Security Disability, Veterans Compensation or pension, Workers' (previously Workman's) Compensation, or another disability payment are present in most survey years. The 1974, 1976, 1979, and 1981 question wording merges disability income with income received from interest and dividends, while the 1984 and 1986 interviews asked respondents about whether any (unspecified) disability income from such sources as Social Security Disability, Workers' Compensation, etc., had been received. Both universes (any family member, respondent or other family member, respondent or husband/partner) and time frames (past calendar year, last 12 months) vary across survey years. The 1992–99 surveys included a set of questions on whether the respondent and/or her husband had applied for or received Social Security Disability benefits either in her lifetime or since the last interview. If so, the survey recorded the age of each family member when receipt began and the year disability benefits were last received.

**Figure 4.25.1 Instructions to Census Interviewers for Coding Social Security, Disability & Other Pension Sources**

| | |
|---|---|
| ***Social Security Payments*** | Include [those] Social Security payments received by persons who have worked long enough in "covered" employment, that is, employment in which Social Security payments were made from a person's salary, to be entitled to payments. Social Security payments may also be paid to the spouse or dependent children of covered workers. Exclude Supplemental Security payments. Do not add in Medicare premiums which are automatically deducted. |
| ***Railroad Retirement Benefits*** | U.S. Railroad Retirement benefits are based on a person's long-term employment (10 years or more) in the railroad industry. Exclude pensions established by railroad companies or unions to supplement Federal Railroad Retirement. |
| ***Social Security Disability Payments*** | Include any payments made to disabled workers under the Social Security disability insurance program (SSDI). Also include Black Lung payments to coal miners and disability payments made under the Railroad Retirement Act. Do not include payments from Supplemental Security Income (SSI) or any Social Security benefits other than disability payments. |
| ***Any Other Disability Payments*** | Include payments received from private disability insurance policies and from the type of private health insurance which provides income when the individual is unable to work because of illness or injury. Also include disability payments from unions or employers. |
| ***Veterans Compensation or Pension*** | Include money received as periodic benefits paid to disabled former members of the armed forces by the Veterans Administration for service-connected disability. Exclude [any] veterans pension paid to the survivor of a veteran and compensation paid to the survivor of a veteran. |
| ***Workers' Compensation*** | Workers' compensation consists of lump sum or periodic payments to employees injured in connection with their jobs. The payments may come from private insurance carriers, State funds, and self-insured employers under Federal and State workers' compensation laws. If the payments come from an insurance company, the insurance must have been paid by the employer, not the employee. |

Source: *1992 Survey of Mature Women Field Representative's Manual* (Census Bureau 1992).

***Survey Instruments & Documentation:*** Questions on income from and eligibility for Social Security and disability are found in the "Assets & Income," "Retirement" or "Retirement and Pension," and post-1988 "Current Labor Force Status & Work History" sections of the questionnaires. The 1992–99 retrospectives on Social Security Disability are located in "Income." Each survey year's *Interviewer's Reference Manual* contains detailed instructions on the specific types of monies to be included and excluded when recording each income source (see Figure 4.25.1).

## 4.26 Training

Training questions were fielded during all survey years except 1968, 1974, 1976, and 1992. The 1967 survey collected information on the training experiences of each respondent during high school and since her regular schooling ended, and on the types of professional or trade certification ever received. Subsequent surveys updated this training and certification record, added both on-the-job training and apprenticeship as categories in the training type/training provider series, and gathered information on the future educational and training plans of the respondents.

The 1967 survey collected information on whether the respondent had been enrolled during high school in a vocational or commercial curriculum and whether, since attending regular school, she had ever participated in a full-time company training program of two or more weeks duration; in other technical or skill training; or additional general training in such courses as English, math, science, or art. Information was gathered for each program on the type of training (professional/technical, managerial, clerical, skilled manual, or general courses); length of and hours per week spent in the training program; completion status; whether the skills acquired were used on the current job; and whether this training had ever been used on a job. In addition, the 1967 survey fielded questions on the respondent's plans to enroll in educational or training courses in the future, whether a certificate had ever been obtained to practice any profession or trade, and, if so, the type (professional [teacher, nurse, etc.] or trade [beautician, etc.]).

A series of variables created from these data summarized—for the longest training program in which the respondent had been enrolled outside of regular school—the characteristic information on each program described above. Another variable coupled the type of training with whether the training was completed. This latter variable was created once again with the 1972 data.

The next four personal interviews (1969, 1971, 1972, and 1977) updated the respondent's record with additional training courses or educational programs in which she participated and/or any new diplomas, degrees, and certificates acquired since the last interview. The 1972 questionnaire repeated the 1967 series on the respondent's plans to seek additional training in the future. Created variables included 'Type and Duration of Longest Occupational Training Program' since 1967 (1969 interview) and since 1967 and 1969 (1971 interview); coding distinguished between programs of "less than 16 weeks" and "16 weeks or more."

Questions about on-the-job training (OJT) and/or other training or educational programs in which the respondent had participated since the last interview were featured in the 1979–89 and 1995–99 surveys. For each OJT program in which the respondent was enrolled, information was collected on the number of weeks, hours per week, and program completion.

The second training series in the 1979–89 and 1995–99 surveys continued to record the same type of information as in earlier surveys with the following exceptions/changes: (1) New coding categories were added to the sponsor/provider questions that included apprenticeship beginning in 1981 and community organizations beginning in 1984. (2) In 1984, a government agency category was added that was intended to reflect training programs operated by CETA, JTPA, or other manpower programs. (3) The coding categories for the type of certification series shifted for the 1979 survey only to professional/technical, managerial, etc. (4) Beginning with the 1981 survey, the certification coding categories included: certificate, license, journeyman's card, or other. (5) The 1984 and subsequent surveys added two questions, one on the reason the respondent took the other training program and the second on the kind of work for which she was being trained; the 1995–99 surveys also asked if the program was required by the respondent's employer. (6) Finally, a question on whether the other training program was part of an apprenticeship program was added to the 1987 and 1989 questionnaires; this question supplemented apprenticeship as a coding category in the provider type series.

Table 4.26.1 presents by survey year and race the numbers of respondents participating in on-the-job and other vocational training programs during 1979–97. Because the universe of respondents asked these questions was different in 1999, that year is not included in the table.

**Table 4.26.1 Numbers of Respondents Participating in Training Programs by Type of Training and Race: 1979–97**

| | On-the-Job Training | | | Other Vocational Training[1] | | |
|---|---|---|---|---|---|---|
| Year | Total | Non-black | Black | Total | Non-black | Black |
| **1979** | 341 | 265 | 76 | 284 | 238 | 46 |
| **1981** | 422 | 326 | 96 | 300 | 257 | 43 |
| **1982** | 327 | 245 | 82 | 193 | 164 | 29 |
| **1984** | 358 | 281 | 77 | 236 | 200 | 36 |
| **1986** | 354 | 284 | 70 | 206 | 173 | 33 |
| **1987** | 273 | 231 | 42 | 155 | 133 | 22 |
| **1989** | 313 | 250 | 63 | 151 | 122 | 29 |
| **1995** | 167 | 129 | 38 | 88 | 74 | 14 |
| **1997** | 105 | 82 | 23 | 67 | 54 | 13 |

Note: This table is based on R00023. (race), R04836., R04845., R05211., R05215., R06507., R06511., R07132., R07136., R07741., R07745., R08680., R08684., R09913., R09917., R34786., R34795., R41948., and R41957.

[1] The 1987 and 1989 surveys asked whether the other training program was part of an apprenticeship program. Small numbers of respondents reported participation in this type of training.

***Survey Instruments & Documentation:*** The "Education & Training" or "Education" sections of the questionnaires contain the training questions. Appendices 6 and 7 in the *Codebook Supplement* contain derivations for the constructed 'Type & Completion of Training Prior to 67' and 'Type & Completion of Occupational Training Taken 67–72' summary variables.

## References

Bureau of Labor Statistics. *Work and Family: Never Too Old to Learn*. Report No. 856. Washington, DC: U.S. Department of Labor, 1993.

Parnes, Herbert S., et al. *Dual Careers: A Longitudinal Study of Labor Market Experience of Women*. Manpower Research Monograph No. 21. Washington, DC: U.S. Government Printing Office, 1970.

Shaw, Lois B. "Effects of Education and Occupational Training on the Wages of Mature Women." Columbus, OH: Center for Human Resource Research, The Ohio State University, 1983.

## 4.27 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 1997 survey, a limited amount of data was collected about parents or transfers. The 1967 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. In 1982, 1984, and 1987–99, the survey asked respondents whether they regularly spent time caring for a relative or friend outside of their household and the number of hours spent at this task each week. The 1984, 1987, and 1989–99 surveys included questions about the respondent's care of household members, including her relationship to the person needing care. These questions on caring for ill and disabled persons are located in either the household chores series or the "Health" section of the questionnaire, depending on the survey year. 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 1997 survey 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. 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. Respondents also provided information about the financial situation of their parents and in-laws by answering questions about parental income 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 1997 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 1997 survey 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 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 1997 Mature 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.

Finally, the transfers section included 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 1997 questionnaire.

## Children and Transfers

To capture complementary information about intergenerational transfers in the opposite direction, the 1999 survey asked Mature 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 4.27.1.

**Figure 4.27.1 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 4.27.1 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 4.27.1 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 | 2608 | Total respondents interviewed | 2467 |
| Number of respondents: | | Number of respondents: | |
| With at least one living parent (R's or husband's) | 475 | With at least one living child | 2138 |
| Providing time transfers to any parent | 266 | Providing time transfers to any child | 586 |
| Providing financial transfers to any parent | 201 | Providing financial transfers to any child | 1280 |
| Providing any transfer to any parent | 324 | Providing any transfer to any child | 1390 |
| | | Receiving time transfers from any child | 795 |
| | | Receiving financial transfers from any child | 1354 |
| | | Receiving any transfer from any child | 1530 |
| Answering questions on estate of father or mother | 2147 | Answering questions on own estate | 1244 |

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.

## 4.28 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:** All interviews except the 1968 mail survey collected earnings, periodicity, and usual hours worked per week data 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 each survey year based on a common hourly time unit, 'Hourly Rate of Pay at Current or Last Job *KEY*.' Rate of pay data for dual and/or intervening jobs are available for each post-1971 personal survey. The longest-job-held-since-June 1972 series fielded in 1977 included a rate of pay for that job. Follow-up questions for those respondents providing any time unit other than "per hour" were included in post-1987 surveys that asked whether wages were compensated by the hour on that job and, if so, an hourly wage rate was collected. In addition, post-1987 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 1992 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. Total pay along with an applicable time period for those respondents employed within the teaching profession is specified beginning with the 1992 survey. A special hourly pay rate variable (R03064.) created for 1974 provides values for those who reported earnings in that year from a current/last job and for an additional 556 respondents reporting hourly wage information at an earlier interview.

***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 in the codebook; Appendix 19 in the *Codebook Supplement* includes additional derivations.

***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. 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: Center for Human Resource Research, The Ohio State University, 1987.

## 4.29 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 1992 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 undercounting 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 1967 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) year worked if before 1962, the (specific) month and year if employment occurred between 1962 and 1965, or a residual category indicating that the last time worked was January 1966 or later. 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., 1966).

Respondents were filtered through a detailed section on work experience before 1966, with different questions depending on marital status and fertility. Respondents who had been married or were currently married and had children were asked for information on the longest job held between the time they stopped attending school and their (first) marriage, the longest job held between the time they married and had their first child, and the longest job held since the birth of their first child. Respondents who were married and who had no children were asked for information on the longest job held between the time they stopped attending school and their (first) marriage, and the longest job held since their (first) marriage. Those who had never married and who had no children were asked for information on the first job in which they worked six months since attending school full-time and the longest job ever held since they stopped attending school full-time. The never-married group with children was asked for information on the longest job held between the time they stopped attending school and the birth of their first child, and the longest job held since that child's birth. Each of these groups was also asked a global question on how many years since these benchmark events they had worked at least six months. A series of created variables (R00744.05–R00744.50) presents this information.

The 1968 survey was a mail interview in which all respondents were asked for information on the job they held last week; the summary weeks questions covered the past 12 months. In the 1969 interview, those respondents who were currently working or who had held a job since June 1, 1968, were asked about that job; summary weeks questions again refer to the last 12 months.

In 1971, the current or last job, the detailed work history section, and the summary weeks questions each used the date of the previous interview as the reference period. In the 1972 survey, the 1971 pattern was repeated. 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 constructed for 1966–72.

The gaps in the summary weeks information began with the 1974 telephone interview. Data on the current or last job were collected back to the date of the previous interview; however, the summary weeks questions only asked about the previous 12-month period. The 1976 telephone interview followed the 1974 pattern.

The 1977 personal interview collected information for those respondents who had worked since the date of the 1976 interview (or April 4, 1976, if the respondent was not interviewed in 1976) on the current or last job and detailed work history. The summary weeks questions were asked of all respondents for the period "since 1976." Respondents were also asked for information on the longest job held since June 1972.

The 1979 telephone interview referred to the date of the 1977 interview (or April 15, 1977, if the respondent was not interviewed in 1977) for the current or last job and to the previous 12 months for the summary weeks questions. A new type of question (item 12d) obtained information on the number of weeks worked for the 12-month period previous to the last 12 months. Answer categories are numbered "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 1981 telephone interview repeated the 1979 pattern.

The 1982 personal interview repeated the 1977 pattern. Respondents were asked for information about both their current or last job and all other jobs held since the date of the 1981 interview (or since April 5, 1981, if the respondent was not interviewed in 1981). The reference period for the summary weeks questions was the last 12 months. For those respondents who had not worked since the last interview, information on weeks unemployed and weeks out of the labor force was collected using item 6. When using the items from the questionnaire to construct weeks worked, users should note that item 21 is bounded differently than usual. Because researchers were running into inconsistencies trying to create summary measures over time, a set of questions dealing with the number of years worked since the respondent was 18 years old was added to this questionnaire. Items 41a through 41c gather information on the number of years since she was 18 that a respondent held a job at all, in how many of those years she worked six months or more, and, of those years, how many she usually worked at least 35 hours per week.

The 1984 telephone interview referred to the date of the 1982 interview (or August 1, 1982, if the respondent was not interviewed in 1982) for the current or last job. Two sets of summary weeks questions referred to the last 12 months and the 12-month period previous to that. Unlike the 1979 and 1981 questions, the answer categories were actual weeks; by using item 12e, one can separate out weeks unemployed from weeks out of the labor force. Items 5c and 5d provide similar information on respondents who had not worked at all since the date of their last interview. Variables need to be created to combine this information for all interviewed respondents.

The 1986 telephone interview referred back to the date of the 1984 interview (or May 5, 1984, if the respondent was not interviewed in 1984) for the current or last job. Two sets of summary weeks questions referred to the last 12 months and the 12-month period previous to that. For those who have not worked at all since 1984, the weeks unemployed and weeks out of the labor force information is collected using items 5b through 5d. Variables need to be created to combine this information for all interviewed respondents.

The 1987 personal interview repeated the 1982 pattern. Respondents were asked about their current or last job and about all employers (not jobs) for whom they had worked since the date of the 1986 interview (or since August 5, 1986, if the respondent was not interviewed in 1986). The focus of the detailed work history section was deliberately changed, and the lead-in question was revised to ask about employers (not jobs) for whom the respondent had worked three or more consecutive months. This year was one of two years (1987 and 1989) that information was collected on all employers for whom the respondent had worked for three or more consecutive months; in all other years respondents are asked about all jobs, regardless of tenure. Summary information was collected for the last 12-month period in items 26a through 26c. For those respondents who had not worked since the previous interview, information on weeks unemployed and out of the labor force can also be found in items 26a through 26c.

The 1989 survey was also a personal interview due to a BLS decision to eliminate the 2-2-1 pattern and field a personal interview every other year. Respondents were asked for information on both their current or last job and on all employers (not jobs) for whom the respondent had worked for three or more consecutive months since the date of the 1987 interview (or since August 15, 1987, if the respondent was not interviewed in 1987). Summary weeks information was collected for the period since the 1987 interview.

The 1992 personal interview included questions on the respondent's current or last job and on all employers for whom the respondent had worked since the date of the 1989 interview (or since the date of last interview, for those not interviewed in 1989). The detailed work history questions were asked about all employers for whom the person had worked since the last interview. Because this change in the reference date back to the previous interview coincided with changes in rules about dropping respondents after two years of noninterview, Census interviewed some respondents whose last interview occurred in the mid-1980s. Certain respondents will consequently have work histories that go back past 1989. The summary weeks questions cover the three-year gap in one-year increments.

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" sections of the questionnaire in various survey years.

## 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 *Mature 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 4.29.1 reports the average number of weeks worked for individuals interviewed at each survey point. In Table 4.29.2, this information is broken down by the number of survey years the respondent reported a positive number of weeks worked. Table 4.29.3 gives the average number of weeks worked for each survey. Finally, Table 4.29.4 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 across the years. However, use of this extra information was beyond the scope of these tabular presentations.

## Table 4.29.1 Average Number of Weeks Worked in All Survey Years by Race (Unweighted): 1967–99

| Race | Number of Cases | Average Weeks[1] |
|---|---|---|
| **Non-black** | 1435 | 25.1 |
| **Black** | 455 | 26.3 |
| **Total** | 1890 | 25.4 |

Universe: Individuals who have been interviewed in all survey years (1967–99).
Note: This table is based on R00023. (race), R00171., R00865., R00950., R01992., R02832., R02920., R03123., R04522., R04650., R04965., R06635., R06744., R07333., R08851., R10065., R13016., R25502., R36368., and R44385.
[1] Zeros are included in calculating averages.

## Table 4.29.2 Average Number of Weeks Worked by the Number of Years Reported Working and Race (Unweighted): 1967–99

| # Years Reported Work | Non-black | | Black | | Total | |
|---|---|---|---|---|---|---|
| | # of Cases | Average Weeks[1] | # of Cases | Average Weeks[1] | # of Cases | Average Weeks[1] |
| 0 | 124 | – | 18 | – | 142 | – |
| 1–5 | 201 | 28.7 | 73 | 27.7 | 274 | 28.4 |
| 6–10 | 271 | 39.3 | 80 | 36.2 | 351 | 38.6 |
| 11–15 | 421 | 43.6 | 129 | 42.4 | 550 | 43.3 |
| 16–18 | 418 | 45.8 | 155 | 46.4 | 573 | 46.0 |

Universe: Individuals who have been interviewed in all survey years (1967–99).
Note: This table is based on the same variables as Table 4.29.1.
[1] Zeros are not included in calculating averages.

## Table 4.29.3 Number of Weeks Worked by Survey Year and Race (Unweighted): 1967–99

| Year | # of Respondents Working | | | Ave. # of Weeks Worked | | | # of Resp. Not Working | | | # of Respondents Missing | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Non-black | Black | Total | Non-black | Black | Total | Non-black | Black | Total | Non-black | Black |
| **1967** | 2999 | 2001 | 998 | 39.9 | 39.7 | 40.2 | 2084 | 1692 | 392 | – | – | – |
| **1968** | 2766 | 1893 | 873 | 39.2 | 40.0 | 37.5 | 2144 | 1683 | 461 | 173 | 117 | 56 |
| **1969** | 2905 | 1968 | 937 | 41.4 | 41.7 | 40.8 | 1807 | 1450 | 357 | 371 | 275 | 96 |
| **1971** | 2956 | 2086 | 870 | 40.3 | 39.5 | 42.0 | 1619 | 1244 | 375 | 508 | 363 | 145 |
| **1972** | 2754 | 1956 | 798 | 42.5 | 42.5 | 42.5 | 1717 | 1308 | 409 | 612 | 429 | 183 |
| **1974** | 2784 | 1995 | 789 | 43.3 | 43.1 | 43.9 | 1538 | 1162 | 376 | 761 | 536 | 225 |
| **1976** | 2631 | 1907 | 724 | 43.7 | 43.9 | 43.1 | 1541 | 1142 | 399 | 911 | 644 | 267 |
| **1977** | 2417 | 1762 | 655 | 45.1 | 45.0 | 45.3 | 1547 | 1130 | 417 | 1119 | 801 | 318 |
| **1979** | 2413 | 1780 | 633 | 44.8 | 44.8 | 44.8 | 1399 | 1001 | 398 | 1271 | 912 | 359 |
| **1981** | 2137 | 1587 | 550 | 46.6 | 46.5 | 47.0 | 1540 | 1098 | 442 | 1406 | 1008 | 398 |
| **1982** | 2124 | 1572 | 552 | 47.8 | 47.6 | 48.6 | 1418 | 1011 | 407 | 1541 | 1110 | 431 |
| **1984** | 2010 | 1507 | 503 | 45.4 | 45.3 | 45.5 | 1412 | 1003 | 409 | 1661 | 1183 | 478 |
| **1986** | 1874 | 1410 | 464 | 46.1 | 46.0 | 46.4 | 1461 | 1043 | 418 | 1748 | 1240 | 508 |
| **1987** | 1769 | 1321 | 448 | 43.8 | 43.7 | 44.2 | 1472 | 1062 | 410 | 1842 | 1310 | 532 |
| **1989** | 1654 | 1245 | 409 | 40.9 | 40.5 | 41.8 | 1440 | 1032 | 408 | 1989 | 1416 | 573 |
| **1992** | 1388 | 1042 | 346 | 40.4 | 40.4 | 40.5 | 1565 | 1128 | 437 | 2130 | 1523 | 607 |
| **1995** | 1084 | 831 | 253 | 38.4 | 39.0 | 36.4 | 1627 | 1181 | 446 | 2372 | 1681 | 691 |
| **1997** | 818 | 636 | 182 | 43.8 | 44.7 | 40.5 | 1790 | 1303 | 487 | 2475 | 1754 | 721 |
| **1999** | 669 | 521 | 148 | 46.2 | 46.7 | 44.5 | 1798 | 1327 | 471 | 2616 | 1845 | 771 |

Note: This table is based on the same variables as Table 4.29.1.

## Table 4.29.4 Average Number of Employers per Survey Period by Race (Unweighted): 1967–99

| | # 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 |
| **1967** | 2841 | 1881 | 960 | 1.3 | 1.2 | 1.4 | 2242 | 1812 | 430 | – | – | – |
| **1968** | 2752 | 1861 | 891 | 1.2 | 1.2 | 1.2 | 2158 | 1715 | 443 | 173 | 117 | 56 |
| **1969** | 2945 | 1992 | 953 | 1.1 | 1.1 | 1.1 | 1767 | 1426 | 341 | 371 | 275 | 96 |
| **1971** | 3041 | 2133 | 908 | 1.3 | 1.3 | 1.3 | 1534 | 1197 | 337 | 508 | 363 | 145 |
| **1972** | 2812 | 1989 | 823 | 1.2 | 1.2 | 1.2 | 1659 | 1275 | 384 | 612 | 429 | 183 |
| **1977** | 2524 | 1828 | 696 | 1.2 | 1.2 | 1.2 | 1440 | 1064 | 376 | 1119 | 801 | 318 |
| **1982** | 2211 | 1639 | 572 | 1.2 | 1.2 | 1.2 | 1331 | 944 | 387 | 1541 | 1110 | 431 |
| **1987** | 1808 | 1344 | 464 | 1.3 | 1.3 | 1.2 | 1433 | 1039 | 394 | 1842 | 1310 | 532 |
| **1989** | 1712 | 1286 | 426 | 1.1 | 1.1 | 1.1 | 1382 | 991 | 391 | 1989 | 1416 | 573 |
| **1992** | 1533 | 1146 | 387 | 1.3 | 1.3 | 1.2 | 1420 | 1024 | 396 | 2130 | 1523 | 607 |
| **1995** | 1145 | 873 | 272 | 1.3 | 1.3 | 1.2 | 1566 | 1139 | 427 | 2372 | 1681 | 691 |
| **1997** | 861 | 666 | 195 | 1.2 | 1.2 | 1.2 | 1747 | 1273 | 474 | 2475 | 1754 | 721 |
| **1999** | 671 | 523 | 148 | 1.2 | 1.2 | 1.1 | 1796 | 1325 | 471 | 2616 | 1845 | 771 |

[1] Averages in 1967 reflect responses to R00188.; 1968 averages reflect the sum of responses to R00835. and R00847.; and 1969 averages reflect the sum of responses to R00910., R00923., R00927., and R00938. The other years listed 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.

# 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 Mature Women, the NLS surveys, and the NLS CD-ROMs. It also provides answers to some common questions about the Mature 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 Mature 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<br>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<br>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 Mature Women CD-ROM

The Mature Women survey is a panel data collection—specifically, the same persons are interviewed year after year. Mature 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 Mature 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 Mature 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 "Mature Women 30–44 in 1967."
(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 aearch.** 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 Mature 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 Mature Women's cohort for each survey through 1992.

**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 Mature 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 Mature 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 Mature 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 Mature 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).<br>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 Mature 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 Mature 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 1989 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 Mature Women's data were searchable by "keyword"—that is, the user could select from a predetermined list of 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 Mature 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
AFDC
Age
Age 14
Age 15
Alimony
Alternative Job
Amount of Fatigue
Answered
Answers
Apartment
Assets
Assistance
Attended
Attending
Attitude
Attitudes
Automobile
Benefits
Birth
Birthplace
Bonds
Bose
Census Division
Certificate
Child
Child Care
Children
Class of Worker
Collective Bargaining
College
College Degree
Commercial
Commitment to Work
Company Training
Comparative Job Status
Contact
Current Job XX (For each survey 67–86)
Current or Last Dual Job
Current or Last Job XX (For each survey 67–87)
Curriculum
Days Per Week
Debt
Dependents
Desire
Desired
Different Area
Diploma
Disability
Disliked Most
Dual Job
Duncan

Duncan Index
Education
Educational
Elementary
Employee Association
Employer
Employers
Employment
Employment Status
Employment Status Recode
Enrolled
Enrollment
Enrollment Status
Expected
Expenses
Family
Family Member
Family Members
Farm
Father
Field of Study
Financial Aid
Financial Position
First Job
Food Stamps
Full-Time
GED
Goal
Grade Attended
Grade Completed
Grandfather
Grandmother
Head of Household
Health
Height
Helping
Helping Others
High School
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
Influence
Interview Date
Interview Length
Interview Method
Interview Status
Intrafirm
Job
Job Pace
Job Pressures
Job Search
Job Supervision
Jobs
Knowledge
Labor Force
Labor Force Status
Labor Market
Last Interview
Last Job

Layoff
Liability
Liked Most
Limit
Limitations
Locate
Location
Longest Job
Loss of Current Job
Marital Status
Market Value
Marriage
Marriages
Medical
Medical Care
Medical Insurance
Method of Finding
Method of Seeking
Military
Mortgages
Most Recent Job
Mother
Motivation
Move
Moved Backward
Mutual Funds
Nationality
Noninterview
Nonmarket Activity
Not Empld XX (For each survey 67–87)
Occupation
Occupational
OLF
OLF XX (For each survey 66–87)
On the Job
On the Job Training
Overtime
Overtime Pay
Parents
Part-Time
Partner
Pension
Plan to Seek
Plans
Progressed
Promotion
Property
Public Assistance
Race
Rate of Pay
Real Estate
Rent
Residence
Responsibility
Restrictions
Retired
Retirement
Rotter Scale
Round Trip
Same Area
Sampling Weight
Savings
Savings Bonds
Seek
Seeking
Self-Employed
Services
Sex
Sibling
Siblings
SMSA
Social Security

Spell Not Working
Spells of Unemployment
Sponsor
SSI
Stocks
Study
Summer
Survey Week
Survey Week XX (For each survey 67–87)
Technical
Tenure
Training
Transfer
Transportation
Travel
Typing or Shorthand
Unemployed
Unemployed XX (For each survey 67–87)
Unemployment
Unemployment Compensation
Union
Veteran Compensation
Vocational
Volunteer
Wages
Weeks in Labor Force
Weeks Not Working
Weeks OLF
Weeks Unemployed
Weeks Worked
Weight
Welfare
Wife
Women Working

## 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. The example below pertains specifically to the Mature Women's cohort.

***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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