

Measuring the Formation and Dissolution of Marital and Cohabiting Unions in Federal Surveys

Introduction

Family life in the United States has changed rapidly in recent decades, and household surveys and vital records have not kept up with these changes. Over the last 40 years, the American population has married at progressively older ages and with progressively less frequency while they have divorced at rising rates. At the same time, less formal unions such as cohabitation has become a large fact of family life. A major challenge for federal data collection is to document how cohabitation has changed the meaning of marriage and divorce. This is important because recent years have tended to demonstrate a stabilization in the divorce rate but this can be a very misleading conclusion because the rising rates of cohabitation have literally changed the meaning of marriage rates which, in turn, changes the meaning of divorce rates. In fact, rather than stabilize, family life continues to become more turbulent because the American people continue to substitute less binding unions for traditional marriage ties when one begins to account for cohabitation.

There is an important emerging literature that demonstrates that exposure to a household structure not anchored by one's own biological parents is damaging to the long run life chances of children. It is imperative that we be able to document the extent to which children are exposed to different types of family structure during their formative years. In order to accomplish this, one must account for how cohabitation insinuates itself around marriage and divorce. Failure to do this can produce startling errors. For example, Bumpass et al has shown that much of the rise in out-of-wedlock childbearing occurs within stable, cohabiting unions. This is a far better family situation than is usually implied by non-marital childbearing, in which case one tends to assume that a single mother struggles to raise her child alone. Failure to account for cohabitation, in this case, leads us to a much too negative impression of what will happen to these children born to unmarried unions.

The work of Bumpass and others suggests that the substitution of cohabitation for marriage and remarriage continues to increase. However, our information base is somewhat blind to this trend, leading to exaggerated interpretations of trends in marriage and divorce. Honest science compels us to correct this situation now. Theodora Ooms recently spoke to the Federal Interagency for Child and Family Statistics about this situation and pleaded with the Forum to take corrective action. She sounded the alarm that we are losing the ability to track marriage and divorce through vital statistics in addition to our well-recognized deficiency in accounting for cohabitation. This comes at a time when America is reconsidering with alarm what may be lost by forsaking marriage. She cited several influential studies on the benefits of marriage as a sign of renewed interest in marriage and expressed dismay that heightened interest unfortunately corresponds with a degraded ability to track and interpret trends in marriage. She also identifies a number of big research questions with big policy implications which are recounted below:

- How can we explain the disconnect between the continuing high value the public places on marriage and behavior which demonstrates that the commitment to marriage has weakened so much? Is the institution of marriage simply going through a period of struggle and transition, to be restructured and stabilized along more egalitarian lines? Or is it disappearing, like the dinosaurs, to be replaced by a variety of alternative family forms?
- What accounts for such persistently high divorce rates? Is it a result of the weakening of legal, social, moral and economic barriers? Or is it because expectations for marriage have risen so high, are unrealistic, and cannot be fulfilled? Or is it due to excessive individualism?
- Out-of-wedlock birth rates in some low-income communities are now as high as 70-80%. Only one third of these are to teen mothers. Clearly childbearing and marriage have become de-coupled (as high divorce rates have de-coupled child rearing and marriage). Does this mean marriage has disappeared in these communities and is no longer valued? We have a few clues that is not the case. Many of these couples are cohabiting, and will later marry each other or someone else. But why? To what extent are the whopping financial marriage penalties for the poor and low income a disincentive to marriage? (Eugene Steurele, of the Urban Institute, presented data at our 1997 meeting to show that a couple each working full time at the minimum wage would stand to lose around \$8,000 in increased taxes and lost benefits if they were to marry.)
- Cohabitation is rapidly becoming a normative experience. The NSFG data for 1995 show that half of all persons under age 40 have lived in a cohabiting relationship. Most of these relationships are however short-lived. We need to understand better the effects of cohabitation on marital stability and quality, and its implications for children, especially in low-income communities where cohabiting may be more permanent.
- What should the goal of policy be, to increase marital stability or improve quality? Or, another way of putting it, should we make marriage harder to get out of or more rewarding to enter and stay in? What are the most effective strategies to pursue: legal, economic, educational, or spiritual?
- Serious parental conflict clearly has major negative consequences for children. As Paul Amato and Alan Booth point out in their recent book, if divorce were limited only to high-conflict marriages, then divorce would generally be in the child's best interest. But from their 15-year study they estimate that less than a third of parental divorces involve highly conflicted marriages. From the point of view of children, are some divorces unnecessary? We know that many children are exposed to serious

parental conflict within marriage. Do we know how to reduce couple conflict? What is a "good enough" marriage?

These are just a few of the questions that are beginning to be raised as we seriously begin to study and debate marriage policy. Research cannot by itself answer many of these questions since they involve value dilemmas and choices that will need to be discussed and debated in the public arena. However better data and research about couples and marriage are urgently needed to inform these discussions and assure that new policy and program proposals are at least grounded in what we know.

New types of surveys are planned in the federal system and some existing surveys are being redesigned. New and redesigned surveys may benefit from this resource which collected information as to how the leading federal and university based surveys conceptualized and measured marriage, divorce and cohabitation.

Professor Arland Thornton and Linda Young-De-Marco of the University of Michigan produced an unpublished paper that described the ways that cohabitation, marriage, and union dissolution are measured in four large surveys: the Panel Study of Income Dynamics; the Health and Retirement Study; the National Study of Families and Households; and the Intergenerational Panel Study of Parents and Children.

This paper examines how leading federal surveys measure marriage, cohabitation, and marital dissolution. First, a brief overview of each survey will then be given, followed by a description of the measurement tools used in these federal data sets to ascertain information about marriage and cohabitation. Staff of member agencies of the Interagency Forum on Child and Family Statistics have assembled information about the federal surveys.

The Data Sets Considered

The goal of this paper is to provide information about the current practice in the measurement of marriage and cohabitation in federal surveys. The description of the methodological tools used in the measurement of union formation and dissolution does not consider all federal surveys covering the topic. We have limited the focus on several large-scale surveys from four major statistical agencies: the Bureau of the Census, the Bureau of Labor Statistics, the National Center for Education Statistics, and the National Center for Health Statistics.

Two major household surveys conducted by the Bureau of the Census, the Survey of Program Dynamics (SPD) and the Survey of Income and Program Participation (SIPP) will be analyzed in regard to the measurement of marriage, divorce, and cohabitation.

Data for the National Longitudinal Surveys (NLS) and the Consumer Expenditure Survey (CE), sponsored by the Bureau of Labor Statistics, will be discussed.

There will also a brief discussion about the marriage and cohabitation data of the Current Population Survey (CPS), which is jointly sponsored by the Bureau of the Census and the Bureau of Labor Statistics. The March supplement of the CPS is co-sponsored by the Department of Health and Human Services. The CPS is conducted at the Bureau of the Census.

The collection of marriage, divorce, and cohabitation data in the following databases sponsored by the National Center for Education Statistics will be examined:

High School and Beyond (HS&B)

National Education Longitudinal Study of 1988 (NELS88)

National Postsecondary Student Aid Study (NPSAS)

Beginning Postsecondary Student Longitudinal Study (BPS)

Baccalaureate and Beyond Longitudinal Study (B&B)

National Assessment of Educational Progress (NAEP)

Third International Mathematics and Science Study (TIMSS)

National Household Education Survey (NHES)

Also, the marriage and cohabitation data of the following surveys conducted by the National Center for Health Statistics and the Centers for Disease Control and Prevention will be analyzed:

National Health Interview Survey (NHIS)

National Health and Nutrition Examination Survey (NHANES)

The National Survey of Family Growth (NSFG)

The National Mortality Followback Survey (NMFS)

The National Maternal and Infant Health Survey and Longitudinal Follow-up (NMIHS)

Birth Certificate Data

Background Information

Before we examine how information concerning marriage and cohabitation is ascertained in these surveys, a brief overview of each data set will be given.

Survey of Program Dynamics

Welfare reform (the Personal Responsibility and Work Opportunity Act of 1996) enacted as P.L.104-193 directed the Bureau of the Census to "... collect data on the 1992 and 1993 panels of the Survey of Income and Program Participation (SIPP) as necessary to obtain such information as will enable interested persons to evaluate the impact of amendments made on a random sample of recipients of assistance under State programs, and other low income families, and in doing so shall pay particular attention to the issues of out-of-wedlock birth, welfare dependency, the beginning and end of welfare spells , and shall obtain information about the status of children participating in such panels."

To implement this directive the Bureau has established the Survey of Program Dynamics (SPD).

To continue data collection for both the 1992 and 1993 SIPP panels with very detailed program, economic, and demographic data will provide extensive baseline information from which to determine the effects of welfare reform. The use of both panels also doubles the size of certain groups of interest. The funding provided is not sufficient, however, to interview all households in both panels; therefore some subsampling will be required after 1997.

Some topical modules were developed and fielded to enhance the core data. Modules of special interest here - fielded in the 1993 panel - include education and training; marital, fertility, and migration histories; family relationships within the home; work schedule, child care, child support, support for non-household members; medical expenses and utilization of health care services; and child well-being.

Data for the SPD will be collected for each of the six years from 1996 to 2001, providing panel data for ten years (1992-2001) when combined with the 1992 SIPP data. SPD data collections will take place simultaneously with the fielding of the 1996 SIPP panel, providing opportunities to place a few of the same questions on the SIPP as are on the SPD.

The Survey of Income and Program Participation

The Survey of Income and Program Participation (SIPP) is a longitudinal survey measuring economic and demographic characteristics of the noninstitutional population in the US. A multistage-stratified sample of persons age 15 years and older are followed over the life of the panel, usually two to four years. SIPP also

provides selected information on children in the household, and persons who moved into the household. From 1984 to 1993 SIPP introduced overlapping panels every year with each panel spanning 2.5 to 3 years. Data were collected every four months. The samples contained 14,000 to 20,000 households. Beginning in 1996, non-overlapping panels were introduced every four years with a targeted sample size of 40,000 households. Data are collected every four months.

The overall design of the SIPP contains three basic elements: (1) the control card containing basic social and demographic characteristics and public assistance receipt for each person in the household; (2) the core portion containing labor force questions and other subjects such as public or subsidized rental housing, school breakfast and lunch participation; (3) the various topical modules.

The National Longitudinal Surveys

The National Longitudinal Surveys (NLS) are sponsored by the Bureau of Labor Statistics, U.S. Department of Labor, to examine labor market experiences. The NLS were begun in the mid-1960's with the drawing of four samples: Young Men who were 14-24 years old, and Older Men who were 45-59 years old as of April 1, 1966; Young Women who were 14-24 years old as of January 1, 1968; and Mature Women who were 30-44 years old as of April 1, 1967. Each sample originally consisted of about 5,000 individuals with oversamples of African-Americans. In the early 1980's, the Young Men and Older Men surveys were discontinued. The women's surveys are currently collected every two years.

In 1979, a new cohort was begun with a large, nationally-representative sample of over 12,000 young men and women who were 14-21 years of age as of January 1, 1979. It includes oversamples of African-Americans, Hispanics, economically disadvantaged Whites, and youth in the military. The military oversample was discontinued after the 1984 survey, and the economically disadvantaged white oversample was discontinued after the 1990 survey. The Youth79 cohort members were interviewed annually from 1979 to 1994. After the 1994 interview, respondents will be interviewed every other year.

In 1997, data collection will begin for a new cohort of youth. The sample will consist of approximately 12,000 young men and women aged 12-17 as of January 1, 1997. It will include oversamples of African-Americans and Hispanics. Cohort members will be interviewed annually.

Consumer Expenditure Survey

The Consumer Expenditure (CE) Survey is designed to provide a continuous detailed flow of data on the buying habits of consumers for use in a variety of economic research and in support of periodic revisions of the Consumer Price Index. The survey collects data on the expenditures, income, and characteristics

of the consumer unit. The survey represents the total civilian noninstitutional population of the U.S. The sample is a household based sample, which interviews consumer units (within the household) for five consecutive quarters. The first interview is a bounding interview in which the control card is completed, and is not used for estimation.

Consumer units are defined as one of the following: (1) a single person living alone or sharing a household with others but who is financially independent; (2) members of a household related by blood, marriage, adoption, or other legal arrangement; (3) two or more persons living together who are financially dependent.

The Current Population Survey

The Current Population Survey (CPS) is the largest ongoing population survey, conducted monthly by the Federal Government since 1942. The CPS provides data for national and state-representative estimates of basic population and labor market information. Periodic supplements provide information on topics such as fertility and marital histories, school enrollment, and labor market behaviors. The survey represents the total civilian non-institutional population of the U.S. Data from the decennial census and new construction universe are used to select independent samples for the 50 states and the District of Columbia. The total sample size is currently around 59,000 households located in 754 PSU's. Each month's sample is composed of eight panels that rotate on a schedule of four months in, eight months out, and four months in. Only 25 percent of the households differ between consecutive months. The March CPS is supplemented with households containing of Hispanic origin from the prior November panel. The households are contacted in-person and by telephone. A household respondent, who must be a knowledgeable household member 15 years or older, provides information for each household member - related family members and all unrelated persons, who occupy the housing unit and have no other usual address. Some supplemental inquiries require response by a designated sample person.

High School and Beyond

High School and Beyond (HS&B) is a longitudinal study, examining the transition from secondary school to early adulthood. It includes data on high school experiences as well as events in the years following high school graduation: postsecondary education, marriage, work, and family formation. The student questionnaires also contain questions on social and demographic characteristics, personality characteristics, political and social attitudes, family environment, and physical disabilities.

The study is based on a national probability sample of high school sophomores and seniors enrolled in public and private schools in the fall of 1980. Alternative

public schools, public schools with a high percentage of Hispanic students, private schools with high achieving students, and Catholic schools with a high percentage of minority group students were oversampled. The base year sample consisted of 30,030 sophomores and 28,240 seniors enrolled in 1,015 schools. Information was also collected from school principals, teachers, and parents.

The first wave of data was collected in the spring of 1980. Follow-ups of both sophomore and senior cohorts were conducted in 1982, 1984, and 1986. A fourth follow-up of almost 15,000 1980 sophomores was conducted in the spring of 1992, and transcripts from their postsecondary institutions were collected in 1992-93.

National Education Longitudinal Study of 1988

The National Education Longitudinal Study of 1988 (NELS:88) is the most recent in a series of longitudinal studies conducted by the National Center for Education Statistics at the U.S. Department of Education. NELS:88 is designed to assess trends in secondary school education, focusing on the transition into and progress through high school, the transition into postsecondary school, and the world of work, and family formation experiences.

NELS:88 is based on a national probability sample of eighth graders. Hispanic and Asian students were oversampled. Data were collected via questionnaires from 24,599 students from 1,057 public and private schools from all 50 states and the District of Columbia in the base year. The data included questionnaires from students, school administrators, teachers, and parents along with teacher ratings of students and students' achievement test scores. The sample was freshened in 1990 and 1992 so that the first and second follow-up samples were representative of U.S. tenth graders in 1990 and U.S. twelfth graders in 1992. The third follow-up was conducted in 1994, when the students were approximately two years out of high school. Education, work, and family formation characteristics were included in this wave of the survey. The fourth and final follow-up will take place in 1997. The questionnaires were not identical at each wave, therefore all of the information included in NELS is not available for every wave.

National Postsecondary Student Aid Study

The National Postsecondary Student Aid Study (NPSAS) is a comprehensive, nationwide study of students enrolled in less-than-2-year institutions, community and junior colleges, 4-year colleges, and major universities located in the United States and Puerto Rico. Undergraduate, graduate, and first-professional students who receive financial aid, as well as those who do not receive aid, participate in NPSAS. NPSAS collects information on student demographics, family income, education expenses, employment, education aspirations, parental

demographic characteristics, parental support, and how students and their families meet the costs of postsecondary education.

NPSAS data come from multiple sources, including institutional records, and student and parent interviews. Beginning with the 1989-90 survey, NPSAS includes a longitudinal component and collects baseline data for specified cohorts of students. Students who began their postsecondary education during 1989-90 will be followed over time to examine such issues as persistence and effects of financial aid on subsequent enrollment. Students who graduated during 1992-93 will be followed over time to examine issues such as the transition from college to work and access to graduate school. These two surveys, known as the Beginning Postsecondary Student Longitudinal Study and the Baccalaureate and Beyond Longitudinal Study, are described in the following sections.

The first NPSAS was conducted during the 1986-87 school year. Data were gathered from institutional records on about 60,000 students at 1,100 colleges, universities, and other postsecondary institutions. About 43,000 of these students and 13,000 parents also completed questionnaires. The second round of the NPSAS was conducted in 1989-90; the third round was conducted in 1992-93. Both surveys collected information from larger samples than the base year. The 1995-96 NPSAS is expected to have a smaller (50,000) sample. The next NPSAS after 1995-96 is scheduled for 2000-01.

Beginning Postsecondary Student Longitudinal Study

Because older students, in addition to recent high school graduates, are increasingly included in postsecondary education, high school cohort studies are not representative of all postsecondary participants at a given point in time. The Beginning Postsecondary Student Longitudinal Study (BPS) includes these "nontraditional" as well as "traditional" students and is representative of all beginning students in postsecondary education (PSE). The BPS survey enhances and expands the base of information available regarding persistence, progress, and attainment from initial time of entry into postsecondary education through leaving and entering the work force. The first BPS will follow first-time, beginning students for 5 years at 2 year intervals. The next BPS will follow that cohort for about 9 years.

BPS is based on the National Postsecondary Student Aid Study (see NPSAS description). About 8,000 students who began their PSE career in the 1989-90 academic year responded to NPSAS:90 and were included in the first BPS follow-up (BPS:90/92) in the spring of 1992 and the second BPS follow-up (BPS:90/94) in the spring of 1994. NPSAS:90 collected data for more than 6,000 parents of those students. New BPS cohorts will alternate with the Baccalaureate and Beyond Study (see B&B description) in using NPSAS as their base. The second BPS cohort will be based on the 1996 NPSAS.

Baccalaureate and Beyond Longitudinal Study

The Baccalaureate and Beyond Longitudinal Study (B&B) provides information concerning education and work experiences after completing the bachelor's degree. It will continue to provide cross-sectional information one year after bachelor's degree completion, while at the same time providing longitudinal data concerning entry into and progress through graduate level education and the work force. A special emphasis of B&B is on those individuals entering public service areas, particularly teaching.

B&B plans to follow high school cohorts or college entry cohorts over a 12-year period, allowing a unique opportunity to gather information concerning delayed entry into graduate level education, times to completion of graduate education, and the interactions between work and education at the graduate level.

The B&B study is based on the National Postsecondary Student Aid Study (NPSAS) described previously. B&B will follow NPSAS baccalaureate degree completers for a 12-year period after completion, beginning with NPSAS:93. About 11,000 students who completed their degree in the 1992-93 academic year were included in the first B&B (B&B:93/94). NPSAS:93 will also provide data for more than 8,000 of their parents. New B&B cohorts will alternate with BPS in using NPSAS surveys as their base. The next B&B cohort will be based on NPSAS:2000.

National Assessment of Educational Progress

The National Assessment of Educational Progress (NAEP) is mandated by Congress to monitor continuously the knowledge, skills, and performance of the nation's children and youth. NAEP provides data about student performance at national, regional, and, on a trial basis, state levels. In addition to performance results in subject areas, NAEP collects basic descriptive information about students, teachers, administrators, schools, and communities. NAEP was begun in 1969. Currently, NAEP is conducted every other year in even-numbered years with samples that are both age (9, 13, and 17) and grade (4th, 8th, and 12th) representative.

NAEP has been designed to produce a representative sample at the national level. In each of the 1990-94 assessments, data were collected from a national probability sample of more than 45,000 students per age/grade or a total of about 146,000 students in nearly 2,100 schools. Data were also collected from these students' principals and a sample of their teachers. Representative state-level data were produced for the first time for participating states from the trial state assessment in 1990.

Third International Mathematics and Science Study

The Third International Mathematics and Science Study (TIMSS) compares the mathematics and science achievement of U.S. students to their counterparts in more than 41 countries and examines the contextual and instructional factors that contribute to achievement. TIMSS is primarily designed as a study of the teaching and learning of mathematics and science. It focuses on three distinct populations of students which are defined in the United States as third and fourth graders; seventh and eighth graders; and twelfth graders.

NCES is also supporting three additional supplements to the TIMSS project to collect data designed to make the findings more relevant to policy makers. These include: (1) an opportunity for states to carry out TIMSS in their state in such a way as to compare their students' achievement with that of the world; (2) videotaped classroom observational studies of eighth-grade mathematics and science teaching in Japan, Germany, and the United States; and (3) ethnographic case studies of key educational policy topics in Japan, Germany, and the United States. The main assessment within TIMSS was conducted in Spring, 1995.

National Household Education Survey

The National Household Education Survey (NHES) is a telephone survey of the non-institutionalized civilian population of the U.S. designed to provide information on education-related issues. The large sample sizes and fairly extensive set of household and respondent descriptors permit a range of family-related issues to be addressed. The survey monitors participation in adult education and the care arrangements and educational experiences of young children. Other topics included in the NHES surveys have been school safety and discipline, parental involvement in their children's schooling, and citizenship and civic participation of children and adults. NHES was first implemented in the spring of 1991, and it has a rotating topical focus. Additional NHES surveys were administered in 1993, 1995, and 1996.

Nearly 64,000 households were surveyed for **NHES:93**. In the school readiness component, approximately 11,000 parents of children 3 to 7 years old were surveyed. The school safety and discipline component surveyed nearly 12,000 parents of children in grades 3 through 12, and nearly 6,500 students in grades 6 through 12 were also interviewed. Over 45,000 households were screened for **NHES:95**. In the program participation component, parents of approximately 14,100 children 0 to 10 years old were surveyed. In the adult education component, approximately 19,700 adults (16 years or older) were interviewed. In **NHES:96** about 56,000 households were surveyed. In the parent involvement component, interviews were completed with about 21,000 parents of children age through grade 12. In the civic involvement component, approximately 9,400

parents of students in grades 6 through 12, 8,000 students in grades 6 through 12, and 2,300 adults were interviewed.

The National Health Interview Survey

The National Health Interview Survey, or NHIS, is a continuous, annual survey of about 116,000 persons in 49,000 households conducted by the National Center for Health Statistics. Persons of all ages are interviewed. The NHIS responds to congressional requirements for data on "the extent and nature of illness and disability of the population of the United States," "the impact of illness and disability of the population on the United States," and "utilization of health care." (Section 306 of the Public Health Service Act.)

The NHIS is of wider interest now, however, because it is being used as a sampling frame and screener for other surveys of the Department of Health and Human Services, including the National Survey of Family Growth (NSFG), the National Health and Nutrition Examination Survey (NHANES), the Medical Expenditure Panel Survey (MEPS) and possibly the National Household Survey on Drug Abuse.

The NHIS is comprised of a "core module," which is repeated every year; "periodic modules," which are done in some years and are expected to be repeated periodically; and "topical modules," which are done once and are not expected to be repeated. Periodic modules and topical modules are dependent on outside funding support. 1997 was the first year in which the NHIS used Computer-Assisted Personal Interviewing (CAPI); only the core module was collected. Periodic and topical modules began in 1998.

(Each year, the NHIS issues a report based on the "core" questionnaire, showing some standard outcome variables by age, sex, race, and income. A recent example is: "Current Estimates from the National Health Interview Survey, 1993," by V. Benson and M. Marino, *Vital and Health Statistics*, Series 10, No. 190, Dec 1994. These measures are shown by a number of socioeconomic and family characteristics in: "Health and Selected Socioeconomic Characteristics of the Family: US, 1988-1990," by J.G. Collins and F.B. LeClere, *Vital and Health Statistics*, Series 10, No. 195, Dec 1996.)

National Health and Nutrition Examination Survey

The National Health and Nutrition Examination Survey (NHANES) is a large and complex survey conducted by the National Center for Health Statistics in collaboration with a large number of other agencies. In NHANES III, about 40,000 people (including 12,000 blacks, 12,000 Mexican-Americans, and 16,000 others) of all ages (2 months and older) were given interviews and extensive medical examinations between 1988 and 1994. The purpose of NHANES is to collect data from a representative sample on "the extent and nature of illness and

disability," "environmental social and other health hazards," and "determinants of health" that can only be measured with medical examinations.

(For an extensive description of NHANES, see: "Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988-1994," *Vital and Health Statistics*, Series 1, No. 32, July 1994.)

The National Survey of Family Growth

The National Survey of Family Growth (NSFG) responds to Section 306 (242k) of the Public Health Service Act, which requires the National Center for Health Statistics to "collect statistics on.... family formation, growth, and dissolution." The NSFG has been conducted by NCHS in 1973, 1976, 1982, 1988, and 1995 on national samples of women 15 - 44 years of age.

In 1995, the sample size of the NSFG was increased by more than 25 percent, to 10,847 women, including 1,553 Hispanic and 2,486 black women.

The National Mortality Followback Survey

The National Mortality Followback Survey (NMFS) was conducted in 1986 and again in 1993. Data were obtained by mail-out, mail-back questionnaires from informants named on the death certificates. Data were gathered for a sample of 18,733 deaths that occurred in 1986, and from 22,957 deaths in 1993.

The National Maternal and Infant Health Survey and Longitudinal Follow-up

The National Maternal and Infant Health Survey (NMIHS) was a stratified sample of 10,000 births, 3,500 fetal deaths, and 5,500 infant deaths that occurred in 1988. Questionnaires were sent by mail to the mother and to health care providers. The central focus of the NMIHS was on maternal and infant health. The purpose of the 1991 Longitudinal Follow-up was to measure child health at about age 3. The sample size was 8,300 live births.

Birth Certificate Data

A birth record is a statement of facts that serves both legal and statistical purposes. Legally, it is a permanent record that documents a person's age, parentage, and citizenship, among other facts. The birth certificate is also used for research purposes, including public health and demographic issues.

The authority for producing national vital statistics (including birth certificate data) is assigned to the Division of Vital Statistics, National Center for Health Statistics (NCHS), as found in the Public Health Service Act, 42 USC 242k. This law requires that NCHS collect data annually from vital records and provide assistance to states to ensure comparable data.

The first standard, or model, certificate of birth was developed in 1900 by the U.S. Bureau of the Census. The national registration area was completed in 1933. Alaska was added in 1959 and Hawaii in 1960.

The birth (and death) certificate data are collected and published through a decentralized, cooperative system. The states have responsibility for registering births, and for coding the data and providing electronic files to NCHS. NCHS ensures comparability by providing model certificates and by providing training, funding, and other assistance. The current model birth certificate has been used since 1989. Currently the Standard Certificate of Live Birth is undergoing a revision process. The new certificate will be implemented in 2002.

Measuring Marriage, Divorce, and Cohabitation

Survey of Program Dynamics

The SPD collects information about the marital status of each household member 15 years of age and older using the categories married - spouse present; married - spouse absent; separated; widowed; divorced; and never married. Household members under the age of 15 are considered to be never married.

The relationship of each household member to the householder is determined, and coded as follows: householder; spouse; unmarried partner; child; grandchild; parent; brother or sister; other relative; foster child; housemate or roommate; roomer or boarder; and other nonrelative. For each child, the SPD determines the line numbers of the child's mother and father (if resident in the household) and whether the father and mother are the child's birth, adoptive, foster or stepparents. If one or both biological or adoptive parents of a child are not resident in the household, the SPD asks if the child has a parent or the parents living outside of this house.

The SPD asks if any current household member lived somewhere else for one consecutive month or more during the past year. If so, questions are asked about the month or months that a household member lived elsewhere. If he or she lived in another household, SPD asks how the absent member is related to the person maintaining the household where he or she lived--spouse, child, parent, brother or sister, other relative, or nonrelative.

Finally, the SPD asks if anyone else who is not a current household member, lived in this house for one consecutive month or longer during the past year. If so, questions are asked about when the temporary resident lived in the house and how he or she is related to the householder. Here, the relationship categories are: spouse, unmarried partner, child, grandchild, parent, brother or sister, other relative, foster child, housemate or roommate, and roomer or boarder.

Consumer Expenditure Survey

On the control card, consumer units are asked to list each person who resides in the household and their relation to the reference person. Marital status of the consumer unit is also established, and coded as follows: (1) Married, (2) Widowed, (3) Divorced, (4) Separated, and (5) Never Married. This information is updated at each interview.

Coding for information on the type of relationship to the reference person includes the category "unrelated person." A cohabiting consumer unit could be defined as a reference person and an unrelated person who form a consumer unit (since they are sharing expenses). While this is not a strict definition, these data could be used as a proxy. Hence, the CE Survey can be used to determine the stock of consumer units who are married, divorced and cohabiting.

Data are only updated for members of a consumer unit or new members. Persons leaving the consumer unit are removed from the sample. Also, consumer units that move (or dissolve) are not followed over the five-quarter period. Hence, the data cannot be used to estimate the number of marriages, divorces, and cohabitations that either form or dissolve. However, the data could be used to examine households that do not move.

Survey of Income and Program Participation

Control Card

Once a householder has been determined, his/her characteristics, including marital status are asked. Marital status includes the categories married - spouse present; married - spouse absent; widowed; divorced; separated; and never married. Starting from the second person in the interview, the relationship to the householder is obtained. Cohabiting couples can be identified through the relationship category "unmarried partner." Ever married persons are also asked if they ever have been divorced and ever widowed. For a spouse of a reference person marital status is not collected, as the instrument already has this information. For the second through twelfth visits to the household, the marital status question is verified and updated as necessary.

Marital History Topical Module

The relationship and marital history module first appeared in Wave 8 of the 1984 panel.

Detailed information on marital history is obtained from all ever-married adults 15 years old and over. The marital history topical module, asked on the second round of re-interviews, first verifies marital status obtained through the control card. The module then asks how many times married, with responses up to four times or more. The questions that follow ask about dates of marriage, did the marriage end in widowhood or divorce, dates of separation, and dates of

widowhood or divorce. These questions are asked of the first two marriages and the last marriage, if married three or more times. Dates of separation are also obtained for persons whose current marital status is "separated." These dates are checked during the interview. If a date is out of chronological order, a screen will appear to verify those dates in questions. The module only asks the detailed data of ever-married persons. Never married persons are, of course, skipped. We may only find out the marital history of unmarried couples if they have previously experienced separation, divorce, or widowhood. No questions are posed of the duration of unmarried partner relationships, although it can be ascertained if the relationship dissolved at any time during the length of the panel.

Household Relationship Topical Module

The relationship module is the last module in the 1996 wave 2 questionnaire. Here we obtain the relationship of all persons in the household to each other. In the case of cohabiting couples, we can determine couples other than the householder and unmarried partner. For example, we can find couples such as the son of the householder and his unmarried partner. Similarly, we can identify married couples who live in subfamilies.

National Longitudinal Surveys

Original Cohorts

Questions on marital status have been asked of respondents in each cohort and survey year, except for the 1968 surveys of Older Men and Mature Women. Information is present for the Mature Women, Young Women, and Young Men that allows a fairly comprehensive marital history to be constructed. Month and year variables are available in various years for: the date of first marriage; the date of the most recent (latest or present) marriage; and the date of each change in marital status since a past interview. Information is available about opposite-sex partners of respondents in the Young Men cohort for 1981, Mature Women for 1987, 1989, and 1992, and Young Women for 1983 and subsequent survey years. The 1995 surveys of Young Women and Mature Women included a sequence on opposite-sex partners which has information on the month and year the respondent and partner began living together and whether they have lived together continuously since that date.

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Questions about marital status have been asked in every survey year. Month and year variables are available for the date of the most recent marriage and the date of each marital status change since the last interview. Information is available on respondents' age at first marriage, the presence of opposite-sex partners, and the marital status of household members. A series of edited variables have been constructed for 1982 through the present that reflect the beginning and ending dates of marriages. The following cohabitation information is available from the 1990, 1992-94 surveys: the month and year the respondent

and his/her opposite-sex partner began living together; whether the respondent lived with his/her spouse before marriage; the month and year the respondent and his/her spouse began living together; and whether the respondent and his/her spouse lived together continuously until marriage.

Current Population Survey

The control card of the CPS asks marital status for each person 15 years or older and relationship to reference person for all persons in the household. This information is updated each month and the person's line number remains the same. Beginning with the 1995 CPS a new category of unmarried partner was added. Marital status is coded: (1) married - spouse present, (2) married - spouse absent, (3) widowed, (4) divorced, (5) separated, (6) never married.

The data can be used to determine the number of married, divorced, and cohabiting households. Census publishes tables on two-adult households from the March supplement. In their tables for unmarried couples, an unmarried couple household consists of a reference person and an unrelated person of the opposite sex. As of 1998, the unmarried partner table will be published showing the characteristics of the household and both the unmarried partners.

As with the Consumer Expenditure Survey, CPS data are only updated for household members or new members. Information on persons leaving the household is not updated. Also, households that move (or dissolve) are not followed over the 16-month period. Hence, the data cannot be used to estimate the number of marriages, divorces, and cohabitations that either form or dissolve. However, the data could be used to examine these types of households for those households that do not move.

The CPS June supplement, co-sponsored by the Department of Health and Human Services, has a more extensive set of questions on marriage and fertility. However, there are no additional data on cohabitation. The questions on marital history include the number of marriages, the month and year of the first, second, and third marriage; and the date of the last, recent marriage for respondents married more than three times. Also, dates of divorce, death of spouse, and separation for each marriage are collected. The marital history supplement occurs every five years, however, there will be no supplement in 2000 because SIPP will contain a marital history topical module.

Surveys conducted by the National Center for Education Statistics

The following databases are included in the description of how marriage, divorce, and cohabitation are measured:

NELS:88 National Education Longitudinal Study of 1988

HS&B High School and Beyond

NPSAS National Postsecondary Student Aid Study

BPS Beginning Postsecondary Student Longitudinal Study

B&B Baccalaureate and Beyond Longitudinal Study

NAEP National Assessment of Educational Progress

TIMSS Third International Mathematics and Science Study

NHES National Household Education Survey

NELS:88 and HS&B are longitudinal studies, which follow students through their high school experiences and into adulthood. For these surveys, family composition measures collected during the middle and high school years focus on the student's family of origin; after the students leave high school, family composition measures focus on their own family building experiences. Both studies include a survey of the students' parents. For High School and Beyond, only a small subset of parents was interviewed during the base year of the study. For NELS:88, a more extensive survey of the entire sample of parents was administered in the base year (when the majority of the students were in eighth grade) and the second follow-up (when the students were in the equivalent of twelfth grade).

NPSAS, BPS, and B&B focus on postsecondary school experiences and incorporate both cross-sectional and longitudinal designs. NPSAS includes a separate parent survey for a sub-sample of parents, which provides information on the student's family of origin. All three surveys include information both on the students' family of origin and on their own family formation experiences.

NAEP is a cross-sectional survey. This survey is school-based and collects minimal information on the characteristics of students' families. There is no supplemental parent survey, but rather family characteristics are reported by the students themselves. TIMSS is another cross-sectional assessment survey, which provides international information on mathematics and science achievement. TIMSS collects minimal information on students' families and does not have a separate parent survey.

NHES surveys are household-based and cross-sectional in nature. These surveys focus on different topic areas in different years. Different surveys within NHES have different focal persons, which range from preschool children and elementary school students, to middle school and high school students, to adults.

Only the NHES surveys collect a full roster of all household members, with information on the specific relationship between household members and the focal person. All of the secondary and postsecondary studies (NELS:88, HS&B, NPSAS, BPS, and B&B) provide only a partial roster of household members, including questions about students' family members. For example, students may be asked to report whether or not they live with their parents, with grandparents, siblings, or boyfriends or girlfriends, but a complete grid of names and the relationships between themselves and all household members is not obtained. NAEP only asks whether the students were living with their mother or mother figure and/or with their father or father figure.

Characteristics of Mother / Female Guardian (or Adult Respondent) in Household:

Except for NAEP and TIMSS (which don't include a parent survey), all of the other surveys provide some basic demographic characteristics of the parent. NCES surveys generally provide information on parents' current marital status, but provide very limited or no information on either cohabitation or marital history. Current marital status of parent or adult respondent is measured in all surveys except for NAEP and TIMSS, which report very limited information on parental characteristics. However, since marital status is provided by parents in HS&B and only a small sub-sample of parents was interviewed for this survey, only a limited number of HS&B respondents have information on their parent's marital status. Even though most surveys provide information on the marital status of adult family members, only two surveys (NELS:88 and one component of NHES:93) discern whether the adult respondent is cohabiting. In addition, limited or no marital history information is collected from the parents in any of the surveys. NELS:88 does ask the marital status of parents at two waves (base year and second follow-up), from which researchers could construct basic changes in marital status over time. In addition, NELS:88 asks the students whether their parents have gotten divorced or remarried in the past two years. If information on parents' cohabitation status and marital history were available, researchers could examine the influence of changes in family context on children's and students' outcomes.

Characteristics of Father / Male Guardian / Spouse of Adult Respondent in Household:

Since the principal parental respondent in NCES surveys is often the mother, sections on characteristics of the current spouse generally provides information on students' fathers or father figures. NAEP and TIMSS do not include parent surveys, and thus provide no information on the focal child's father. In addition, other NCES surveys which have parent components provide minimal information on the characteristics of the father or spouse of the principal adult in the household. Current marital status may be constructed from information collected

from the primary adult respondent. However, there is no information on marital history of the spouse.

Characteristics of Student:

Since children and students are the focus of most NCES surveys, this is the most complete section of questions concerning family composition. All surveys report basic demographic information about students and children. The questionnaires contain information about the child or student's family of origin as well as about their own family formation practices.

Student characteristics include information about their own marital and fertility histories. These are relevant to the first five surveys - NELS88, HS&B, NPSAS, BPS, B&B - since they focus on secondary and postsecondary school students as they go through school and begin forming their own families. Current marital status is reported for all five of these surveys, while the surveys differ on information provided on marital histories. For example, follow-up waves of NELS:88 and HS&B provide information on the student's age at first marriage, the number of times married, and the current cohabitation status of the respondents. BPS and B&B present slightly less information by reporting whether there was a change in marital status since the time of the last interview, and what that change was. HS&B provides additional timing information by including age at separation and age at divorce. B&B collects date of change which could be compared to date of birth for age.

The National Health Interview Survey

Through the 1996 data year, information on marital status was limited to the legal status. Cohabitation was not included as a category. The respondents were asked if, there have ever been married, and if they are now married, divorced, widowed, or separated.

Beginning in 1997, respondents of the NHIS "core module" are handed a card containing 17 relationship categories, including spouse, unmarried partner, child, grandchild, parent, and many others. Also, the marital status question has been changed to a series of questions on whether the respondent is now married, widowed, divorced, separated, never married or living with a partner; whether the spouse is living in the household; if the respondent has ever been married, and the respondent's current legal marital status.

National Health and Nutrition Examination Survey

NHANES IV, beginning in 1998, will collect the same information on marriage, cohabitation, and family formation as in the NHIS core questionnaire.

The National Survey of Family Growth

The NSFG has always collected a marriage and divorce history, including dates of separation. Some data on cohabitation were collected in 1982 and 1988. The 1995 survey - available on public use tapes - contains a wide array of new data on marriage, divorce, and cohabitation. First, a full marriage and divorce history has been retained with beginning and ending dates, including dates of separation. Second, a full cohabitation history was collected, including beginning and ending dates. Third, current cohabitation is collected. Fourth, a history of all non-cohabiting sexual partners was added, covering January 1991 to the date of interview in 1995. Fifth, the characteristics of the first voluntary male sexual partner were collected. Sixth, a number of demographic characteristics of each partner were also collected, including his marital status, education, race, Hispanic origin, religion, and importance of religion to him. In addition, respondents were asked which type of relationship the partners had at the time when they began having intercourse (just met, just friends, going together, going steady, engaged, married). Finally, during the interviewer-administered interview and in the Audio CASI interview, the total number of the woman's sexual partners in the last 12 months and in her lifetime was collected.

The NSFG also collected event histories of education and work. In addition, event histories of living arrangements with father, mother, and grandparents were collected, from the woman's birth until she left the parental home. This allows for studies on the effects of the parent's marital histories on the woman's marital history.

The National Mortality Followback Survey

Marital status as of the time of death was coded, on both the death certificate and the survey, as married, widowed, divorced, separated, or never married. If ever married, the informant is asked for the date of the marriage, yielding the duration of the marriage. Information on cohabitation is not collected, but if the decedent usually lived in a private home during the last year of life, a household roster is collected, including the relationship of each person in the household to the person who died. Marital history is not asked, neither on the death certificate nor the survey form.

The National Maternal and Infant Health Survey and Longitudinal Follow-up

The mother was asked for her current marital status, number of times married if any, and the length of the first and the current marriage. Cohabitation in the 1988 NMIHS has to be inferred from the household roster. In the 1991 Longitudinal Follow-up the mother's marital status in January 1988 and at the

date of interview was collected. Current cohabitation has to be inferred from the household roster.

Birth Certificate Data

Currently, the Standard Certificate of Live Birth includes items on the marital status of the mother. For both the mother and the father data on age, race, Hispanic origin, and educational attainment are collected.