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The National Survey of Family Growth

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The National Survey of Family Growth (NSFG) provides a rich source of reliable national-level data on marriage, divorce, childbearing, and parenthood—as well as information on participation in programs such as welfare, food stamps, Medicaid, and others. This essay explains how NSFG data contribute to our understanding of these topics and notes ways in which the survey could be enhanced to respond to concerns in the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA, 42, U.S.C. § 1305).

To illustrate the insights that can be gained from NSFG data, this essay presents statistical comparisons of mothers receiving Aid to Families and Dependent Children (AFDC) in 1995 with other low-income mothers, higher-income mothers, and childless women. The NSFG data show that mothers receiving AFDC in 1995 were more likely than other women to have been raised by single parents, to have had a non-voluntary first intercourse, and to have had their first sexual experience with a man who was 7 or more years older than they were. Moreover, their first sexual intercourse occurred at a younger average age. About one-third of the women in this group had had a birth before age 18, and their first pregnancy was more likely to be unintended than were the first pregnancies of the women in the other groups. The mothers receiving AFDC also were more likely to be using female sterilization as a birth control method than were other mothers.

The most recent NSFG was conducted in 1995, giving us a statistical portrait of women receiving AFDC just before the 1996 welfare reform legislation was passed. The next survey, in 2002, will give us a portrait of women, men, and families 6 years after the legislation was enacted.

Background

Goals of welfare reform. The Welfare Reform Act of 1996 begins with a clear statement of its goals and premises:

The Congress makes the following findings:

(1) Marriage is the foundation of a successful society.
(2) Marriage is an essential institution of a successful society which promotes the interests of children.

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(3) Promotion of responsible fatherhood and motherhood is integral to successful child rearing and the well-being of children. . . .

(5c) The increase in the number of children receiving public assistance is closely related to the increase in births to unmarried women. . . .

(8) The negative consequences of an out-of-wedlock birth on the mother, the child, the family, and society are well documented. . . .

* * *

(10) In light of this demonstration of the crisis in our Nation, it is the sense of the Congress that prevention of out-of-wedlock pregnancy and reduction in out-of-wedlock birth are very important Government interests and the policy contained in. . . this Act is intended to address the crisis." (§ 101)

The viewpoint expressed in the law is that children should be raised by married couples and that out-of-wedlock childbearing and single parenthood lead to demonstrable costs to the child and to society, including a greater likelihood of the receipt of public assistance. Section 905 of the law requires the Secretary of Health and Human Services to report annually to Congress on "the progress that has been made" in "preventing out-of-wedlock teenage pregnancies," and section 906 requires a research program that "studies the linkage between statutory rape and teenage pregnancy."

About NSFG. The need for surveys to collect information on factors related to marriage, divorce, pregnancy, and childbearing has long been recognized in the United States. Surveys similar to (but smaller than) the NSFG were conducted by other organizations in 1955, 1960, 1965, and 1970. The National Center for Health Statistics (NCHS) conducted the NSFG in 1973, 1976, 1982, 1988, and 1995, with samples of 8,000-11,000 women 15-44 years of age (Mosher and Bachrach 1996). The survey has been designed to provide reliable national estimates of factors associated with birth and pregnancy rates and family formation.

The NSFG responds to the requirement in the Public Health Service Act that the NCHS "shall collect statistics on . . . family formation, growth, and dissolution" (§ 306 (b)1(h) 42 USC 242). The NSFG data on contraceptive use, marriage and cohabitation, sexual activity, and infertility help NCHS produce data that supplement—and help amplify and explain—the data produced by the birth registration system (see the essay by Ventura in this monograph, as well as Ventura, Mosher, Curtin, Abma, and Henshaw 2000).

NSFG data are also used in the following ways, among others:

- To document statistically the determinants and consequences of teenage pregnancy, in the U.S. Department of Health and Human Services (HHS) annual report to Congress on teenage pregnancy required by Section 905 of the Welfare Reform Act (U.S. Department of Health and Human Services 2000).

- For the Title X family planning program administered by HHS Office of Population Affairs, the NSFG provides measures of the need for the program and the services received by clients of Title X and other programs (e.g., Frost, 2001; Abma, Chandra, Mosher, Peterson, and Piccinino 1997).

- For the National Institute for Child Health and Human Development, the NSFG helps identify topics that need further investigation and serves as a source of data for scholars and policy researchers (e.g., Bumpass and Lu, 2000).

- To measure gains made toward achieving numerous Healthy People 2010 objectives.

- As a basic source of statistical data for the National Campaign to Prevent Teen Pregnancy (e.g., Anderson, Driscoll, and Lindberg, 1998; Terry and Manlove 2000).

The results of the survey have been published in more than 250 NCHS reports and articles in scientific journals (e.g., Mosher and Bachrach, 1996; Abma, Chandra, Mosher, Peterson, and Piccinino 1997; Ventura, Mosher, Curtin, Abma, and Henshaw 2000; Abma and Sonenstein 2001; Bramlett and Mosher 2001). Many of those reports have focused on the following factors affecting birth and pregnancy rates:

- Marriage, divorce, unmarried cohabitation, and sexual intercourse among teens and adults.
- Contraceptive use, sterilization, infertility, and breast-feeding.
- Miscarriage, stillbirth, and wanted and unwanted births.

NSFG provides reliable data at the national level on marriage, divorce, childbearing, and parenthood (including out-of-wedlock teenage pregnancies) and the characteristics of women's sexual partners. The 2002 NSFG will also interview men in order to produce reliable data on fatherhood and mens' role in teen pregnancy prevention and childrearing. In addition, the survey also collects information on work, child care, and the amount and sources of income, including welfare, food stamps, and Medicaid, among others.

An outline of the 1995 NSFG questionnaire follows:

- Background:
  - Periods of living with mother, father, and grandparents during childhood.
  - Work history.

- Pregnancy history and family formation:
  - Pregnancies and births.
  - Adoption, stepchildren, foster children.

- Marriages and relationships:
  - Marriage history and cohabitation history.
  - First intercourse.

  - Partner history, 1991-1995.
  - Sterilization operations.
  - Whether difficult or impossible to get pregnant or carry to term.

- Contraception and birth expectations:
  - All contraceptive methods ever used.
  - Methods used in 1991-1995.
  - Wantedness of pregnancies.
  - Births expected in the future.

- Use of medical services:
  - Family planning services, infertility services, and other medical services.
  - Diseases related to infertility
  - HIV testing

- Demographic characteristics:
  - Race and ethnicity, religion, child care, income, health insurance.

The 1995 National Survey of Family Growth (NSFG) was based on in-person interviews with a national sample of 10,847 women 15 to 44 years of age. It provides a unique and detailed statistical portrait of American women and families, focusing on factors affecting birth and pregnancy rates (including out-of-wedlock and teenage childbearing), women's health, and marriage and divorce.

The next NSFG, in 2002, will be based on in-person interviews with a national sample of about 19,000 men and women 15-44 years of age. The data collected will describe how American men, women, and families are changing over time.

Methodology of the NSFG. The 1995 NSFG contains data on sexual activity, marriage, infertility, contraceptive use and other behaviors by factors such as age, education, income, receipt of welfare or other income assistance, race and Hispanic origin; the types of medical services received in the last year, if any, and where that care was received; and neighborhood characteristics.

It is often noted that telephone surveys are faster and less expensive to conduct than in-person studies like the NSFG. But the NSFG and its predecessor surveys have always been based on in-person interviews, for several reasons. First, given the sensitive subject matter of the interview, it is important that the respondent can verify the identity and legitimacy of the interviewer (which is not possible by telephone). Second, the interviewer can ensure the respondent's privacy and provide materials and explanations that ensure that the respondent understands the questions and the answer choices. Third, in-person interviews have higher response rates and provide better coverage of low-income populations. For example, in the 1995 NSFG, more than 1 in 5 AFDC recipients (22 percent) lived in a household without a telephone, as did 12 percent of other low-income women (i.e., those with incomes below 200 percent of the poverty line). These

households would have been missed if the survey were conducted by telephone. The NSFG is based on in-person interviews conducted in the households of the responding women.

Before 1995, the surveys took about 60 to 70 minutes to complete; in 1995, however, the interviews averaged 100 minutes. Response rates have averaged about 79 percent. In 1995, the interviews were conducted using laptop computers, and some of the data were collected using a technique called Audio Computer-Assisted Self-Interviewing (Audio CASI), in which the respondent entered her answers into the computer herself. Interviews were conducted in private in either English or Spanish. Parental consent was obtained for interviews with women 15 to 17 years of age. The sample was drawn from the civilian, non-institutional population of the United States (Mosher 1998; Kelly, Mosher, Duffer, and Kinsey 1997).

All surveys are affected by sampling error (which can be measured well) and non-sampling error (which is harder to measure). Sampling error is the difference between the results obtained from the sample—in this case, of 10,847 women—and the results that would have been obtained if all 60 million women 15-44 years of age were interviewed. Non-sampling error is caused by inability to interview every person in the sample, and the inability of respondents to provide some of the information requested. The NSFG has always been designed to minimize both types of error and to collect the highest quality data possible. Sampling error is minimized by the sample design. To minimize non-sampling error, the questionnaire is carefully constructed; the interviewer materials are customized to the survey; the interviews are conducted in person by professional female interviewers, who receive an intensive, seven-day training session.

Extensive checks on the quality of the information are built into the interview and conducted during data processing. For example, the survey estimates of births match well with the number of births reported in the birth registration system (Abma, Chandra, Mosher, Peterson, and Piccinino 1997, table 6).

Measures of sampling error for the percentages shown in table 2 are shown in Appendix Table A. Sampling variation is fairly small in tables 1-4 because the sample sizes are quite large in the groups shown in tables 1-4. (The size of the sampling errors in table 2 is very similar to those in tables 1, 3, and 4, because the denominators of the percentages are the same in tables 1-4.) Measures of sampling error for every statistic in tables 1-6 are available from the authors on request.

The data described in this chapter are primarily from the 1995 NSFG. In 2002, the survey will include about 11,800 women and, for the first time, 7,200 men of reproductive age, for a total sample of 19,000.

Trends in Contraceptive Use by Income

NSFG data can be used to monitor how families in different segments of the population are changing over time. For example, a recent article described contraceptive use among white and black women by household income level (Piccinino and Mosher 1998). That analysis showed

that, among low-income black women, the proportion using the oral contraceptive pill dropped *by half,* from 41 percent to 20 percent, between 1988 and 1995. This pronounced drop was offset by increases in use of female sterilization, which rose from 41 percent to 52 percent, and use of Norplant implants and Depo-Provera injectables, which increased to 6 percent. It is likely that these changes in contraception among low-income Black women helped produce the sharp decline in the birth rates that occurred among young Black women in the 1990s (Ventura, Mosher, Curtin, Abma, and Henshaw 2000).

Other research based on the NSFG (Ranjit, Bankole, Darroch, and Singh 2001) shows that sterilization, implants, and injectables have lower rates of accidental, or unintended, pregnancy than the pill. Among low-income white women, a similar but smaller drop in the use of oral contraceptive pills (from 36 percent to 25 percent) was accompanied by increases in the use of female sterilization, implants, and injectables. Recent studies have found income to be closely correlated with effective use of the pill and other contraceptive methods (Ranjit, Bankole, Darroch and Singh 2001, tables 5 and 6). Another recent study showed that the increases in use of injectable and implant contraception were especially pronounced among Black mothers under age 25, and that their birth rates declined sharply in the 1990's (Ventura, Mosher, Curtin, Abma, and Henshaw 2000).

A Profile of Women Receiving Welfare in 1995

Tables 1, 2, 3, and 4 describe three groups of mothers and a comparison group of childless women in 1995, the year before the welfare reform act was passed. The four groups are:

- Mothers receiving AFDC.
- Mothers not receiving AFDC but with household incomes less than twice the poverty level.
- Mothers with higher household incomes (greater than or equal to 200 percent of the poverty level).
- Childless women with higher household incomes.

The NSFG sample included 1,008 mothers in the AFDC group, 2,120 other low-income mothers, 3,765 higher income mothers, and 2,225 women who, although childless, have had intercourse at some time. The variables chosen may be viewed both as measurements of some of the factors that sometimes lead to receipt of welfare, and as factors that help measure how people using public programs are faring. Collecting data on variables such as these over time is one way to monitor the effects of changes in the economy and the effects of public policies on various segments of the population. Complex multivariate analyses (of, for example, factors affecting receipt of welfare) are possible using NSFG data, but they are outside the scope of this chapter.

Table 1 shows some demographic and economic characteristics of the four groups of women. Women receiving AFDC in 1995 averaged 30 years of age, somewhat younger than other low-income and higher-income mothers. Women receiving AFDC had an average of 2.5 children, about the same as other low-income mothers, but significantly more than the higher- income

mothers. On average, women receiving AFDC expected to have three children, about the same as the other low-income mothers, but more than the two higher-income groups. Mothers receiving

Table 1: U.S. Women Ages 15 to 44 by Welfare Status and Selected Demographic and Economic Characteristics, 1995

	AFDC	One or More Births, No AFDC		Childless and Income ≥ 200% of Poverty
		Income <200% of Poverty	Income ≥200% of Poverty	
Sample *n*	1,008	2,120	3,765	2,225
Mean number of:				
Live births	2.5	2.4	1.9	0.0
Additional births expected	0.5	0.4	0.4	1.6
Total births expected	3.0	2.8	2.3	1.6
Years of school completed	10.8	11.5	13.5	13.9
Mean income/ poverty level (%)	106	131	420	490
Mean age (years)	30	33	36	28
Mean age at first intercourse	16	17	18	18
Percent with no telephone in household	22	12	2	2

NA = Not applicable.
Source: 1995 National Survey of Family Growth.

AFDC averaged less than 11 years of school (10.8 years)—less than a high school diploma and less than the other groups. Their income was also lower (about the same as the poverty level).

Table 2 shows some data on early life—the respondents' parents, early sexual activity and contraceptive use—highlighting some striking differences between AFDC mothers and others. For example, more than half (58 percent) of those receiving AFDC had been raised by one parent at least part of their childhoods—far more than the 31 to 40 percent of women in the other three groups. About 61 percent of the AFDC group did not use any contraceptive method at first intercourse; about the same proportion as among other low-income mothers, but much more than in the two higher-income groups. For 65 percent of AFDC recipients, the first pregnancy was unintended, compared with just 50 percent of other low-income mothers and only 42 percent of higher-income mothers. This difference is probably related to younger childbearing: 32 percent of mothers receiving AFDC had had a birth before age 18—far more than in the other three groups.

Table 2: U.S. Women Ages 15 to 44 by Welfare Status and Selected Family Background and Early Reproductive Experience

	AFDC (%)	One or More Births, No AFDC		Childless & Income ≥200% of Poverty (%)
		Income <200% of Poverty (%)	Income ≥200% of Poverty (%)	
Sample *n*	1,008	2,120	3,765	2,225
Woman raised by:				
2 parents from birth	42	60	69	64
1 parent some/all the time	58	40	31	36
First intercourse was:				
Not voluntary	14	9	6	6
Voluntary but not wanted	28	28	20	20
Voluntary and wanted	58	63	73	75
Birth control method at first voluntary intercourse:				
Pill	17	16	23	19
Condom	17	20	23	43
Withdrawal	4	5	9	7
Other	1	3	4	4
No method	61	56	41	28
First voluntary male partner was:				
Same age as she was or younger	19	20	25	24
1-4 years older	56	57	59	59
5-6 years older	9	11	8	7
7 or more years older	16	12	8	10
First pregnancy was:				
Intended	35	50	58	—
Unintended	65	50	42	–
Age at first childbirth:				
Under 18	32	18	9	NA
18-19	30	24	13	NA
20-24	28	41	37	NA
25 or older	10	17	42	NA

NA = Not applicable.
Source: 1995 National Survey of Family Growth.

Of the women receiving AFDC in 1995, 14 percent said that their first sexual intercourse was not voluntary, as table 2 also shows. Another 28 percent reported that their first intercourse was voluntary (i.e., not forced) but not really wanted. Thus, 42 percent of women in the AFDC group had a first intercourse that was either not voluntary or not wanted—similar to the 37 percent of low-income mothers but higher than the 26 percent of higher-income mothers (see also Abma, Driscoll, and Moore 1998). Finally, among the women receiving AFDC, 16 percent reported that their first voluntary male partner was 7 or more years older than the respondent—not dramatically different from other low-income women.

The data in tables 1 and 2 suggest some of the characteristics that most clearly distinguish women who received AFDC in 1995 from those who did not. Those receiving AFDC were much more likely to have grown up in one-parent households; their first pregnancies were much more likely to be unintended (nearly two-thirds were unintended), and they were much more likely than others to have a birth before they were 18.

Table 3 shows the four groups of women by their current contraceptive use and birth intentions at the date of interview. The proportion of women who were having intercourse (in the 3 months before the interview) but were not using any method of contraception was about the same in each of the 3 groups of mothers: 4 to 6 percent. The differences are small and are not statistically significant. The proportion using contraception at the date of interview was 70 percent among women on AFDC—higher than the proportion of childless women using contraception, but lower than the two other groups of women with children.

Nearly half (49 percent) of those receiving AFDC in 1995 had had tubal sterilizations for contraceptive reasons. In addition, by 1995, 13 percent of the women in this group were already using either Norplant or Depo-Provera, compared with 3 to 6 percent of the respondents in the other three groups. In short, women receiving AFDC tended to be using the most effective contraceptive methods available—sterilization, implants, and injections—at least as much as the other two groups of mothers. Finally, 27 percent of women receiving AFDC in 1995 intended to have at least one more birth, a marginally higher proportion than in the other two groups of mothers.

Table 3: U.S. Women Ages 15 to 44 by Welfare Status and Current Contraceptive Use and Birth Intentions, 1995				
		One or More Births, No AFDC		Childless and Income ≥ 200% of Poverty (%)
	AFDC (%)	Income<200% of Poverty (%)	Income ≥200% of Poverty (%)	
Sample *n*	1,008	2,120	3,765	2,225
Use of contraception:				
Having intercourse and not using a method	6	5	4	8
Using contraception	70	78	79	63
Method of contraception:				
Female sterilization	49	46	33	3
Male sterilization	1	8	19	5
Norplant implants	5	2	1	1
Depo-Provera shots	8	4	2	3
Pill	17	19	17	49
Condom	15	14	17	29
Other	6	7	11	10
Do you intend to have any (more) births?				
Yes	27	22	18	67
No	68	72	75	25
Don't know, nor sure, or disagree with partner	5	6	7	8
Fecundity status:				
Surgically sterilized for contraceptive reasons	34	41	40	5
Surgically sterilized for health reasons	2	4	5	2
Impaired fecundity	11	9	10	13
Fecund	53	46	45	80
NA = Not applicable. *Source:* 1995 National Survey of Family Growth				

Table 4 shows several other measures of characteristics of the four groups of women at the date of interview. About half (52 percent) of mothers receiving AFDC had been married at some time in their lives. Although this proportion is much lower than in the other groups of mothers, the data do not correspond to the popular image of the never-married teenage welfare recipient.

Table 4: Percentage of U.S. Women Ages 15 to 44 by Welfare Status and Selected Characteristics, 1995				
		One or More Births, No AFDC		Childless and Income ≥ 200% of Poverty (%)
	AFDC (%)	Income <200% of Poverty (%)	Income ≥200% of Poverty (%)	
Sample *n*	1,008	2,120	3,765	2,225
Marital and cohabitation history:				
Ever married	52	85	95	43
Ever cohabitated	28	8	3	18
Neither	20	7	2	39
Unmarried women—number of male sexual partners in past 12 months:				
None	12	16	15	16
1 man	48	50	54	52
2 men	16	16	18	17
3 or more men	25	18	13	14
All women—intercourse in past 12 months:				
All 12 months	63	76	82	61
9-11 months	10	8	8	11
1-8 months	15	9	7	15
No intercourse at all	13	7	4	13
Labor force status last week:				
Working	19	49	64	71
Going to school	10	3	1	16
All other	70	48	35	13
Importance of religion in daily life:				
Very important	52	57	54	36
Somewhat important	40	36	38	46
Not important	9	7	8	18
Source: 1995 National Survey of Family Growth.				

Among currently unmarried mothers receiving AFDC, 63 percent had had intercourse in all 12 of the previous 12 months, compared with 82 percent of higher-income mothers. About 60 percent had had one or no sexual partners in the past 12 months. About 25 percent had had three or more partners in the last 12 months.

About half of the mothers receiving AFDC (52 percent) said that religion was "very important" in their daily lives. Only 9 percent said that religion was "not important." Those proportions were similar for other low-income mothers and higher-income mothers. Religion was "very important" to a much smaller proportion of the group of women without children.

Role of Neighborhood Characteristics

Is the rate of teen childbearing and welfare receipt related to the neighborhood or community environment, or only to the characteristics of the individuals? To make it possible to study such questions, the NSFG contextual data file, which is available to qualified researchers through the NCHS Research Data Center (http://www.cdc.gov/nchs/r&d/rdc.html), contains data on many characteristics of the areas in which women in the NSFG sample live. Many of the variables are available at the state, county, census tract, and block group levels. Researchers can thus examine outcome variables (such as marriage, contraception, or childbearing) by measures such as:

- Percentage of population black, white, Hispanic.
- Median rent; median value of homes.
- Median family income; median household income.
- Percent receiving public assistance.
- Average value of public assistance.
- Unemployment rate.
- Percent with incomes below poverty level.
- Crime rates (violent, property, and total).
- AFDC payment per family, or per recipient.
- AFDC income cut-off.

Tables 5 and 6 illustrate how these variables can be used, employing characteristics of the block group (the smallest of these four units) as an indicator of the neighborhood environment. Neighborhood characteristics come from block group-level data as measured in the 1990 census, and the sample is limited to women for whom community characteristics were available. Three measures of neighborhood economic conditions are shown: median family income, unemployment rate, and percentage of households receiving public assistance. Data are presented for all women, white non-Hispanic women, and Black non-Hispanic women. Data for all women includes Hispanics, Asians, and American Indians. These groups could not be shown separately because there were not enough of them in the sample to generate reliable statistics.

Table 5 presents data for 3,821 women age 18 to 29, and shows the percentage of those women who had a birth before age 18. Table 6 is limited to women 15 to 19, and shows the percents of women 15 to 19 who had ever had sexual intercourse.

Establishing the role that the neighborhood or community environment plays in affecting individual behavior requires complex statistical analyses that are beyond the scope of this chapter (for examples, see Billy, Brewster, and Grady 1994; Brewster, 1994; Mosher and McNally 1991). Tables 5 and 6, however, show some simplified examples. These data are nonetheless consistent with South and Baumer's (2000, p. 1379) finding that "(most) of the racial difference in the risk

of premarital childbearing can be explained by racial differences in neighborhood quality" and with Kirby, Coyle, and Gould's (2001) finding that most of the differences between areas in the teen birth rate were associated with the levels of poverty and education in the community.

Table 5: Percentage of Females Ages 18 to 29 Who Had Had a Birth Before Age 18, by Race and Specified Community Characteristics, 1995

Community characteristic (in 1990)	All Women[1]	White (Non-Hispanic)	Black (Non-Hispanic)
Average for all communities	8	5	18
Median family income:			
Less than $20,000	21	10	33
$20,000-49,999	8	6	15
$50,000 or greater	3	2	2
Unemployment rate:			
Less than 5 percent	6	4	9
5-9 percent	8	6	17
10 percent or greater	16	7	27
Percentage of households on welfare:			
Less than 3 percent	5	4	10
3-8 percent	7	5	14
9 percent or greater	15	8	25

Note: All three neighborhood characteristics in this table were measured at the block group level, using summary tape files from the 1990 census. Sampling error estimates for all tables in this chapter are available from the authors on request.

[1] All women category includes Hispanics, Asians and American Indians. These groups are not shown separately because there were not enough of them in the sample to generate reliable statistics in this table.

Source: 1995 National Survey of Family Growth contextual data file.

Eight percent of women 18-29 years of age (for whom information on community characteristics was available) had had a birth before age 18, including 5 percent of white women, and 18 percent of black women. For white women in low-income neighborhoods (median family incomes below $20,000), 10 percent had given birth before age 18. In neighborhoods with median incomes of $50,000 or more, the proportion was only 2 percent. Among non-Hispanic Black women, 33 percent living in low-income areas had given birth before they were 18. Thus, although Black teens in poor neighborhoods were more likely to have had a birth than white women*, births before age 18 were equally rare to both white and Black teens in higher-income neighborhoods.*

For white women, unemployment levels did not seem to predict the likelihood that a women had given birth before age 18. For Black women, however, the proportion who had had a birth

before age 18 was 9 percent in low-unemployment areas and 27 percent in high-unemployment areas. A fairly similar pattern was seen for levels of welfare receipt in the neighborhood.

Table 6 looks at these patterns for teenagers—females ages 15 to 19. About 61 percent of white teens in low-income neighborhoods had had intercourse, compared with just 38 percent in areas with median incomes of $50,000 and up. The same pattern holds just as strongly for Black

Table 6: Percentage of Females Ages 15 to 19 Who Had Ever Had Sexual Intercourse, by Race and Specified Community Characteristics, 1995

Community characteristic (in 1990)	All Women[1]	White (Non-Hispanic)	Black (Non-Hispanic)
Average for all communities	50	50	60
Median family income:			
Less than $20,000	69	61	68
$20,000-49,999	51	51	57
$50,000 or greater	37	38	45
Unemployment rate:			
Less than 5 percent	42	43	56
5-9 percent	54	57	56
10 percent or greater	66	57	64
Percentage of households on welfare:			
Less than 3 percent	43	44	55
3-8 percent	48	50	49
9 percent or greater	63	58	65

Note: All three neighborhood characteristics in this table were measured at the block group level, using summary tape files from the 1990 census. Sampling errors are larger in this table than in tables 1-5 because the number of sample cases is smaller in table 6 (n=1,400) than in tables 1-5. Sampling error estimates for all tables in this chapter are available from the authors on request.

[1] All women category includes Hispanics, Asians and American Indians. These groups are not shown separately because there were not enough of them in the sample to generate reliable statistics in this table.

Source: 1995 National Survey of Family Growth contextual data file.

teenagers: 68 percent in the poorest areas and 45 percent in the most affluent areas had had intercourse. Similarly, teens who live in areas of high unemployment (10 percent and higher) were more likely to have had intercourse than were teens in areas with low unemployment. Finally, teens living in neighborhoods in which less than 3 percent of the households received welfare were much less likely to have had intercourse than were those in areas in which 9 percent or more of the households were receiving welfare benefits.

The findings in tables 5 and 6 are consistent with theories suggesting that not just individual characteristics, but also economic opportunity and other neighborhood characteristics affect patterns of teenage sexual behavior. These can be monitored in future cycles of the NSFG, and verified with detailed multivariate studies, such as those by Hogan, Astone, and Kitigawa (1985); Mosher and McNally (1991); Billy, Brewster, and Grady (1994); Brewster (1994); South and Baumer (2000); and Kirby, Coyle, and Gould (2001).

Looking to the Future

In 2002, Cycle 6 of the NSFG is expected to interview about 11,800 women and 7,200 men ages 15 to 44. Black and Hispanic men and women will be sampled at higher rates than white men and women, and teenagers will be sampled at a higher rate than adults, in order to allow for more detailed analyses of these groups. Trends and differences in sexual activity, contraceptive use, marriage, divorce, and cohabitation, will be measured more reliably and more consistently than ever before.

Recent changes in the administration of the survey have made it possible to conduct the NSFG more frequently and more flexibly than in previous years. If Cycle 6 is completed in 2002, for example, Cycles 7 and 8 could follow at three-year intervals—in 2005 and 2008—if funding is sufficient. Conducting the survey every three or four years would make the data more useful for monitoring the changes in American families over the next decade.

Finally, several options for the 2005 and 2008 surveys are being considered:

1. Many men who are in prisons and jails are fathers. Including a sample of incarcerated men could help to measure the prevalence of absent fathers in various groups in the population and help to understand the impact of their absence on their families.

2. National household surveys usually exclude men and women in the military. Including respondents who are in the military would provide data comparable to those for the civilian population on patterns of marriage, divorce, contraception, unintended pregnancy, and family growth among those in the military.

3. Collecting biomarkers such as urine, saliva, or hair samples could help further our understanding of some of the correlates of health and disease, teenage pregnancy, marriage and divorce, and infant health.

4. Conducting a 4-month follow-up survey to collect more detailed, reliable data on the consistency with which contraceptives are used, and how unintended pregnancies occur, could supply information that would help to improve birth control counseling, especially among groups with high rates of pregnancy, including sexually active teens, minorities, and the poor.

5. Increasing the sample size of the survey to as many as 35,000 interviews could allow for larger samples of Black, Hispanic, or Asian respondents; or larger numbers of teenagers; or

samples that would allow separate estimates for regions or selected states. The age range could be expanded (e.g., up to age 59) to improve statistics on topics such as cohabitation, marriage, divorce, child care and child support, and blended families.

The cost of any of these options must be funded separately, but the marginal costs would be lower than the costs of doing an independent study to accomplish the same goal.

Compared with other surveys of families and children, then, the NSFG can provide useful data on out-of-wedlock and teenage childbearing, unintended pregnancy, marriage, divorce and cohabitation, and a variety of other outcomes, as discussed. In short, the NSFG is in a position to provide a reliable and detailed statistical portrait of the ways in which American men, women and families deal with the changing conditions in which they live.

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Appendix

Appendix Table A: 95 Percent Confidence Intervals[1] for the Percentages in Table 2

	AFDC (%)	One or More Births, No AFDC		Childless and Income ≥200% of Poverty (%)
		Income <200% of Poverty (%)	Income ≥200% of Poverty (%)	
Woman raised by:				
2 parents from birth	40.2-43.8	58.6-61.4	68.0-70.0	62.7-65.3
1 parent some/all the time	56.2-59.8	38.6-41.4	30.0-32.0	34.7-37.3
First intercourse was:				
Not voluntary	12.5-15.5	8.2-9.8	5.6-6.4	5.5-6.5
Voluntary but not wanted	26.2-29.8	26.7-29.3	19.2-20.8	19.2-20.8
Voluntary and wanted	56.1-59.9	61.7-64.3	72.2-73.8	74.1-75.9
Birth control method at first voluntary intercourse:				
Pill	15.5-18.5	15.1-16.9	22.2-23.8	18.1-19.9
Condom	15.5-18.5	19.0-21.0	22.3-23.7	41.9-44.1
Withdrawal	3.2-4.8	4.4-5.6	8.5-9.5	6.4-7.6
Other	0.6-1.4	2.6-3.4	3.6-4.4	3.6-4.4
No method	58.9-63.1	54.8-58.2	40.1-41.9	27.0-29.0
First voluntary male partner was:				
Same age as she was or younger	17.4-20.6	18.9-21.1	24.3-25.7	23.0-25.0
1-4 years older	54.0-58.0	55.7-58.3	58.0-60.0	57.8-60.2
5-6 years older	7.9-10.1	10.2-11.8	7.5-8.5	6.4-7.6
7 or more years older	14.6-17.4	11.2-12.8	7.5-8.5	9.3-10.7
First pregnancy was:				
Intended	33.1-36.9	48.7-51.3	57.1-58.9	–
Unintended	63.1-66.9	48.7-51.3	41.1-42.9	–
Age at first childbirth:				
Under 18	30.2-33.8	17.1-18.9	8.5-9.5	NA
18-19	28.4-31.6	22.9-25.1	12.4-13.6	NA
20-24	26.5-29.5	39.8-42.2	36.2-37.8	NA
25 or older	8.9-11.1	16.1-17.9	41.1-42.9	NA

[1]This means that the chances are 95 out of 100 that the true value of the percentage in the total population is between the upper and lower percentages shown.
NA = Not applicable. *Source:* 1995 National Survey of Family Growth