Socioeconomic Differentials and Trends in the Timing of Births

This report contains an analysis of cumulative birth probabilities within first marriages in the United States. Trends and differentials in these probabilities, by race, Hispanic origin, education at first marriage, farm origin, religious preference, and timing of first birth are discussed. The probabilities are shown for specified birth order intervals and age at first marriage or previous birth.

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SOCIOECONOMIC DIFFERENTIALS AND TRENDS IN THE TIMING OF BIRTHS

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INTRODUCTION

This report presents an analysis of how quickly births follow first marriage and succeeding births. It is concerned with whether births occur sooner after marriage and closer together in some socioeconomic groups of women than in other groups. Trends in the timing of births are also considered. The data in this report pertain only to births within first marriage, not to all births.

Although the data were collected in 1973, the techniques, measures, and substantive findings discussed in this report are unique and of continuing importance in any complete analysis of childspacing, fertility differentials, and fertility trends in the United States. The data are a product of an important new application of life table methodology that provides more valid measures of childspacing and of the extent of untimely births in various groups than has heretofore been available. Accordingly this report provides valuable baseline data against which future studies of childspacing and fertility differentials and trends can be compared.

The timing of births within marriage may have important effects on annual fertility rates, maternal and child health, and the future economic status of parents. Given the present low levels of fertility in the United States, the timing of births may have more effect than changes in completed family size on annual fertility rates, since changes in completed family size are likely to be small. Even if completed family size does not change at all, if birth intervals become shorter, annual fertility rates will rise temporarily; if birth intervals become longer, annual fertility rates will fall.

In addition to the effect on fertility rates, the spacing of births can have a long-lasting influence on the health of the mother and child. The risk of maternal and infant mortality, as well as other complications of childbirth, increases when births are spaced closely together. The timing of the arrival of children also influences the occupational and educational opportunities of the parents. Much attention has been focused on the timing of the first birth[1-3] as a crucial event in determining the family's relative socioeconomic status later in life.

SUMMARY OF PRINCIPAL FINDINGS

This report presents national estimates of differences between socioeconomic groups in the timing of births within first marriages in the United States. Using a life table technique, the report shows the probability of having a birth within a specified period of time since the first marriage or the most recent birth. This section highlights some findings discussed in greater detail in later sections.

The data demonstrate that a woman's age at first marriage or her most recent birth is closely associated with how quickly the next birth will take place. For example, women first married before age 19 were more likely to have their first birth within 12 months of marriage than were women married in the age group 19-21 years, or those aged 22 years or over. The respective

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probabilities were .46, .35, and .26. This indicates that the chances were 46, 35, and 26 out of 100, respectively, that a birth would occur within 12 months of marriage. Because age has this important effect, cumulative birth probabilities by other characteristics are shown separately for comparable categories of age at first marriage or previous birth.

There were significant differences in the timing of births in different racial, ethnic, and religious groups. Black women were about twice as likely to have their first birth within 7 months of marriage as white women were (the probabilities were .32 and .14, respectively) and to have a second birth within a year of their first birth (.14 and .07, respectively). Black wives were also more likely than white wives to have subsequent births spaced closely together.

Women of Hispanic origin were more likely to have their first birth within a year of marriage than were other women (.49 and .36, respectively), to have a second birth within 18 months of the first (.29 and .23, respectively), and to have a third birth within 18 months of the second (.24 and .16, respectively).

White Catholic wives were more likely than were white Protestant wives to have two live births within 18 months of each other. For both the first and subsequent births, birth probabilities for white Catholic women were higher than for white Protestant women at each 6-month interval from 12 to 60 months after first marriage, although not always significantly so.

Among women of similar ages at first marriage or at the birth of their most recent child, there was no strong, consistent pattern in the timing of births by the educational attainment of the women at the time of first marriage.

The probability of having a first birth within 12 months of marriage was higher for women first married in 1960-64 than for women first married in 1970-73. Similarly, the probability of having a second birth within 18 months of the first birth was lower for women first married in 1970-73 than for women first married in 1960-64.

In general, the findings of this report suggest two overall conclusions. Since the late 1950's, there has been some lengthening of birth intervals for the first two births and declines in the

probabilities of later births within first marriages in the United States. However, there are still significant groups—black women, Hispanic women, women who marry at young ages, and Catholic women—who frequently have births at closely spaced intervals. These findings may have important implications for fertility rates, maternal and child health, and the economic prospects of parents.

After this summary, the text contains sections describing the background and methodology of the report, and a more detailed discussion of the specific findings of the study. Appendixes I-IV contain technical notes, an explanation of how the birth probabilities were calculated, definitions of terms, and a reproduction of the survey questions on marriages and births.

BACKGROUND AND METHODOLOGY

The data presented in this report are results of the 1973 National Survey of Family Growth (NSFG), conducted by the National Center for Health Statistics. The NSFG is a periodic survey designed to provide information about fertility, family planning, and those aspects of maternal and child health that are closely related to childbearing. For the 1973 survey, data on these topics were collected through personal interviews with about 9,800 women 15-44 years of age who had ever been married or who had offspring of their own living in the household. Respondents were selected by a multistage, area probability, cross-sectional sample of households in the conterminous United States. The interviews were conducted between July 1973 and February 1974, and were centered on September 13, 1973. Further discussion of the survey design, definition of terms, and sampling variability can be found in the appendixes.

In this report, the detailed pregnancy histories obtained from each respondent in the 1973 survey are used to study spacing of live births. The spacing of births is discussed in terms of the following six intervals:

First interval—First marriage to first birth.

Second interval—First birth to second birth.

Third interval—Second birth to third birth.

Fourth interval—Third birth to fourth birth.

Fifth interval—Fourth birth to fifth birth.

Sixth interval—Fifth birth to sixth birth.

A cross-sectional sample of women 15-44 years of age is useful in analyzing the spacing of births because it permits study of groups of women of the greatest interest—younger wives who may not have completed their childbearing. However, this cross-sectional design requires that several special procedures be used to insure that the estimates of birth intervals are unbiased.[4] This section describes those procedures.

Because women were selected by marital status for the sample, this report focuses only on births that occurred within first marriages, not on all births. Women who had a live birth before their first marriage were excluded from the calculations.

Since the younger women had to have married at a young age to be included in the sample, women in the younger age cohorts who will marry at older ages are not observed. Thus there is a younger distribution of age at first marriage than would be obtained from a sample taken only from an age group in which most women who will marry have already done so. Since many studies have shown that age at first marriage is related to subsequent fertility, tabulations on the interval from first marriage to first birth were controlled for age at first marriage.

Similarly, because women of childbearing age (15-44 years of age) were interviewed, most of the fertility histories collected are incomplete. Many of the women interviewed will have more children in the future. The younger women in the sample will have had births only at young ages; the older women, however, may have had births both at younger and at older ages. Therefore, the study of a cross-section of women 15-44 years of age may yield a younger distribution of age at each birth than would be observed if a sample of women who had *completed* childbearing was selected. Because age at each birth is related to subsequent fertility, age at previous birth was controlled in all tabulations for intervals after the first birth.

Similarly, the time between births is affected because women were interviewed before they completed childbearing. The younger women in the sample have been able to have had children for a shorter period of time before the interview than have the older women. As a result the younger women who have had more than one live birth can only have had short intervals between births, but the older women could have had long or short intervals between births. Thus any cross-sectional sample of women of childbearing age yields more short intervals between births than would be observed if only women with completed fertility histories had been interviewed.

Because of these problems, spacing between births was not measured by computing the mean number of months from one birth (birth n) to the next (birth $n + 1$) for women with $n + 1$ or more births. Means computed in this manner would be too small because of the short intervals resulting from the cross-sectional design of the study. Instead a life table procedure was used to compute the cumulative probability of having a birth a given number of months since the first marriage or since the previous birth.

A life table procedure allows the combination of data on closed intervals with data on open intervals. A closed interval is the number of months from one birth (birth n) to the next birth (birth $n + 1$) for women with at least $n + 1$ births during their first marriage. An open interval is the number of months from birth n to interview for those with n births still in their first marriage at the time of interview or the number of months from birth n to the end of first marriage for those whose first marriage ended between their nth birth and the interview. The details of the calculation of these cumulative birth probabilities can be found in appendix II. In this report, a birth refers to a pregnancy ending in at least one live birth. The end of first marriage refers to the time that the woman and her husband stopped living together and not to the date of formal dissolution, if any.

SPECIFIC FINDINGS

Age and Birth Order Differentials

Table 1 shows the age and birth order patterns of marital fertility in the United States.

During the first interval (first marriage to first birth) the probability of having a first birth rises very quickly. By the end of 5 years, the cumulative probability of having a first birth is .91 for women married before age 19, .85 for women married at age 19-21, and .78 for women married at age 22 or over. Age at first marriage is also related to the probability of a premarital conception (a birth by the end of 7 months of marriage). The probability of a premarital conception was .22 for women married before age 19, .14 for women married at age 19-21, and .08 for women married at age 22 or over.

For the interval from first birth to second birth (second interval), the data show that a younger age at first birth increases the probability of having a second birth within 18 months of the first: the probability is .27 for women with first birth before age 21, and .19 for women with first birth at age 24 or over. The probability of a second birth within 5 years is .84 for women whose first birth was before age 24, and .75 for women whose first birth was at age 24 or over. In general, age at first birth has a smaller effect on the timing of the second birth than age at first marriage has on the timing of the first birth.

The birth probabilities for the first two intervals are high, and appear to reflect a desire for at least two children in almost every marriage.

Figure 1 shows cumulative probabilities of a third birth by the age of the wife at her second birth. This interval is particularly important because an average of about two births per couple suffices to replace the population of each generation; three births per couple implies substantial population growth over the long term. Stronger differences emerge in this interval than in the previous two intervals because more couples decide then that their family is complete. Five years after the second birth, the probability of a third birth is .68 for women with a second birth before age 23, .55 for women with a second birth at age 23-26, and .37 for women with a second birth at age 27 or over. A younger age at second birth is related to a greater probability of having a third birth within 18 months of the second.

When corresponding groups by age at previous birth are compared for the fourth through
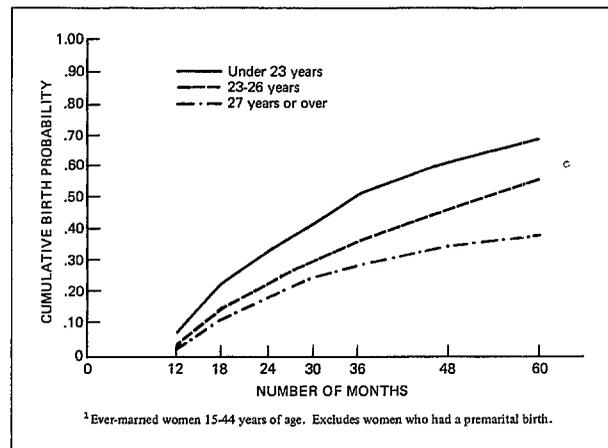
Figure 1. Cumulative birth probabilities by month for the interval from second birth to third birth, by mother's age at second birth: United States, 1973[1]

the sixth intervals, the cumulative birth probabilities are very similar. However there are sharp differentials among the age groups in each of these birth intervals. The birth probabilities are much lower for women who were older at their previous birth (table 1).

Race

In table 1 and figure 1, an important association is shown between age at marriage or previous birth on the one hand and the timing of additional births on the other hand. But even within age groups, there are differences in birth probabilities between white wives and black wives. Table 2 and figures 2-7, therefore, show birth probabilities for white women and black women separately. In the first interval (figure 2), first marriage to first birth, the probability of a birth within 7 months of marriage is higher among black women than among white women in all three age groups (under 19, 19-21, and 22 years or over). However, by the end of 5 years, within age groups, the probability of having a first birth is similar for the two races.

Close spacing of births (two pregnancies each ending in at least one live birth within 18 months of each other) was more common among black women than among white women in all age groups and all intervals beyond the first birth. Although some of the differences
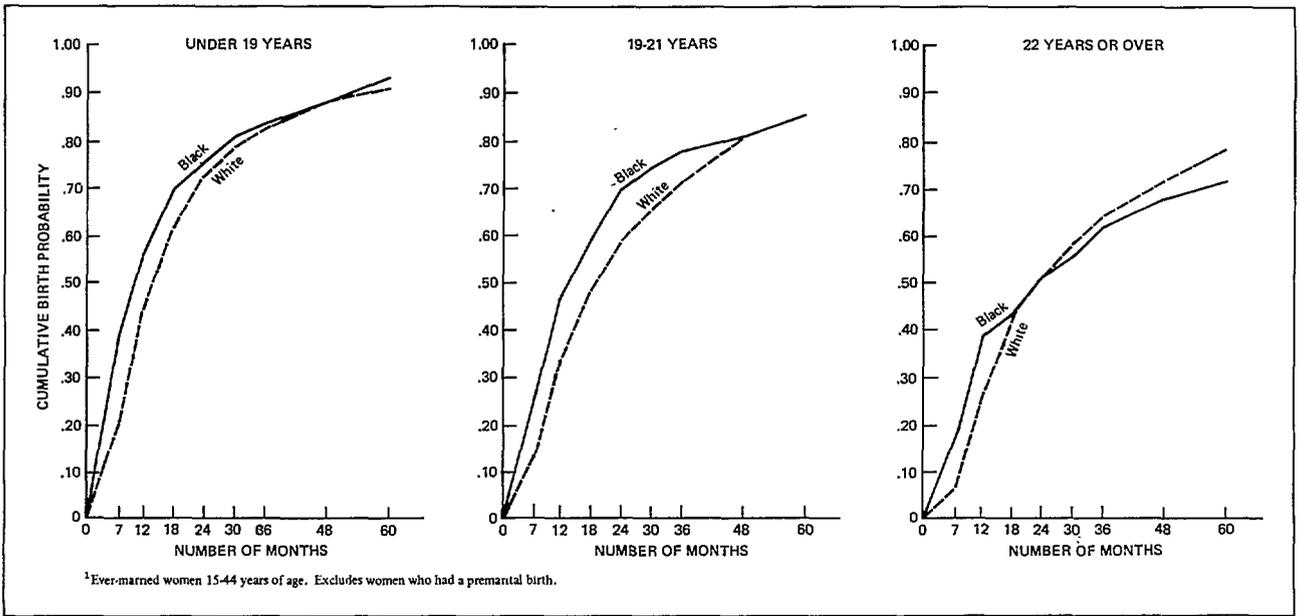
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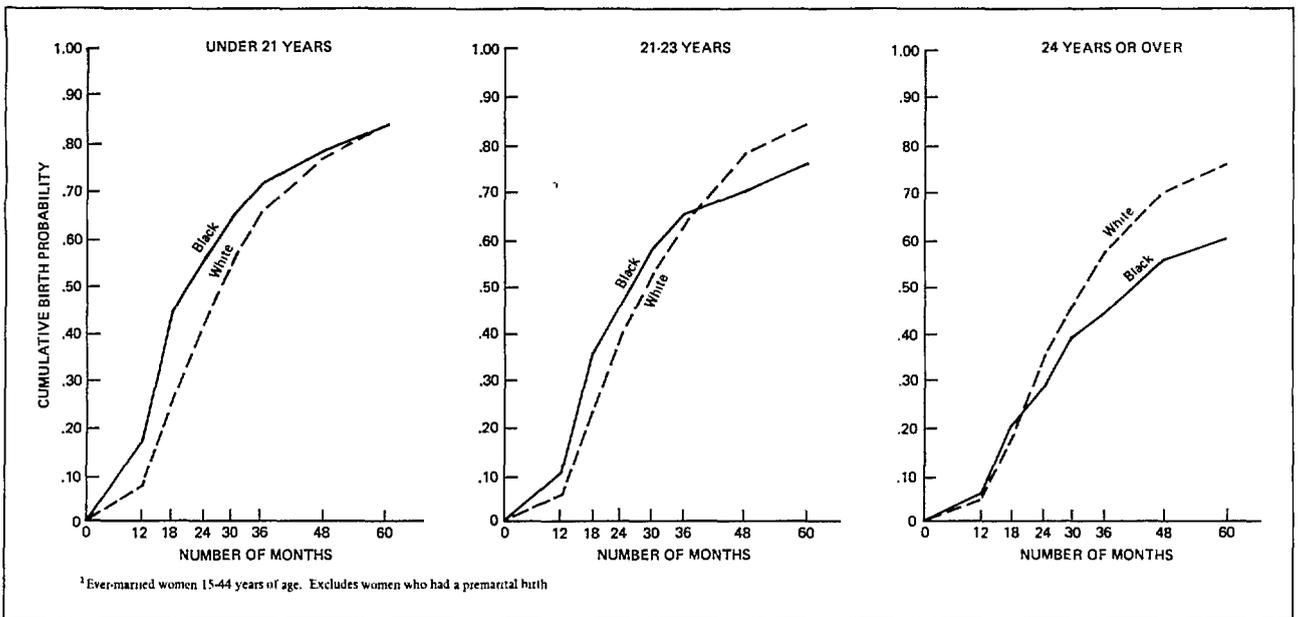
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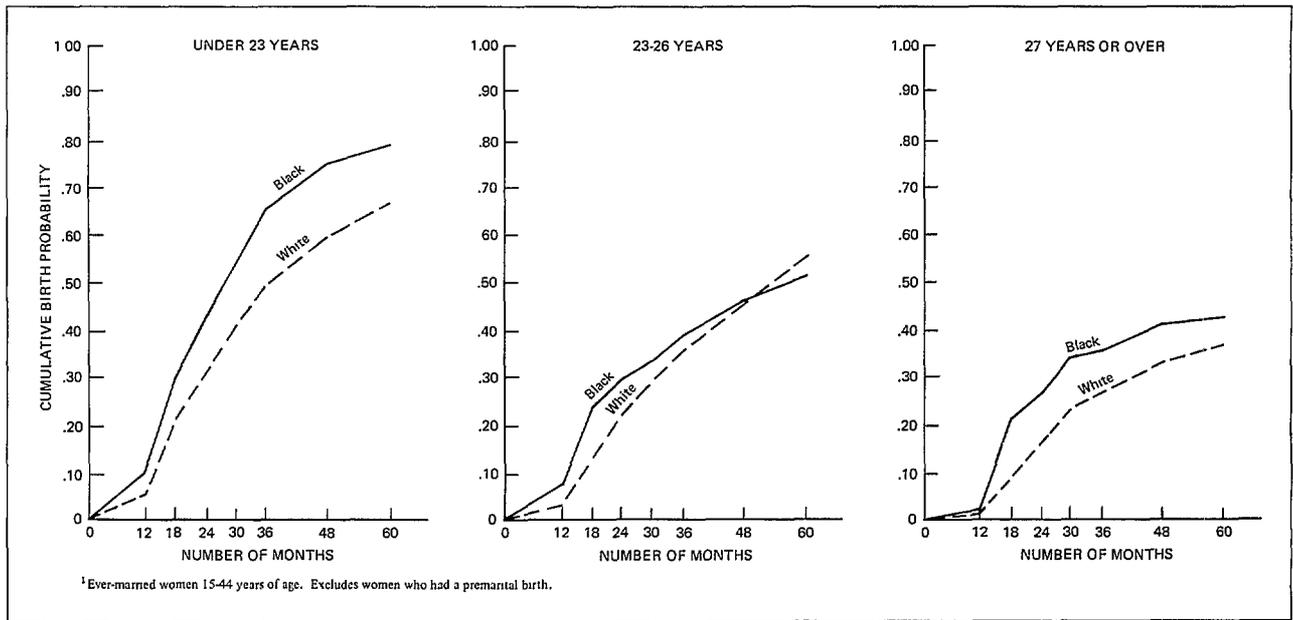
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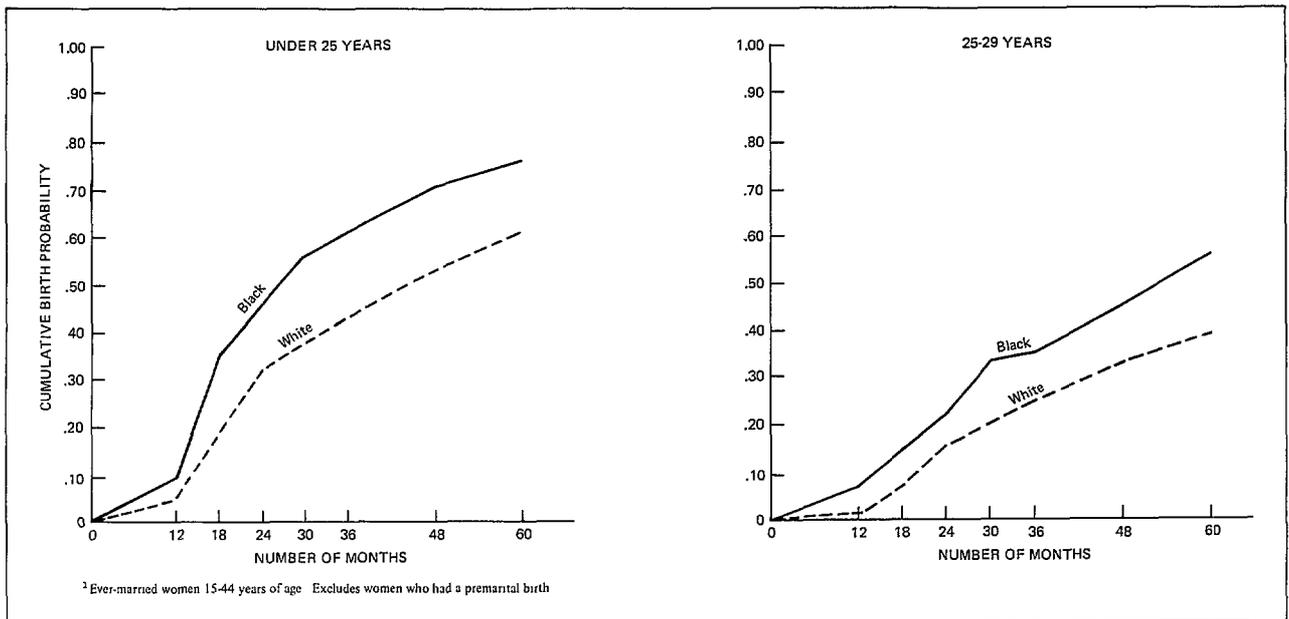
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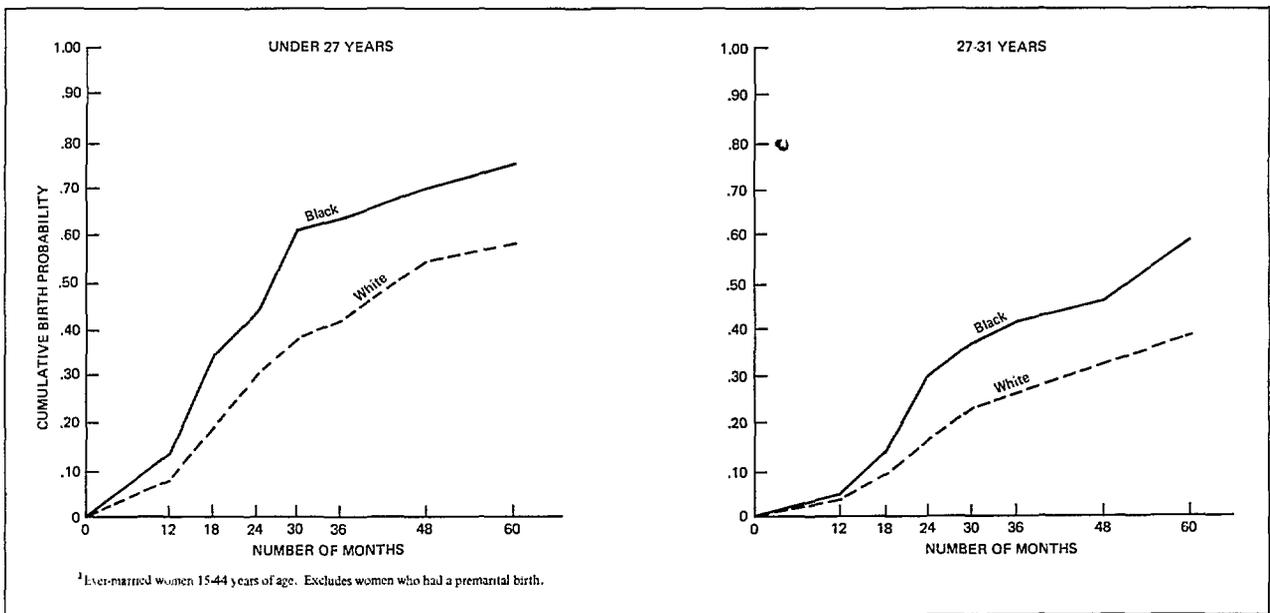
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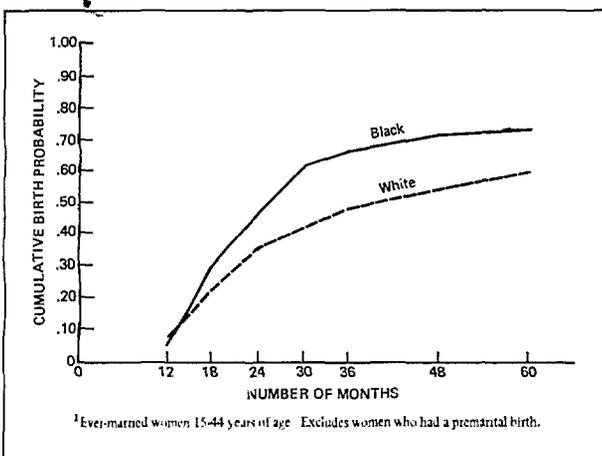
Figure 7. Cumulative birth probabilities by month for the interval from fifth birth to sixth birth for women whose fifth child was born before age 29, by race: United States, 1973[1]

within age groups are not statistically significant, the size and consistency of these differences strongly suggest that they exist in the population as well as in the sample.

In the third, fourth, fifth, and sixth intervals the probability of having a birth within 5 years

was substantially higher for black women than for white women.

Hispanic Origin

Women of Hispanic origin had a higher probability of having a live birth within a year of marriage than other women had. First birth probabilities at points beyond 1 year were also usually higher for women of Hispanic origin (table 3).

In the succeeding intervals women of Hispanic origin were more likely to have births within 18 months of each other than other women were. In addition, in most intervals the birth probabilities rise more quickly for women of Hispanic origin, although by 5 years after the beginning of the interval the probabilities for women of Hispanic origin and all other women tend to converge.

Education at First Marriage

Educational levels were clearly associated with birth probabilities only for the interval from first marriage to first birth. The probability of having a live birth within 7 months of mar-

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riage was higher for women at the lowest educational levels than for those at the highest educational levels for white women and women of all races combined, regardless of age at first marriage (tables 4 and 5). This result may be produced by an effect of education on the timing of the first birth, or an effect of the first birth on whether the woman completes school, or some combination of these factors. Although having a first birth is a nearly universal phenomenon for married women in the United States, the 5-year probabilities of a first birth decrease as educational level increases.

In all subsequent birth intervals, there are only small, inconsistent differences by educational level within age groups.

Among black wives, there were no consistent differences by educational level within age groups (table 6).

Farm Origin

The youngest brides in the sample (those married before age 19) were less likely to have a birth within 7 months of marriage if they were of farm origin. The probability of having a birth within 7 months of marriage, for those married before age 19, was .17 for those of farm origin, and .24 for those of nonfarm origin (table 7).

There were no strong consistent differences between women of farm and nonfarm origins within age groups in the remaining intervals (tables 7-9).

Religion

Birth probabilities for white Catholic and white Protestant women are shown in table 10. Among white women who married before age 19, the Catholic women were most likely to have a live birth within 7 months of marriage. Their probability was .25 compared to .19 for Protestant women. Furthermore, the birth probabilities for Catholic women were higher for all age groups at each 6-month interval from 12 months through 60 months after first marriage than for white Protestant women.

In the second-, third-, and fourth-order intervals, white Catholic women were more likely than white Protestant women were to have closely spaced births (two pregnancies each ending in at least one live birth within 18 months of

each other) and to have an additional birth within 5 years of the beginning of the interval. The birth probabilities were also higher for Catholic women at each 6-month interval from 12 months to 60 months. Although some of the differences in the fourth, fifth, and sixth intervals were not statistically significant, the size and consistency of these differences strongly suggest that they exist in the population as well as in the sample.

Premarital Conception

Conceiving a child before marriage may have an effect on the timing of subsequent childbearing for couples who remain in their first marriage because a premarital conception is correlated with high fecundability and a low level of ability to plan pregnancies. Table 11 contains birth probabilities for the second, third, and fourth birth intervals according to whether or not the first child was born before the end of 7 months of marriage. Women whose first child was premaritally conceived were more likely to have a second birth within 18 months of the first than were women whose first child was not conceived premaritally. For women who had their first birth before they were 24, the birth probabilities converge by 60 months since the first birth. However, for women whose first child was born when they were age 24 or over, the birth probabilities are lower through the 5th year for those without a premarital conception than for those with a premarital conception. In other words, the oldest group of women at first birth, not premaritally pregnant, are probably less likely to have a second birth.

For the interval from second to third birth, among the youngest group of women (those whose second child was born before age 23), women whose first child was premaritally conceived were probably more likely to have their third birth within 18 months of their second. For the older age group and for the interval from third to fourth birth, there were no statistically significant differences between women with and women without premarital conceptions.

Trends in Birth Probabilities, 1950-73

Table 12 contains birth probabilities, by calendar year of first marriage. Because of the

age limits on the population interviewed, to retain comparability between years the age limits on the oldest group in each interval were restricted. The trends should be interpreted with caution since many statements are based on subgroups containing only a small number of cases.

In the first interval, first marriage to first birth, there is no evidence of any strong trends in premarital conceptions, although the reported values for women first married in 1950-54 are lower than those reported for later years. The interval between marriage and first birth decreased between 1950-54 and 1955-59 for all age groups and then increased between 1955-59 and 1970-73. In other words, the birth probabilities at given numbers of months since first marriage were higher in 1955-59 than in 1950-54, and lower in 1970-73 than in 1955-59.

The interval from first birth to second birth decreased from 1950-54 to 1955-59 (although not significantly in each age group). Since then the interval between first and second birth appears to be increasing.

For the third interval, data are available for the two younger age groups for the late 1950's through 1973. A decline in the probability of a third birth within 18 months of the second can be seen since 1960-64. Similarly, between 1960-64 and 1965-69, there was a decline in the probability of a third birth within 5 years of the second.

For the higher order intervals (third birth to fourth birth, fourth birth to fifth birth, and fifth birth to sixth birth), for the time periods available, in every comparison but one, there are declines (not significant in every case) since 1960-64 in the probabilities of having an additional birth within 18 months. Similarly, the 5-year probabilities of having a birth are becoming smaller as fewer women go on to have additional births.

The declines observed in these probabilities through the later 1960's and early 1970's reflect the overall decline in fertility observed during that period. Fewer births of order three or higher as well as fewer closely spaced births (within 18 months) occurred during this period.

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LIST OF DETAILED TABLES

Table 1. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth: United States, 1973

Months since marriage or birth	Age at first marriage			
	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands	28,209	10,729	11,004	6,477
	Cumulative probability of a first birth since first marriage			
Number of months:				
7	.15	.22	.14	.08
12	.37	.46	.35	.26
18	.53	.63	.50	.42
24	.63	.73	.60	.51
30	.69	.79	.67	.58
36	.74	.83	.72	.64
48	.82	.88	.81	.72
60	.86	.91	.85	.78
	Age at first birth			
	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands	21,151	10,264	6,169	4,717
	Cumulative probability of a second birth since first birth			
Number of months:				
12	.07	.09	.07	.05
18	.24	.27	.22	.19
24	.40	.44	.40	.33
30	.53	.57	.52	.46
36	.63	.67	.63	.57
48	.76	.78	.77	.69
60	.82	.84	.84	.75
	Age at second birth			
	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands	15,511	6,863	5,659	2,989
	Cumulative probability of a third birth since second birth			
Number of months:				
12	.04	.07	*.03	*.02
18	.16	.22	.14	.10
24	.26	.33	.22	.17
30	.34	.42	.29	.24
36	.41	.51	.36	.27
48	.50	.61	.46	.34
60	.57	.68	.55	.37

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 1. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth: United States, 1973—Con.

Months since marriage or birth	Age at third birth			
	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands	8,534	3,555	3,672	1,307
	Cumulative probability of a fourth birth since third birth			
Number of months:				
12	.04	*.06	*.03	*.01
18	.13	.21	.09	*.05
24	.23	.34	.16	.10
30	.28	.41	.21	.14
36	.32	.46	.25	.16
48	.40	.55	.33	.20
60	.48	.63	.40	.25
	Age at fourth birth			
	15-44 years	Under 27 years	27-31 years	32 years or over
Number of women in thousands	4,020	1,929	1,459	632
	Cumulative probability of a fifth birth since fourth birth			
Number of months:				
12	.05	.09	*.03	*.00
18	.15	.22	.10	*.03
24	.24	.33	.18	*.08
30	.31	.41	.24	*.12
36	.35	.46	.28	*.14
48	.43	.57	.33	.19
60	.47	.61	.39	.22
	Age at fifth birth			
	15-44 years	Under 29 years	29-33 years	34 years or over
Number of women in thousands	1,900	1,009	609	281
	Cumulative probability of a sixth birth since fifth birth			
Number of months:				
12	*.04	*.06	*.03	*.00
18	.17	.23	*.10	*.06
24	.25	.36	*.14	*.09
30	.32	.45	.22	*.10
36	.37	.51	.24	*.14
48	.43	.57	.30	*.17
60	.47	.61	.35	*.23

[1] Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 2. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth, by race: United States, 1973

Months since marriage or birth	White				Black			
	Age at first marriage							
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands	25,818	9,656	10,283	5,879	2,077	1,014	664	399
	Cumulative probability of a first birth since first marriage							
Number of months:								
7	.14	.20	.13	.07	.32	.39	.27	*.19
12	.36	.45	.34	.26	.48	.56	.47	.39
18	.52	.62	.49	.42	.62	.70	.60	.43
24	.63	.73	.59	.51	.69	.76	.70	.51
30	.69	.79	.66	.58	.74	.81	.74	.56
36	.74	.83	.72	.64	.78	.84	.78	.62
48	.82	.88	.81	.72	.82	.88	.81	.68
60	.86	.91	.85	.78	.86	.93	.85	.72
	Age at first birth							
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands	19,393	9,233	5,789	4,372	1,540	972	344	225
	Cumulative probability of a second birth since first birth							
Number of months:								
12	.07	.08	.06	.05	.14	.17	*.11	*.07
18	.22	.25	.22	.19	.38	.44	.35	*.21
24	.39	.42	.39	.34	.50	.56	.46	.29
30	.53	.56	.52	.46	.59	.65	.58	.39
36	.63	.66	.63	.57	.66	.72	.65	.44
48	.76	.78	.78	.70	.74	.79	.70	.56
60	.82	.84	.84	.76	.79	.84	.76	.60
	Age at second birth							
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands	14,327	6,156	5,379	2,793	1,039	668	256	115
	Cumulative probability of a third birth since second birth							
Number of months:								
12	.04	.06	.03	*.02	.09	*.11	*.08	*.03
18	.16	.21	.13	.09	.28	.30	*.23	*.22
24	.25	.31	.22	.17	.38	.43	.30	.27
30	.33	.41	.29	.23	.47	.54	.33	.34
36	.40	.49	.36	.27	.55	.65	.39	.36
48	.49	.59	.46	.33	.64	.75	.47	.41
60	.57	.67	.55	.37	.69	.79	.52	.42

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 2. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth, by race: United States, 1973—Con.

Months since marriage or birth	White				Black			
	Age at third birth							
	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands	7,812	3,116	3,480	1,216	656	425	176	55
	Cumulative probability of a fourth birth since third birth							
Number of months:								
12	.03	*.05	*.02	*.00	*.09	*.10	*.08	*.01
18	.12	.19	.08	*.03	.28	.35	*.15	*.10
24	.21	.32	.16	.09	.38	.47	*.22	*.21
30	.26	.38	.20	.13	.48	.57	.33	*.21
36	.31	.43	.25	.15	.52	.61	.35	*.31
48	.38	.53	.32	.19	.61	.71	.46	*.31
60	.46	.61	.39	.24	.69	.77	.57	*.41
	Age at fourth birth							
	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over
Number of women in thousands	3,567	1,629	1,352	586	412	287	94	31
	Cumulative probability of a fifth birth since fourth birth							
Number of months:								
12	*.05	*.08	*.03	*.00	*.11	*.14	*.04	*.05
18	.13	.19	.09	*.03	.28	.34	*.14	*.09
24	.22	.30	.17	*.08	.39	.44	*.29	*.24
30	.28	.38	.23	*.12	.53	.61	.37	*.26
36	.32	.42	.27	*.14	.56	.63	.41	*.29
48	.41	.54	.32	.19	.62	.70	.46	*.29
60	.45	.58	.38	.22	.69	.75	.58	*.29
	Age at fifth birth							
	15-44 years	Under 29 years	29-33 years	34 years or over	15-44 years	Under 29 years	29-33 years	34 years or over
Number of women in thousands	1,638	814	561	262	249	186	44	19
	Cumulative probability of a sixth birth since fifth birth							
Number of months:								
12	*.04	*.07	*.03	*.00	*.05	*.06	*.02	- - -
18	.16	.23	*.10	*.06	.23	.28	*.10	- - -
24	.23	.35	*.14	*.09	.39	.46	*.17	- - -
30	.29	.41	.22	*.09	.51	.62	*.21	- - -
36	.34	.47	.24	*.14	.55	.66	*.22	- - -
48	.40	.54	.30	*.16	.61	.71	*.29	- - -
60	.44	.59	.34	*.22	.67	.73	*.57	- - -

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 3. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the third birth and age of the wife at first marriage or previous birth, by Hispanic origin: United States, 1973

Months since marriage or birth	All origins				Hispanic origin				All other origins			
	Age at first marriage											
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands..........	28,209	10,729	11,004	6,477	1,855	866	560	429	26,355	9,862	10,445	6,048
	Cumulative probability of a first birth since first marriage											
Number of months:												
7...	.15	.22	.14	.08	.13	.18	*.10	*.09	.16	.22	.14	.07
12...	.37	.46	.35	.26	.49	.52	.48	.44	.36	.45	.35	.25
18...	.53	.63	.50	.42	.64	.68	.64	.58	.52	.63	.49	.41
24...	.63	.73	.60	.51	.76	.79	.78	.67	.62	.73	.59	.50
30...	.69	.79	.67	.58	.81	.86	.81	.70	.69	.79	.66	.57
36...	.74	.83	.72	.64	.84	.90	.83	.75	.74	.82	.72	.63
48...	.82	.88	.81	.72	.89	.92	.91	.80	.81	.87	.81	.72
60...	.86	.91	.85	.78	.92	.96	.91	.83	.85	.91	.85	.78
	Age at first birth											
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands..........	21,151	10,264	6,169	4,717	1,493	821	397	275	19,658	9,443	5,773	4,442
	Cumulative probability of a second birth since first birth											
Number of months:												
12...	.07	.09	.07	.05	.11	*.12	*.13	*.04	.07	.08	.06	.05
18...	.24	.27	.22	.19	.29	.32	.30	*.22	.23	.26	.22	.18
24...	.40	.44	.40	.33	.48	.53	.51	*.30	.40	.43	.39	.33
30...	.53	.57	.52	.46	.59	.62	.67	.42	.53	.56	.51	.46
36...	.63	.67	.62	.57	.66	.70	.71	.51	.63	.66	.63	.57
48...	.76	.78	.77	.69	.76	.80	.81	.55	.76	.79	.77	.70
60...	.82	.84	.84	.75	.81	.86	.83	.65	.82	.84	.84	.76

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 3. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the third birth and age of the wife at first marriage or previous birth, by Hispanic origin: United States, 1973—Con.

Months since marriage or birth	All origins				Hispanic origin				All other origins			
	Age at second birth											
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands..........	15,511	6,863	5,659	2,989	1,000	543	326	131	14,511	6,319	5,332	2,860
	Cumulative probability of a third birth since second birth											
Number of months:												
12...	.04	.07	*.03	*.02	*.06	*.08	*.04	- - -	.04	.07	.03	- - -
18...	.16	.22	.14	.10	.24	.32	*.18	- - -	.16	.21	.13	- - -
24...	.26	.33	.22	.17	.34	.44	*.25	- - -	.25	.32	.22	- - -
30...	.34	.42	.29	.24	.44	.54	.34	- - -	.33	.41	.29	- - -
36...	.41	.51	.36	.27	.52	.64	.38	- - -	.40	.49	.36	- - -
48...	.50	.61	.46	.34	.59	.73	.43	- - -	.50	.60	.47	- - -
60...	.57	.68	.55	.37	.66	.77	.52	- - -	.57	.67	.55	- - -

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 4. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fourth birth and age of the wife at first marriage or previous birth, by education at first marriage: United States, 1973

Months since marriage or birth	Education at first marriage															
	All educational levels				Less than high school at first marriage				High school at first marriage				More than high school at first marriage			
	Age at first marriage															
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands...	28,209	10,729	11,004	6,477	8,542	6,238	1,476	828	13,116	4,108	6,380	2,629	6,551	382	3,149	3,020
Cumulative probability of a first birth since first marriage																
Number of months:																
7	.15	.22	.14	.08	.23	.25	.19	.14	.14	.19	.14	.08	.08	*.10	.10	*.06
12	.37	.46	.35	.26	.49	.50	.47	.39	.36	.39	.37	.29	.24	.41	.26	20
18	.53	.63	.50	.42	.64	.66	.62	.53	.53	.59	.52	.47	.38	.58	.39	.35
24	.63	.73	.60	.51	.75	.77	.72	.61	.63	.68	.63	.55	.48	.64	.48	44
30	.69	.79	.67	.58	.80	.83	.76	.66	.69	.75	.70	.61	55	.71	.55	.52
36	.74	.83	.72	.64	.84	.86	.80	.71	.74	.79	.74	.67	.63	.75	.64	.59
48	.81	.88	.81	.72	.87	.90	.84	.75	.82	.85	.83	.75	.73	.82	.76	.69
60	.86	.91	.85	.78	.91	.93	.87	.81	.86	.89	.87	.79	.79	.84	.81	.76
	Age at first birth															
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands...	21,151	10,264	6,169	4,717	6,861	5,301	910	650	9,962	4,342	3,513	2,106	4,328	620	1,747	1,960
Cumulative probability of a second birth since first birth																
Number of months:																
12	.07	.09	.07	.05	.09	.10	*.08	*.04	.07	.08	.07	*.05	.06	*.05	*.06	*.05
18	.24	.27	.22	.19	.27	.29	.24	.17	.23	.24	.23	.19	.20	.21	.20	.18
24	.40	.44	.40	.33	.44	.47	.39	.27	.39	.41	.39	.35	.37	.38	.41	.33
30	.53	.57	.52	.46	.56	.59	.52	.40	.51	.55	.50	.46	.51	.50	.55	.48
36	.63	.67	.63	.57	.66	.69	.61	.48	.62	.65	.62	.58	.62	.61	.67	.58
48	.76	.78	.77	.69	.77	.80	.75	.64	.76	.77	.76	.68	.77	.74	.82	.73
60	.82	.84	.84	.75	.83	.85	.81	.71	.82	.84	.83	.74	.81	.76	.86	.78

[1] Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 4. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fourth birth and age of the wife at first marriage or previous birth, by education at first marriage: United States, 1973—Con.

Months since marriage or birth	All educational levels				Less than high school at first marriage				High school at first marriage				More than high school at first marriage			
	Age at second birth															
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands...	15,511	6,863	5,659	2,989	5,143	3,681	987	475	7,302	2,782	3,091	1,429	3,066	399	1,581	1,086
Cumulative probability of a third birth since second birth																
Number of months:																
12	.04	.07	*.03	*.02	.07	.08	*.05	*.05	.03	*.05	*.02	*.01	*.02	*.03	*.03	*.01
18	.16	.22	.14	.10	.22	.25	.17	*.11	.13	.18	.12	*.07	.14	*.16	.15	.13
24	.26	.33	.22	.17	.33	.37	.24	.20	.22	.28	.21	.15	.23	.27	.25	.20
30	.34	.42	.29	.24	.40	.46	.29	.23	.30	.37	.27	.22	.32	.45	.32	.26
36	.41	.51	.36	.27	.48	.55	.35	.28	.37	.46	.36	.25	.37	.49	.37	.30
48	.50	.61	.46	.34	.57	.63	.44	.37	.49	.58	.47	.33	.44	.58	.47	.33
60	.57	.68	.55	.37	.63	.69	.52	.42	.56	.67	.55	.37	.50	.61	.56	.35
	Age at third birth															
	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands...	8,534	3,555	3,672	1,307	3,189	2,010	867	312	3,939	1,330	1,948	661	1,407	215	857	335
Cumulative probability of a fourth birth since third birth																
Number of months:																
12	.04	*.06	*.03	*.01	.05	*.07	*.03	*.01	*.03	*.04	*.03	*.00	*.01	*.00	*.01	*.02
18	.13	.21	.09	*.05	.19	.25	*.10	*.06	.10	.17	*.08	*.02	*.08	*.11	*.09	*.06
24	.23	.34	.16	.10	.30	.38	.17	*.13	.19	.29	.15	*.07	.19	*.21	.19	*.15
30	.28	.41	.21	.14	.35	.45	.22	*.14	.23	.36	.19	*.11	.23	*.26	.24	*.19
36	.32	.46	.25	.16	.40	.50	.25	.20	.27	.40	.23	*.13	.29	*.33	.32	*.20
48	.40	.55	.33	.20	.49	.60	.34	.25	.34	.50	.30	.15	.36	.43	.38	*.25
60	.48	.63	.40	.25	.57	.67	.43	.32	.43	.60	.39	.19	.39	.50	.40	.28

[1] Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 5. Number of ever-married white women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fourth birth and age of the wife at first marriage or previous birth, by education at first marriage: United States, 1973

Months since marriage or birth	Education at first marriage															
	All educational levels				Less than high school at first marriage				High school at first marriage				More than high school at first marriage			
	Age at first marriage															
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands...	25,818	9,656	10,283	5,879	7,529	5,556	1,279	694	12,184	3,769	6,005	2,409	6,105	331	2,998	2,776
Cumulative probability of a first birth since first marriage																
Number of months:																
7	.14	.20	.13	.07	.21	.23	.18	*.11	.13	.17	.13	*.07	.07	*.04	.09	*.05
12	.36	.45	.34	.26	.48	.49	.47	.39	.36	.38	.36	.29	.23	.37	.24	.20
18	.52	.62	.49	.42	.64	.66	.62	.53	.53	.58	.52	.47	.37	.56	.38	.35
24	.63	.73	.59	.51	.75	.78	.72	.61	.63	.68	.62	.56	.47	.62	.47	.44
30	.69	.79	.66	.58	.80	.83	.76	.66	.69	.74	.70	.62	.54	.71	.54	.51
36	.74	.83	.72	.64	.84	.86	.80	.70	.74	.78	.74	.68	.62	.74	.63	58
48	.82	.88	.81	.72	.88	.90	.85	.75	.82	.85	.83	.76	.73	.82	.75	.68
60	.86	.91	.85	.78	.91	.93	.87	.81	.86	.89	87	.80	.79	.84	80	76
Age at first birth																
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands...	19,393	9,233	5,789	4,372	6,077	4,711	804	562	9,300	3,994	3,324	1,983	4,016	529	1,660	1,827
Cumulative probability of a second birth since first birth																
Number of months:																
12	.07	.08	.06	.05	.08	.09	*.08	*.04	.07	.07	.06	*.05	.05	*.03	*.06	*.05
18	.22	.25	.22	.19	.25	.26	.23	.17	.22	.23	.22	.20	.19	.20	.20	.18
24	.39	.42	.39	.34	.42	.45	.38	.27	.39	.40	.38	.36	.38	.38	.42	.33
30	.53	.56	.52	.46	.55	.57	.50	.40	.51	.55	.50	.47	.52	.51	.56	.48
36	.63	.66	.63	.57	.64	.67	.60	.48	.63	.65	.62	.59	.63	.63	.67	.58
48	.76	.78	.78	.70	.77	.79	.75	.62	.75	.77	.76	.69	.78	.77	.83	.74
60	.82	.84	.84	.76	.83	.85	.81	.69	.82	.84	.83	.75	.82	.79	.87	.79

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 5. Number of ever-married white women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fourth birth and age of the wife at first marriage or previous birth, by education at first marriage: United States, 1973—Con.

Months since marriage or birth	All educational levels				Less than high school at first marriage				High school at first marriage				More than high school at first marriage			
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands...	14,327	6,156	5,379	2,793	4,573	3,241	914	419	6,863	2,561	2,944	1,359	2,891	354	1,521	1,015
Cumulative probability of a third birth since second birth																
Number of months:																
12	.04	.06	.03	*.02	.07	.08	*.04	*.05	.03	*.05	*.02	*.01	*.02	*.02	*.03	*.01
18	.16	.21	.13	.09	.21	.24	.16	*.09	.13	.18	.12	*.06	.14	*.14	.15	.13
24	.25	.33	.22	.17	.31	.36	.22	*.18	.22	.27	.20	.15	.23	*.25	.25	.19
30	.33	.41	.29	.23	.38	.44	.28	*.22	.30	.36	.27	.22	.31	.43	.32	.25
36	.40	.49	.36	.27	.46	.53	.33	.25	.37	.45	.36	.25	.36	.48	.38	.30
48	.49	.59	.46	.33	.55	.61	.43	.33	.48	.58	.47	.33	.44	.57	.47	.32
60	.57	.67	.55	.37	.62	.68	.50	.40	.56	.66	.56	.37	.50	.59	.56	.34
Age at third birth	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands...	7,812	3,116	3,480	1,216	2,783	1,728	773	281	3,701	1,202	1,872	628	1,328	186	835	307
Cumulative probability of a fourth birth since third birth																
Number of months:																
12	.03	*.05	*.02	*.00	*.04	*.06	*.01	*.01	*.03	*.04	*.03	*.00	*.01	*.00	*.01	*.00
18	.12	.19	.08	*.03	.17	.22	*.09	*.05	.09	.16	.08	*.02	*.08	*.09	.09	*.04
24	.21	.32	.16	.09	.27	.35	*.15	*.10	.18	.29	.15	*.07	.18	*.21	.20	*.13
30	.26	.38	.20	.13	.33	.42	.19	*.12	.23	.35	.19	*.11	.22	*.23	.23	*.17
36	.31	.43	.25	.15	.37	.47	.22	*.18	.27	.40	.23	*.13	.28	*.32	.32	*.17
48	.38	53	.32	.19	.47	.58	.31	*.23	.33	.48	.30	*.15	.35	.42	.38	*.23
60	.46	.61	.39	.24	.54	.65	.40	*.30	.42	.58	.38	.19	.38	.47	.40	*.27

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 6. Number of ever-married black women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the third birth and age of the wife at first marriage or previous birth, by education at first marriage: United States, 1973

Months since marriage or birth	All educational levels				Less than high school at first marriage				High school at first marriage				More than high school at first marriage			
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands...	2,077	1,014	664	399	904	642	174	88	847	326	353	168	326	47	136	143
	Cumulative probability of a first birth since first marriage															
Number of months:																
7	32	.39	.27	*.19	.36	.40	*.23	*.27	.29	.36	.29	*.18	.26	*.48	.31	*.13
12	.48	.56	.47	.31	.53	.58	.41	.37	.46	.50	.47	.35	.43	.73	.53	*.23
18	.62	.70	.60	.43	.67	.71	.59	.52	.60	.69	.58	.46	.54	.80	.66	.33
24	.69	.76	.70	.51	.74	.76	.71	.58	.66	.74	.67	.50	.64	.83	.76	.47
30	.74	.81	.74	.56	.78	.81	.75	.58	.72	.81	.72	.55	.70	:84	.80	.56
36	.78	.84	.78	.62	.80	.84	.76	.63	.75	.83	.77	.57	.77	.89	.81	.68
48	.82	.88	.81	.68	.84	.87	.81	.68	.81	.90	.81	.66	79	.90	.83	.71
60	.86	.93	.85	.72	.90	.93	.86	.69	.84	.92	.84	.71	.81	.90	.85	.73
	Age at first birth															
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands...	1,540	972	344	225	705	553	95	57	598	332	176	91	237	87	72	78
	Cumulative probability of a second birth since first birth															
Number of months:																
12	.14	.17	*.11	*.07	.18	.20	*.14	*.07	*.12	*.14	*.12	*.05	*.09	*.12	*.05	*.09
18	.38	.44	.35	*.21	.47	.52	.33	*.22	.34	.35	.41	*.17	*.25	*.25	.25	.24
24	.50	.56	.46	.29	.59	.63	.51	*.32	.44	.47	.51	*.22	.34	.38	*.29	*.34
30	.59	.65	.58	.39	.71	.74	.74	*.36	.53	.56	.57	.37	.41	.39	.40	.43
36	.66	.72	.65	.44	.77	.80	.76	.50	.61	.66	.65	.39	.46	.42	.51	.46
48	.74	.79	.70	.56	.83	.85	.80	.69	.72	.78	.72	.48	.51	.46	.52	.56
60	.79	.84	.76	.60	.85	.87	.80	.71	.78	.86	.78	.54	.60	.54	.67	.61

[1] Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 6. Number of ever-married black women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the third birth and age of the wife at first marriage or previous birth, by education at first marriage: United States, 1973—Con.

Months since marriage or birth	Education at first marriage															
	All educational levels				Less than high school at first marriage				High school at first marriage				More than high school at first marriage			
	Age at second birth															
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands...	1,039	668	256	115	511	411	69	*30	394	222	131	42	134	35	56	43
Cumulative probability of a third birth since second birth																
Number of months:																
12	.09	*.11	*.08	*.03	*.12	*.12	*.12	---	*.07	*.08	*.08	*.02	*.04	*.07	*.02	*.03
18	.28	.30	*.23	*.22	.34	.34	*.30	---	.22	*.24	*.21	*.17	*.21	*.33	*.16	*.17
24	.38	.43	.30	.27	.46	.47	*.40	---	.33	.38	*.27	*.24	*.26	*.38	*.23	*.19
30	.47	.54	.33	.34	.57	.60	.43	---	.37	.43	.31	*.28	.37	*.57	*.28	*.30
36	.55	.65	.39	.36	.68	.71	.59	---	.44	.53	.32	*.30	.38	.59	*.31	*.30
48	.64	.75	.47	.41	.76	.79	.64	---	.54	.67	.36	*.34	.50	.69	.54	*.36
60	.69	.79	.52	.42	.79	.82	.76	---	.59	.74	.39	*.36	.54	.79	.56	*.38

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 7. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth, by farm and nonfarm origin: United States, 1973

	All origins				Farm origin				Nonfarm origin			
Months since marriage or birth	Age at first marriage											
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands...	28,209	10,729	11,004	6,477	6,965	3,118	2,460	1,388	21,245	7,611	8,544	5,089

Cumulative probability of a first birth since first marriage

Number of months:												
7	.15	.22	.14	.08	.14	.17	.14	.09	.16	.24	.14	.07
12	.37	46	.35	.26	.39	42	38	.33	.37	47	.34	.24
18	.53	.63	.50	42	.56	.61	.53	.52	.52	.64	49	40
24	.63	.73	.60	.51	.67	.72	.63	.60	.62	.74	.59	48
30	.69	.79	.67	.58	.73	.79	.68	.65	.68	.79	.66	.56
36	.74	.83	.72	.64	.76	.81	.73	.71	.74	.84	.72	.62
48	.82	.88	.81	.72	.83	.86	.81	.78	.81	.88	.81	.70
60	.86	.91	.85	.78	.86	.90	.84	.81	.86	.92	.85	.77

	Age at first birth											
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands...	21,151	10,264	6,169	4,717	5,548	3,020	1,441	1,086	15,603	7,244	4,728	3,631

Cumulative probability of a second birth since first birth

Number of months:												
12	.07	.09	.07	.05	.06	.07	*.06	*.04	.08	.09	.07	*.05
18	.24	.27	.22	.19	.23	.26	.20	.19	.24	.27	.23	.18
24	.40	44	40	.33	48	48	.37	.31	40	42	40	.34
30	.53	.57	.52	46	.54	.60	.49	44	.53	.55	.53	47
36	.63	.67	.63	.57	.63	.69	.59	.52	.63	.65	.65	.58
48	.76	.78	.77	.69	.76	.80	.75	.63	.76	.77	.78	.71
60	.82	.84	.84	.75	.83	.86	.82	.72	.82	.83	.84	.76

	Age at second birth											
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands...	15,511	6,863	5,659	2,989	4,206	2,159	1,303	744	11,305	4,703	4,356	2,245

Cumulative probability of a third birth since second birth

Number of months:												
12	.04	.07	*.03	*.02	.05	*.06	*.04	*.01	.04	.07	*.03	*.02
18	.16	.22	.14	.10	.16	.21	.14	*.07	.16	.22	.14	.10
24	.26	.33	.22	.17	.27	.33	.23	.16	.26	.32	.22	.18
30	.34	42	.29	.24	.35	42	.29	.23	.33	42	.29	.24
36	41	.51	.36	.27	42	.52	.34	.27	40	.50	.36	.27
48	.50	.61	46	.34	.51	.62	43	.36	.50	.60	48	.33
60	.57	.68	.55	.34	.59	.70	.50	41	.57	.67	.56	.36

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 7. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth, by farm and nonfarm origin: United States, 1973—Con.

Months since marriage or birth	All origins				Farm origin				Nonfarm origin			
	Age at third birth											
	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands...	8,534	3,555	3,672	1,307	2,514	1,195	909	410	6,021	2,360	2,763	897

Cumulative probability of a fourth birth since third birth

Number of months:												
12	.04	*.06	*.03	*.01	*.04	*.07	*.03	*.00	.03	*.05	*.03	.01
18	.13	.21	.09	*.05	.14	.23	.08	*.02	.12	.20	.09	*.05
24	.23	.34	.16	.10	.25	.36	.17	.11	.22	.32	.16	*.10
30	.28	.41	.21	.14	.32	.44	.23	.16	.26	.39	.20	*.12
36	.32	.46	.25	.16	.35	.47	.27	.20	.31	.45	.25	.14
48	.40	.55	.33	.20	.44	.57	.34	.25	.39	.54	.32	.17
60	.48	.63	.40	.25	.51	.65	.43	.28	.46	.63	.39	.23

	Age at fourth birth											
	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over
Number of women in thousands...	4,020	1,929	1,459	632	1,256	679	401	176	2,764	1,250	1,058	456

Cumulative probability of a fifth birth since fourth birth

Number of months:												
12	.05	.09	*.03	*.00	*.06	*.08	*.05	*.01	*.05	.09	*.02	*.00
18	.15	.22	.10	*.03	.18	.22	*.14	*.11	.13	.22	*.08	*.00
24	.24	.33	.18	*.08	.28	.35	*.20	*.18	.22	.31	.18	*.05
30	.31	.41	.24	*.12	.34	.44	*.25	*.18	.29	.40	.24	*.10
36	.35	.46	.28	.14	.38	.47	.30	*.18	.33	.45	.28	*.13
48	.43	.57	.33	.19	.46	.58	.35	*.21	.41	.56	.33	*.19
60	.47	.61	.39	.22	.52	.64	.40	*.26	.45	.59	.39	*.21

	Age at fifth birth											
	15-44 years	Under 29 years	29-33 years	34 years or over	15-44 years	Under 29 years	29-33 years	34 years or over	15-44 years	Under 29 years	29-33 years	34 years or over
Number of women in thousands...	1,900	1,009	609	*282	630	374	164	*92	1,270	636	445	189

Cumulative probability of a sixth birth since fifth birth

Number of months:												
12	*.04	*.06	*.03	- - -	*.03	*.03	*.03	- - -	*.05	*.08	*.03	.00
18	.17	.23	*.10	- - -	.16	*.23	*.09	- - -	.17	.24	*.11	.08
24	.25	.36	*.14	- - -	.30	.41	*.16	- - -	.23	.34	*.13	.09
30	.32	.45	.22	- - -	.36	.49	*.22	- - -	.30	.42	*.22	.09
36	.37	.51	.24	- - -	.42	.54	*.25	- - -	.34	.48	*.24	.09
48	.43	.57	.30	- - -	.47	.58	*.32	- - -	.40	.56	.29	.14
60	.47	.61	.35	- - -	.53	.64	.43	- - -	.45	.60	.32	.23

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 8. Number of ever-married white women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fifth birth and age of the wife at first marriage or previous birth, by farm and nonfarm origin: United States, 1973

Months since marriage or birth	All origins				Farm origin				Nonfarm origin			
	Age at first marriage											
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands...	25,818	9,656	10,283	5,879	6,227	2,770	2,228	1,229	19,591	6,886	8,055	4,650
	Cumulative probability of a first birth since first marriage											
Number of months:												
7	.14	.20	.13	.07	.13	.15	.12	*.08	.15	.22	.13	.07
12	.36	45	.34	.26	.38	41	.38	.33	.36	46	.33	.24
18	.52	.62	49	42	.56	.61	.53	.53	.51	.63	48	.39
24	.63	.73	.59	.51	.67	.72	.63	.62	.61	.73	.58	48
30	.69	.79	.66	.58	.73	.79	.68	.66	.68	.79	.65	.55
36	.74	.83	.72	.64	.76	.81	.73	.71	.74	.84	.72	.62
48	.82	.88	.81	.72	.83	.86	.81	.79	.81	.88	.81	.71
60	.86	.91	.85	.78	.86	.90	.84	.81	.86	.92	.85	.78
	Age at first birth											
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands...	19,393	9,233	5,789	4,372	4,972	2,691	1,316	965	14,421	6,542	4,472	3,407
	Cumulative probability of a second birth since first birth											
Number of months:												
12	.07	.08	.06	.05	.05	*.06	*.06	*.03	.07	.09	.07	.06
18	.22	.25	.22	.19	.22	.24	.19	.19	.23	.25	.22	.19
24	.39	42	.39	.34	41	46	.36	.32	.39	41	40	.34
30	.53	.56	.52	46	.53	.59	48	45	.52	.55	.53	47
36	.63	.66	.63	.57	.63	.68	.58	.53	.63	.66	.65	.58
48	.76	.78	.78	.70	.75	.80	.74	.64	.76	.77	.79	.72
60	.82	.84	.84	.76	.83	.86	.82	.74	.82	.83	.85	.76
	Age at second birth											
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands...	14,327	6,156	5,379	2,793	3,792	1,902	1,209	681	10,535	4,254	4,170	2,112
	Cumulative probability of a third birth since second birth											
Number of months:												
12	.04	.06	.03	*.02	*.04	.06	*.03	*.01	.04	.06	*.03	*.02
18	.16	.21	.13	.09	.14	.19	.13	*.05	.16	.21	.13	.10
24	.25	.31	.22	.17	.25	.31	.22	.14	.25	.32	.22	.18
30	.33	41	.29	.23	.33	40	.28	.21	.33	41	.29	.24
36	40	49	.36	.27	40	49	.34	.25	40	49	.36	.27
48	49	59	46	.33	49	.59	42	.33	.50	.60	48	.32
60	.57	.67	.55	.37	.57	.68	.50	.39	.57	.66	.56	.36

[1] Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 8. Number of ever-married white women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fifth birth and age of the wife at first marriage or previous birth, by farm and nonfarm origin: United States, 1973—Con.

Months since marriage or birth	All origins				Farm origin				Nonfarm origin			
	Age at third birth											
	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands...	7,812	3,116	3,480	1,216	2,214	1,018	826	370	5,598	2,098	2,654	846
	Cumulative probability of a fourth birth since third birth											
Number of months:												
12	.03	*.05	*.02	*.00	*.04	*.07	*.02	*.00	.03	*.04	*.02	*.00
18	.12	.19	.08	*.03	.13	.21	.08	*.02	.11	.18	.08	*.04
24	.21	.32	.16	.09	.23	.33	.16	*.10	.21	.31	.16	*.09
30	.26	.38	.20	.13	.29	.40	.22	*.16	.25	.37	.19	*.11
36	.31	.43	.25	.15	.33	.43	.26	*.19	.30	.44	.24	.13
48	.38	.53	.32	.19	.42	.54	.34	*.25	.37	.52	.32	.17
60	.46	.61	.39	.24	.49	.62	.42	.28	.44	.61	.38	.22
	Age at fourth birth											
	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over
Number of women in thousands...	3,567	1,629	1,352	586	1,057	542	358	158	2,511	1,087	994	429
	Cumulative probability of a fifth birth since fourth birth											
Number of months:												
12	*.05	*.08	*.03	- - -	*.04	*.05	*.05	- - -	*.05	.09	*.02	- - -
18	.13	.19	.09	- - -	.14	.17	*.12	- - -	.12	.21	*.08	- - -
24	.22	.30	.17	- - -	.25	.31	*.18	- - -	.21	.30	.17	- - -
30	.28	.38	.23	- - -	.30	.39	*.22	- - -	.27	.37	.24	- - -
36	.32	.42	.27	- - -	.34	.42	*.27	- - -	.31	.42	.28	- - -
48	.41	.54	.32	- - -	.43	.54	.33	- - -	.40	.54	.32	- - -
60	.45	.58	.38	- - -	.48	.60	.37	- - -	.44	.57	.38	- - -

[1] Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 9. Number of ever-married black women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fifth birth and age of the wife at first marriage or previous birth, by farm and nonfarm origin: United States, 1973

Months since marriage or birth	All origins				Farm origin				Nonfarm origin			
	Age at first marriage											
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands...	2,077	1,014	664	399	679	335	224	120	1,398	679	440	279

Cumulative probability of a first birth since first marriage

Number of months:												
7	.32	.39	.27	*.19	.30	.36	.27	*.19	.32	.41	.27	*.18
12	.48	.56	.47	.31	.45	.52	.42	.32	.50	.58	.49	.31
18	.62	.70	.60	.43	.58	.64	.56	.46	.64	.74	.62	.42
24	.69	.76	.70	.51	.65	.71	.66	.50	.71	.79	.72	.52
30	.74	.81	.74	.56	.72	.80	.71	.54	.75	.81	.76	.57
36	.78	.84	.78	.62	.75	.83	.72	.58	.79	.83	.81	.64
48	.82	.88	.81	.68	.79	.85	.78	.66	.84	.90'	.83	.69
60	.86	.93	·.85	.72	.85	.92	.82	.69	.87	.93	.86	.73

	Age at first birth											
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands...	1,540	972	344	225	520	317	121	82	1,021	655	223	143

Cumulative probability of a second birth since first birth

Number of months:												
12	.14	.17	*.11	*.07	*.16	.21	*.10	*.07	.13	.15	*.12	*.06
18	.38	.44	.35	*.21	.41	.51	.30	*.17	.37	.40	.38	*.23
24	.49	.56	.46	.29	.54	.65	.49	*.23	.47	.51	.44	.33
30	.59	.65	.58	.39	.64	.74	.62	*.31	.57	.60	.55	.44
36	.66	.72	.65	.44	.71	.80	.72	.35	.63	.67	.60	.50
48	.74	.79	.70	.56	.77	.84	.79	.49	.72	.77	.63	.60
60	.78	.84	.76	.60	.82	.88	.87	.51	.77	.82	.68	.66

	Age at second birth											
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands...	1,039	668	256	115	373	253	85	35	666	415	171	80

Cumulative probability of a third birth since second birth

Number of months:												
12	.09	*.11	*.08	*.03	*.11	*.12	*.09	*.04	*.08	*.10	*.07	*.02
18	.28	.30	*.23	.22	.33	.36	*.28	*.29	.24	.27	*.20	*.19
24	.38	.43	.30	.27	.43	.47	*.33	*.34	.36	.41	.28	*.24
30	.47	.54	.33	.34	.51	.57	.39	*.34	.45	.55	.30	*.34
36	.55	.65	.39	.36	.60	.69	.44	*.35	.53	.62	.37	.36
48	.64	.75	.47	.41	.72	.83	.53	*.40	.60	.69	.43	.42
60	.69	.79	.52	.42	.75	.86	.55	*.40	.65	.75	.51	.44

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 9. Number of ever-married black women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the fifth birth and age of the wife at first marriage or previous birth, by farm and nonfarm origin: United States, 1973—Con.

Months since marriage or birth	All origins				Farm origin				Nonfarm origin			
	Age at third birth											
	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands...	656	425	176	55	269	172	79	18	387	252	97	38

Cumulative probability of a fourth birth since third birth

Number of months:												
12	*.09	*.10	*.08	- - -	*.09	*.09	*.10	- - -	*.09	*.11	*.06	- - -
18	.28	.35	*.15	- - -	.29	.35	*.16	- - -	.27	.35	*.14	- - -
24	.38	.47	*.22	- - -	.43	.51	*.27	- - -	.35	.44	*.18	- - -
30	.48	.57	.33	- - -	.53	.63	*.30	- - -	.45	.52	.33	- - -
36	.52	.61	.35	- - -	.58	.68	*.33	- - -	.49	.56	.36	- - -
48	.61	.71	.46	- - -	.64	.74	.45	- - -	.59	.69	.46	- - -
60	.69	.77	.57	- - -	.73	.80	.56	- - -	.67	.75	.57	- - -

	Age at fourth birth											
	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over
Number of women in thousands...	412	287	94	31	185	133	44	8	227	154	50	23

Cumulative probability of a fifth birth since fourth birth

Number of months:												
12	*.11	*.14	*.04	- - -	*.17	*.21	*.04	- - -	*.06	*.08	*.04	- - -
18	.28	.34	*.14	- - -	.37	.42	*.24	- - -	*.21	.28	*.07	- - -
24	.39	.44	*.29	- - -	.48	.51	*.40	- - -	.33	.38	*.21	- - -
30	.53	.61	.37	- - -	.58	.62	.53	- - -	.49	.59	*.23	- - -
36	.56	.63	.41	- - -	.61	.65	.53	- - -	.52	.61	*.31	- - -
48	.62	.70	.46	- - -	.68	.73	.57	- - -	.58	.68	*.37	- - -
60	.69	.75	.58	- - -	.73	.78	.64	- - -	.65	.73	.53	- - -

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 10. Number of ever-married white women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth, by religious preference: United States, 1973

Months since marriage or birth	All religions[2]				Protestant				Catholic			
	Age at first marriage											
	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over	15-44 years	Under 19 years	19-21 years	22 years or over
Number of women in thousands...	25,818	9,656	10,283	5,879	16,352	7,036	6,349	2,967	7,827	2,110	3,332	2,385

Cumulative probability of a first birth since first marriage

Number of months:												
7	.14	.20	.13	.07	.14	.19	.13	*.07	.15	.25	.14	*.07
12	.36	.45	.34	.26	.35	.43	.32	.21	.42	.51	.42	.34
18	.52	.62	.49	.42	.50	.60	.46	.35	.60	.70	.59	.53
24	.63	.73	.59	.51	.61	.71	.57	.46	.69	.81	.67	.62
30	.69	.79	.66	.58	.68	.78	.64	.51	.75	.85	.73	.69
36	.74	.83	72	.64	.73	.82	.70	.58	.79	.88	.78	.74
48	.82	.88	.81	72	.81	.87	.79	.69	.86	.92	.86	.79
60	.86	.91	.85	.78	.85	.90	.84	.76	.88	.95	.89	.83

	Age at first birth											
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands...	19,393	9,233	5,789	4,372	12,280	6,440	3,359	2,481	6,080	2,427	2,103	1,551

Cumulative probability of a second birth since first birth

Number of months:												
12	.07	.08	.06	.05	.06	.07	.04	*.04	.09	.10	.11	.06
18	.22	.25	.22	.19	.20	.24	.17	.14	.28	.28	.30	.25
24	.39	.42	.39	.34	.37	.41	.34	.30	.46	.48	.50	.39
30	.53	.56	.52	.46	.50	.54	.46	.44	.59	.61	.63	.48
36	.63	.66	.63	.57	.60	.64	.59	.53	.70	.73	.72	.61
48	.76	.78	.78	.70	.74	.76	.75	.67	.81	.83	.83	.74
60	.82	.84	.84	.76	.81	.83	.82	.73	.86	.88	.88	.80

	Age at second birth											
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands...	14,327	6,156	5,379	2,793	9,005	4,197	3,135	1,672	4,642	1,757	1,960	924

Cumulative probability of a third birth since second birth

Number of months:												
12	.04	.06	.03	*.02	.03	.05	*.02	*.02	.06	.10	*.04	*.02
18	.16	.21	.13	.09	.13	.18	.10	.07	.21	.29	.19	.10
24	.25	.31	.22	.17	.23	.29	.18	.14	.31	.39	.29	.19
30	.33	.41	.29	.23	.30	.38	.24	.19	.39	.47	.37	.27
36	.40	.49	.36	.27	.37	.47	.30	.23	.47	.55	.46	.31
48	.49	.59	.46	.33	.46	.57	.40	.29	.57	.66	.57	.38
60	.57	.67	.55	.37	.53	.64	.49	.31	.65	.74	.64	.45

[1] Excludes women who had a premarital birth.
[2] Includes white women whose religious preference is other than Protestant or Catholic, as well as those who have no religion.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 10. Number of ever-married white women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth order through the sixth birth and age of the wife at first marriage or previous birth, by religious preference: United States, 1973—Con.

Age at third birth

Months since marriage or birth	All religions[2]				Protestant				Catholic			
	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands...	7,812	3,116	3,480	1,216	4,693	2,027	1,969	697	2,805	1,020	1,331	455

Cumulative probability of a fourth birth since third birth

Number of months:												
12	.03	*.05	*.02	*.00	*.03	*.04	*.02	*.01	*.04	*.06	*.03	*.00
18	.12	.19	.08	.03	.10	.17	*.05	*.03	.16	.25	.13	*.03
24	.21	.32	.16	.09	.18	.28	.12	*.06	.27	.39	.23	*.13
30	.26	.38	.20	.13	.23	.35	.16	*.10	.33	.45	.28	*.17
36	.31	.43	.25	.15	.28	.40	.20	*.13	.37	.50	.34	*.17
48	.38	.53	.32	.19	.35	.49	.27	.17	.46	.62	.41	.22
60	.46	.61	.39	.24	.41	.58	.33	.17	.55	.70	.51	.34

Age at fourth birth

Months since marriage or birth	All religions[2]				Protestant				Catholic			
	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over	15-44 years	Under 27 years	27-31 years	32 years or over
Number of women in thousands...	3,567	1,629	1,352	586	1,970	999	680	290	1,510	616	636	258

Cumulative probability of a fifth birth since fourth birth

Number of months:												
12	*.05	*.08	*.03	*.00	.04	*.06	*.01	*.00	.06	*.11	*.05	*.00
18	.13	.19	.09	*.03	.11	.17	*.06	*.02	.16	.23	*.14	*.05
24	.22	.30	.17	*.08	.19	.28	.14	*.03	.26	.35	.23	*.13
30	.28	.38	.23	*.12	.24	.33	.17	*.05	.35	.44	.31	*.20
36	.32	.42	.27	*.14	.28	.37	.24	*.07	.39	.51	.34	*.22
48	.41	.54	.32	.19	.36	.48	.27	*.12	.48	.62	.41	*.29
60	.45	.58	.38	.22	.40	.53	.29	*.16	.53	.65	.49	*.32

Age at fifth birth

Months since marriage or birth	All religions[2]				Protestant				Catholic			
	15-44 years	Under 29 years	29-33 years	34 years or over	15-44 years	Under 29 years	29-33 years	34 years or over	15-44 years	Under 29 years	29-33 years	34 years or over
Number of women in thousands...	1,638	814	561	263	816	408	288	120	802	397	267	138

Cumulative probability of a sixth birth since fifth birth

Number of months:												
12	*.04	*.07	*.03	...	*.03	*.05	*.03	...	*.05	*.07	*.03	...
18	.16	.23	*.10	...	.12	*.18	*.07	...	.19	*.27	*.14	...
24	.23	.35	*.14	...	.19	.30	*.11	...	.27	.39	*.18	...
30	.29	.41	.22	...	.27	.36	*.22	...	.33	.46	*.22	...
36	.34	.47	.24	...	.32	.43	*.22	...	.36	.51	*.27	...
48	.40	.54	.30	...	.38	.50	*.28	...	.42	.58	*.33	...
60	.44	.59	.34	...	.42	.55	*.29	...	.47	.62	.40	...

[1] Excludes women who had a premarital birth.
[2] Includes white women whose religious preference is other than Protestant or Catholic, as well as those who have no religion.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 11. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since previous birth, by birth order through the fourth birth and age of the wife at previous birth, by timing of first birth: United States, 1973

Months since previous birth	All women				First birth 0-7 months after marriage				First birth 8 months or more after marriage			
	Age at first birth											
	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over	15-44 years	Under 21 years	21-23 years	24 years or over
Number of women in thousands..............	21,151	10,264	6,169	4,717	4,023	3,140	648	235	17,127	7,124	5,521	4,482
Cumulative probability of a second birth since first birth												
Number of months:												
12	.07	.09	.07	.05	.12	.13	*.11	*.06	.06	.07	.06	.05
18	.24	.27	.22	.19	.31	.32	.28	*.26	.22	.24	.22	.18
24	.40	.44	.40	.33	.46	.47	.42	.44	.39	.42	.39	.32
30	.53	.57	.52	.46	.59	.59	.57	.55	.52	.56	.51	.45
36	.63	.67	.63	.57	.68	.68	.70	.65	.62	.66	.62	.56
48	.76	.78	.77	.69	.79	.78	.82	.83	.75	.78	.77	.69
60	.82	.84	.84	.75	.85	.84	.85	.92	.81	.84	.83	.74
	Age at second birth											
	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over	15-44 years	Under 23 years	23-26 years	27 years or over
Number of women in thousands..............	15,511	6,863	5,659	2,989	2,900	2,096	650	154	12,611	4,767	5,009	2,835
Cumulative probability of a third birth since second birth												
Number of months:												
12	.04	.07	*.03	*.02	.08	.09	*.05	- - -	.04	.05	*.03	- - -
18	.16	.22	.14	.10	.22	.25	.16	- - -	.15	.20	.13	- - -
24	.26	.33	.22	.17	.31	.35	.22	- - -	.25	.31	.22	- - -
30	.34	.42	.29	.24	.40	.46	.28	- - -	.32	.40	.29	- - -
36	.41	.51	.36	.27	.47	.53	.36	- - -	.39	.50	.36	- - -
48	.50	.61	.46	.34	.58	.64	.49	- - -	.49	.59	.46	- - -
60	.57	.68	.55	.37	.64	.70	.54	- - -	.56	.67	.55	- - -

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 11. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since previous birth, by birth order through the fourth birth and age of the wife at previous birth, by timing of first birth: United States, 1973—Con.

Months since previous birth	All women				First birth 0-7 months after marriage				First birth 8 months or more after marriage			
	Age at third birth											
	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over	15-44 years	Under 25 years	25-29 years	30 years or over
Number of women in thousands..............	8,534	3,555	3,672	1,307	1,686	1,130	497	59	6,848	2,425	3,175	1,248
	Cumulative probability of a fourth birth since third birth											
Number of months:												
12..	.04	*.06	*.03	- - -	*.05	*.07	*.02	- - -	.03	*.05	*.03	- - -
18..	.13	.21	.09	- - -	.19	.23	*.10	- - -	.12	.20	.08	- - -
24..	.23	.34	.16	- - -	.29	.36	*.15	- - -	.21	.33	.17	- - -
30..	.28	.41	.21	- - -	.35	.40	.23	- - -	.26	.41	.20	- - -
36..	.32	.46	.25	- - -	.39	.46	.25	- - -	.31	.46	.25	- - -
48..	.40	.55	.33	- - -	.47	.54	.32	- - -	.39	.56	.33	- - -
60..	.48	.63	.40	- - -	.55	.61	.42	- - -	.46	.64	.40	- - -

[1]Excludes women who had a premarital birth.

NOTE: The sums of the aggregates may not add to totals due to rounding.

Table 12. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth interval through the sixth birth and age of the wife at first marriage or previous birth, by year of first marriage: United States, 1973

Months since marriage or birth	First married 1970-73			First married 1965-69			First married 1960-64			First married 1955-59			First married 1950-54		
	Age at first marriage														
	Under 19 years	19-21 years	22-34 years	Under 19 years	19-21 years	22-34 years	Under 19 years	19-21 years	22-34 years	Under 19 years	19-21 years	22-34 years	Under 19 years	19-21 years	22-34 years
Number of women in thousands	1,551	2,064	1,420	2,055	2,744	1,851	1,991	2,101	1,270	1,927	1,796	. .	1,802	1,951	. .
	Cumulative probability of a first birth since first marriage														
Number of months.															
7	.25	.15	*.07	.29	.15	*.08	.23	.17	*.08	.23	.13	. .	.15	.08	. . .
12	.39	.26	.18	.48	.31	.22	.50	.43	.28	.54	.42	. . .	.39	.33	. . .
18	.54	.37	.29	.63	.44	.35	.65	.60	.44	.73	.59	. . .	.60	.50	. . .
24	- - -	- - -	- - -	.75	.52	.44	.73	.69	.52	.81	.70	. .	.70	.63	.
30	- - -	- - -	- - -	.80	.58	.49	.78	.73	.60	.86	.80	.	.78	.70	. . .
36	. . .	. . .	. . .	.83	.64	.57	.82	.81	.66	.89	.82		.82	.75	. . .
48	. . .	. . .	. . .	.89	.74	.66	.88	.87	.73	.92	.88	. . .	.86	.83	. . .
60	. . .	. . .	. . .	.91	.80	.74	.91	.89	.77	.95	.91	. .	.90	.86	. .
	Age at first birth														
	Under 21 years	21-23 years	24-35 years	Under 21 years	21-23 years	24-35 years	Under 21 years	21-23 years	24-35 years	Under 21 years	21-23 years	24-35 years	Under 21 years	21-23 years	24-35 years
Number of women in thousands	1,333	924	960	2,054	1,384	1,343	2,090	1,376	1,101	2,128	1,397	. . .	1,836	1,084	. .
	Cumulative probability of a second birth since first birth														
Number of months·															
12	*.05	*.02	*.03	*.06	*.05	*.04	.11	.10	*.07	.12	.09	. . .	.09	*.07	. . .
18	.14	*.11	.13	.15	.17	.17	.35	.27	.21	.34	.30	. . .	.30	.21	. . .
24	- - -	- - -	- - -	.30	.33	.30	.52	.44	.33	.52	.51	. . .	.50	.36	. . .
30	- - -	- - -	- - -	.43	.46	.43	.65	.55	.47	.65	.63	. .	.63	.51	. . .
36	. . .	. . .	. . .	.55	.62	.56	.73	.62	.55	.75	.72	. . .	.71	.64	. . .
48	. . .	. . .	. . .	.70	.78	.69	.82	.76	.68	.84	.83	. . .	.83	.78	. . .
60	. . .	. . .	. . .	.77	.81	.76	.85	.83	.72	.90	.88	. . .	.90	.85	. . .
	Age at second birth														
	Under 23 years	23-26 years	27-35 years	Under 23 years	23-26 years	27-35 years	Under 23 years	23-26 years	27-35 years	Under 23 years	23-26 years	27-35 years	Under 23 years	23-26 years	27-35 years
Number of women in thousands	801	997	673	1,178	1,366	840	1,901	1,265	. . .	1,541	1,622	. . .	1,249	. . .	. . .
	Cumulative probability of a third birth since second birth														
Number of months:															
12	*.02	*.02	*.00	*.05	*.02	*.02	.08	*.04	. . .	.08	*.03	. . .	*.06	. . .	. . .
18	.12	*.06	*.07	.14	.08	*.09	.25	.20	. . .	.24	.16	. . .	.25	. . .	. . .
24	.18	.10	*.08	.23	.15	*.14	.36	.31	. . .	.37	.24	. . .	.37	. . .	. . .
30	- - -	- - -	- - -	.29	.20	.20	.45	.38	. . .	.46	.30	. . .	.48	. . .	. . .
36	- - -	- - -	- - -	.34	.26	.23	.53	.44	. . .	.56	.38	. . .	.59	. . .	. . .
48	- - -	- - -	- - -	.47	.37	.28	.61	.53	. . .	.66	.48	. . .	.68	. . .	. . .
60	- - -	- - -	- - -	.55	.43	.29	.70	.58	. . .	.72	.60	. . .	.74	. . .	. . .

[1]Excludes women who had a premarital birth.

Table 12. Number of ever-married women 15-44 years of age,[1] and cumulative birth probabilities within first marriage, by number of months since first marriage or previous birth, by birth interval through the sixth birth and age of the wife at first marriage or previous birth, by year of first marriage: United States, 1973—Con.

Months since marriage or birth	First married 1970-73			First married 1965-69			First married 1960-64			First married 1955-59			First married 1950-54		
	Age at third birth														
	Under 25 years	25-29 years	30-39 years	Under 25 years	25-29 years	30-39 years	Under 25 years	25-29 years	30-39 years	Under 25 years	25-29 years	30-39 years	Under 25 years	25-29 years	30-39 years
Number of women in thousands	305	509	259	607	940	...	1,170	1,270	...	935	893	...	517	...	...
Cumulative probability of a fourth birth since third birth															
Number of months:															
12	*.00	*.01	---	*.04	*.03	---	*.07	*.01	...	*.04	*.05	...	*.09	...	...
18	*.10	*.04	---	.15	*.07	---	.19	.09	...	.24	.12	...	*.33	...	...
24	---	---	...	.26	.13	---	.31	.15	...	.37	.25	...	*.49	...	...
30	...	...	...	.29	.17	---	.38	.20	...	.45	.27	...	*.58	...	...
36	...	...	...	.35	.22	---	.42	.24	...	.50	.33	...	.64	...	...
48	...	...	...	.47	.29	---	.48	.33	...	.63	.38	...	.67	...	...
60	...	...	...	.53	.34	---	.55	.39	...	.73	.48	...	.78	...	...
	Age at fourth birth														
	Under 27 years	27-31 years	32-37 years	Under 27 years	27-31 years	32-37 years	Under 27 years	27-31 years	32-37 years	Under 27 years	27-31 years	32-37 years	Under 27 years	27-31 years	32-37 years
Number of women in thousands	135	227	109	379	423	296	617	571	...	603	...	...	...	...	...
Cumulative probability of a fifth birth since fourth birth															
Number of months:															
12	*.09	*.00	---	*.07	*.03	---	*.09	*.02	...	*.08	...	...	...	...	...
18	*.19	*.06	---	*.15	*.06	---	.23	*.09	...	.24	...	...	...	...	...
24	...	...	...	*.20	*.12	---	.33	.20	...	.37	...	...	...	...	...
30	...	...	...	.33	*.14	---	.38	.26	...	.45	...	...	...	...	...
36	...	...	...	.35	.18	---	.45	.31	...	.49	...	...	...	...	...
48	...	...	...	.46	.23	---	.57	.37	...	.60	...	...	...	...	...
60	...	...	...	.48	.27	---	.61	.43	...	.66	...	...	...	...	...

Months since marriage or birth	First married 1970-73		First married 1965-69		First married 1960-64		First married 1955-59		First married 1950-54	
	Age at fifth birth									
	Under 29 years	29-33 years	Under 29 years	29-33 years	Under 29 years	29-33 years	Under 29 years	29-33 years	Under 29 years	29-33 years
Number of women in thousands	---	---	211	215	357	287	297	...	...	...
Cumulative probability of a sixth birth since fifth birth										
Number of months:										
12	---	---	*.13	*.02	*.04	*.03	*.07	...	...	...
18	---	---	*.16	*.12	*.24	*.10	*.29	...	...	...
24	---	---	*.29	*.14	.38	*.15	.41	...	...	...
30	---	---	.39	*.21	.43	*.20	.49	...	...	...
36	---	---	.40	*.24	.51	*.23	.56	...	...	...
48	---	---	.43	*.26	.59	*.30	.65	...	...	...
60	---	---	.48	*.31	.63	*.36	.69	...	...	...

[1] Excludes women who had a premarital birth.

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APPENDIXES

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APPENDIX I

TECHNICAL NOTES

Background

This report is one of a series of statistical reports based on information collected from a nationwide sample of women by the National Survey of Family Growth conducted by the National Center for Health Statistics.

The National Survey of Family Growth (NSFG) utilizes a questionnaire to obtain demographic information and information on fertility, family planning, and health factors related to childbearing. As data relating to various subjects within these broad topics are tabulated and analyzed, separate reports are issued. The present report is based on data collected in the first cycle of the survey, which was centered on September 1973.

The population covered by the sample for the NSFG is women 15-44 years of age living in households in the conterminous United States at the time of interview who were ever married or had offspring living with them. The sample did not include women living in institutions or group quarters. Personal interviews were conducted by the staff of the National Opinion Research Center (NORC), Chicago, beginning in July 1973 and ending in February 1974.

Statistical Design

The sampling plan for the survey was a multistage probability design. Black households and households of all other races were selected at different probabilities so that the sample was composed of about 40 percent black women and 60 percent women of all other races. The sample was designed so that tabulations could be provided for each of the four geographic regions of the United States.

The first stage of the sample design consisted of drawing a sample of primary sampling units (PSU's). A PSU consisted of a county, a small group of contiguous counties, or a standard metropolitan statistical area as defined by the U.S. Bureau of the Census in March 1971. The second and third stages of sampling were used to select several segments (clusters of about 100 dwelling units) within each PSU. A systematic sample of dwelling units was then selected from each segment. Each sample dwelling unit was visited by an interviewer who listed all household members. If a woman 15-44 years of age, ever married or with offspring in the household, was listed as being in the household, an extended interview was conducted. If more than one woman in the household met the eligibility criteria, one of the women was randomly selected for an extended interview.

Since the design of the NSFG was a complex multistage probability sample, the derivation of estimates involved three basic operations:

Inflation by the reciprocal of the probability of selection. — The probability of selection is the product of the probabilities of selection from each step of selection in the design (PSU, segment, listing unit, household, and sample persons within household).

Nonresponse adjustment. — The estimates were inflated by a multiplication of two factors. The first has the number of sample households in a given PSU and stratum as its numerator and the number of households screened in the PSU and stratum as its denominator. The second factor has as its numerator the number of screened households with an eligible woman of a specific

age and race class and PSU group, and as its denominator, the number of women actually interviewed in the same age and race class and PSU. Screener response for the total survey was 89.8 percent and interview response was 90.2 percent for the total sample, yielding an overall response of approximately 81.0 percent.

Poststratification by marital status-age-race.—The estimates are ratio adjusted within each of 12 age-race cells to an independent estimate of the population for ever-married women. These independent estimates were derived from the U.S. Bureau of the Census Current Population Surveys of 1971-73. The numbers of single women with offspring living with them were inflated by steps 1 and 2.

All figures are individually rounded; aggregate figures are rounded to the nearest thousand. The sums of aggregates and percentages may not add up to the total due to the rounding.

The effect of the ratio-estimating process is to make the sample more closely representative of the population of women 15-44 years of age, living in households in the conterminous United States, and ever-married or with offspring living with them. The final postratification reduces the sample variance of the estimates for most statistics.

Descriptive material on the sampling design and estimation procedures may be found in another report.[5]

Measurement Process

Field operations for the survey were conducted by NORC as agent for NCHS. Their responsibilities included pretesting the interview schedule, selecting the sample, interviewing respondents, and carrying out quality control checks. The questionnaire was pretested in November 1972, and subsequent smaller field trials were held in March 1973. Interviewers were trained for a week prior to fieldwork and

had their first few schedules reviewed thoroughly. During the first part of the fieldwork, each interview schedule was reviewed for the completeness of certain key items and more intensive review and followup were performed if errors were discovered. Review and followup were reduced to a sample of each interviewer's work in the later part of the fieldwork. A 10 percent sample of all households with telephones was recontacted to verify the interview and the accuracy of a few items. All of these operations were monitored by NCHS.

The parts of the interview schedule applicable to this report are reproduced in appendix IV. The complete schedules are available upon request. Two different forms were used, one for interviewing currently married women and the other for interviewing widowed, divorced, separated, or single women with their own children living with them. The two forms differ mainly in wording when reference is made to the husband; there are a few questions in each schedule that do not appear in the other.

Data Reduction

Coding and keying were done by NORC and the U.S. Bureau of the Census. Each coder's work was systematically sampled for verification. Keying at the U.S. Bureau of the Census was performed on key-to-disk equipment programed to reject invalid entries. Each keyer's work was systematically sampled for verification. The data were edited by the U.S. Bureau of the Census and NCHS to minimize internal inconsistencies. After editing, value entries were imputed to cases with missing data on an item-by-item basis. No item with more than 15 percent missing data was included in the imputation. The imputed value entry for a case was selected from a randomly chosen case with similar characteristics such as race, age, and marital status, using a procedure known as "hot deck" imputation.

Reliability of Estimates

Since the statistics presented in this report are based on a sample, they may differ some-

what from the figures that would have been obtained if a complete census had been taken using the same questionnaires, instructions, interviewing personnel, and field procedures. This chance difference between sample results and a complete count is referred to as sampling error and is measured by a statistic called the standard error of estimate. The relative standard error of an estimate is obtained by dividing the standard error of the estimate by the estimate itself and is expressed as a percent of the estimate. Included in this appendix are a relative standard error chart (figure I) and tables I and II, from which the relative standard errors can be determined for estimates shown in this report. In order to derive relative errors which would be applicable to a wide variety of health statistics and which could be prepared at a moderate cost, a number of approximations were required. As a result, the figure and tables provide an estimate of the approximate relative standard error rather than the precise error for any specific statistic. The standard errors were computed using a procedure known as balanced half-sample replication.[6]

The chances are about 68 out of 100 that an estimate from the sample would differ from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference between the sample estimate and a complete count would be less than twice the standard error. In this report, numbers and percentages which have a standard error that is more than 25 percent of the estimate itself are considered unreliable. They are marked with an asterisk to caution the user but may be combined to make other types of comparisons of greater precision.

In this report, sample statistics are compared among subgroups or across years, using the normal deviate test at the 0.05 level of confidence. Significance at the 0.05 level means that the difference is large enough that in repeated samples of the same size and type as this one, such a large difference would be expected to be found in less than 5 percent of the samples. Significance at the 10-percent level means that such a large difference would be expected to be found in less than 10 percent of such repeated samples.

When two or more sample statistics are compared and they have only small, statistically non-

significant differences among them, they may be referred to as "similar." Observed differences that are described in terms such as "greater," "less," "larger," "smaller," and so forth, have been tested and found statistically significant at the 5-percent level. Statements qualified with the word "probably" indicate that the difference is significant at the 10-percent level but not at the 5-percent level. In many of the smaller categories of the tables of this report, differences were found to be substantial but not statistically significant using a 2-tailed t-test. In these instances, one should not conclude that no difference exists, but simply that such differences cannot be established with 95-percent confidence from a sample of this size. Lack of comment in the text about any two statistics does not necessarily mean that the difference was tested and found not to be significant.

The approximate standard error (denoted by S) of an estimated cumulative birth probability (P') based on an estimate of a number of women (denoted by N') entering the birth interval of interest is given by:

$$S_{p'} = \sqrt{\frac{6137.885\,(P')\,(1-P')}{N'}}.$$

for women of all races, white women, and Hispanic women; and

$$S_{p'} = \sqrt{\frac{3043.265\,(P')\,(1-P')}{N'}}$$

for black women. Standard errors based on these formulas have been computed for selected values of P' and N' and are shown in tables I and II. Details of the balanced half-sample replication procedure and the curve fitting procedure are given elsewhere.[5]

Approximate standard errors for estimated cumulative birth probabilities are shown in table I for white women and women of all races combined and are shown in table II for black women.

Figure I. Relative standard errors for aggregates of women, by race
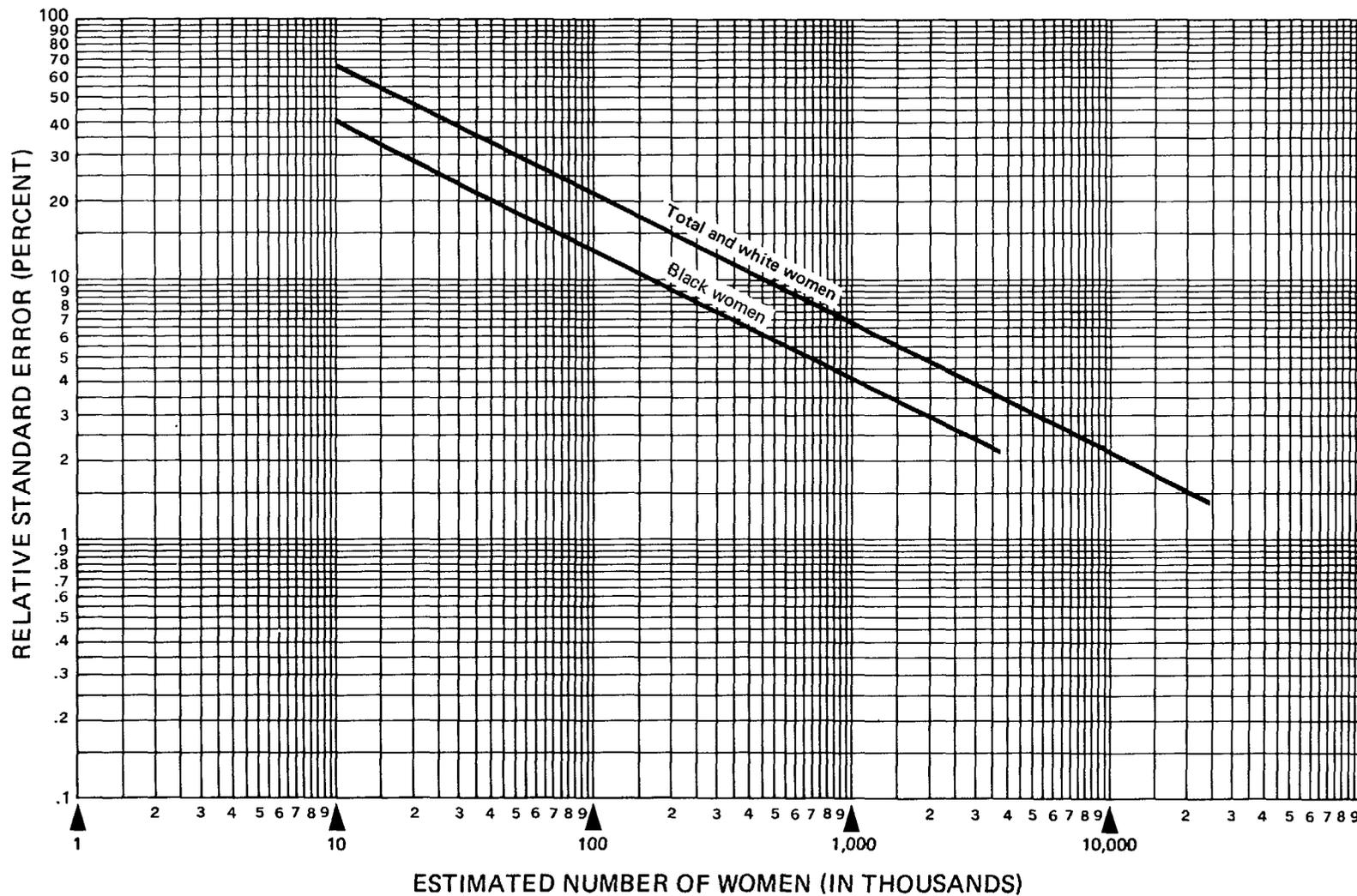
Example of use of chart: An aggregate of 2 million women (on the scale at the bottom of the chart) of all races has a relative standard error of 4.8 percent, or a standard error of 96,000 (4.8 percent of 2 million).

Table I. Approximate standard errors for estimated cumulative birth probabilities for white and total women: 1973 National Survey of Family Growth

Number of women at beginning of interval	Estimated cumulative birth probability						
	.02 or .98	.05 or .95	.10 or .90	.20 or .80	.30 or .70	.40 or .60	.50
	Standard error						
1,000..	.347	.540	.743	.991	1.135	1.214	1.239
10,000..	.110	.171	.235	.313	.359	.384	.392
50,000..	.049	.076	.105	.140	.161	.172	.175
100,000..	.035	.054	.074	.099	.114	.121	.124
500,000..	.015	.024	.033	.044	.051	.054	.055
1,000,000.......................................	.011	.017	.024	.031	.036	.038	.039
5,000,000.......................................	.005	.008	.011	.014	.016	.017	.018
10,000,000.....................................	.003	.005	.007	.010	.011	.012	.012

Table II. Approximate standard errors for estimated cumulative birth probabilities for black women: 1973 National Survey of Family Growth

Number of women at beginning of interval	Estimated cumulative birth probability						
	.02 or .98	.05 or .95	.10 or .90	.20 or .80	.30 or .70	.40 or .60	.50
	Standard error						
1,000..	.244	.380	.523	.698	.799	.855	.872
10,000..	.077	.120	.165	.221	.253	.270	.276
25,000..	.049	.076	.105	.140	.160	.171	.174
50,000..	.035	.054	.074	.099	.113	.121	.123
75,000..	.028	.044	.060	.081	.092	.099	.101
100,000..	.024	.038	.052	.070	.080	.085	.087
1,000,000.......................................	.008	.012	.017	.022	.025	.027	.028

Nonsampling Error

In addition to sampling error, the survey results are subject to several sources of potential nonsampling error, including interview nonresponse, nonresponse to individual questions within the interview, inconsistency of responses to individual questions, respondent error or misreporting, and errors of recording, coding, or keying by survey personnel. It is impossible to measure the extent of nonsampling errors accurately. Although some useful approximate measures can be made of some types of nonsampling error, the survey must rely upon several quality control procedures and other methods incorporated into the survey design to minimize nonsampling error.

Interview nonresponse.—Interview nonresponse, or the failure to obtain whole interviews,

arises from several sources—incomplete listing of households for the sampling frame, inability to screen all sample households for eligible respondents, and inability to complete a full interview. Completeness of listing cannot be tested directly as it requires an independent, accurate accounting of the households that should have been listed. In the NSFG, listing accuracy was tested at the time of screening by use of the "half open interval" check for missed households; i.e., at designated sample households, the interviewer was required to check for dwelling units between the sample household just screened and the next listed dwelling unit. This procedure resulted in the addition of 781 missed units or an additional 2.4 percent to the original sample of dwelling units to be screened.

Of the original sample of 32,818 dwelling units to be screened, 3,820 were found to be

vacant, not dwelling units, or group quarters. Of the remaining dwelling units, 9.7 percent were not successfully screened. This included 2.3 percent refusals to have the household members listed; 1.6 percent with language problems, illness, or otherwise unavailable in the field period; 4.6 percent where no one could be found at home; and 1.1 percent for other reasons such as refused access to the unit.

Of the 26,177 households for which screening was completed, 10,879 were found to contain an eligible respondent. However, interviews were not completed in 9.8 percent of these cases because of refusals by the eligible respondents (5.0 percent); language, illness, and related problems (2.0 percent); and no contact after repeated calls (2.7 percent).

The nonresponse adjustment for interview nonresponse described above imputes to nonresponding dwelling units and women the characteristics of similar respondent dwelling units and women.

Item nonresponse.—Nonresponse to individual questions (item nonresponse) was less than 2 percent for about half (51 percent) of the items. Item nonresponse occurred when the person refused to answer the question, when the person did not know the answer to the question, when the question was erroneously not asked or the answer not recorded by the interviewer, and where the answer was uncodeable. For 37 percent of the items, nonresponse was between 2 and 10 percent. For the remaining 12 percent of the items, nonresponse was greater than 10 percent of persons eligible to answer the items. Half of these high nonresponse items were concentrated in two areas—detailed income questions and questions about the reasons for switching from one contraceptive method to another. The remaining high nonresponse items were generally those asked of small numbers of persons.

Some illustrative items with their associated nonresponse rates are: the number of children ever born (parity) (no missing data), intentions about having another child (0.7 percent), whether contraception was stopped in order to become pregnant (1.9 percent), highest grade of school attended (0.1 percent), and total family income (6.8 percent).

For most items an adjustment for missing data values was made by one of four imputation procedures. In order of frequency employed they were: (1) "hot deck" imputation, (2) imputation from a sorted file, (3) editing from other data within the same case, and (4) allocation based on technical judgments.

"Hot deck" imputation refers to a procedure in which the file is first randomized. Next a matrix is created for values of items (e.g., race, age, and marital status) judged to be correlated with the item to be imputed (e.g., number of times married). A reasonable "cold deck" value (e.g., 2 = married twice) is assigned to each cell of the matrix in case the first file record with the given characteristics has missing data. The randomized file is processed and each record is identified as belonging to one cell of the matrix (e.g., white, age 25-29, currently married). The item to be imputed is checked: if it is blank—not applicable (e.g., not married before), it is ignored; if it has a missing data code, the code in the matrix is placed in the record. If it has an acceptable code, that code replaces the code already in the matrix, and it remains in the matrix until another record with the same characteristics and a known code is encountered. This insures that the probability of a code being assigned to a record with missing data is the same as the probability of that code occurring among records with the same characteristics but with known data.

For imputation from a sorted file, the records are first sorted by selected characteristics (e.g., marital status, race, and age) so that the first group of records would be currently married black women aged 15-19, the second group would be currently married black women aged 20-24, etc. An initial value is assigned for the item to be imputed—(e.g., 4 [tubal ligation] for type of sterility)—and for any item dependent upon the item to be imputed—(e.g., 9 [not ascertained] as to whether the operation was for contraceptive reasons). The ordered file is processed and each record is checked. If the item to be imputed is blank—not applicable, it is ignored; if it has a known code, it and its dependent items would replace the existing set of values; if it has a missing data code, it and its dependent items would be changed to the preset values above. This procedure insures that the im-

puted code is reasonable for the ordering characteristics and that the probability of assignment is the same as in the population in general. There will be some bias, however, as the boundaries between groups are crossed.

Where sampling error affects the precision of survey estimates, nonsampling error introduces bias. Imputation procedures reduce this bias to the extent that the assumptions about the relations between respondent and nonrespondent characteristics are true. But the amount of remaining bias, if any, cannot be measured. Therefore, stringent quality control procedures were introduced at every stage of the survey, including the check on completeness of the household listing mentioned earlier, the extensive training and practice of interviewers, field observation of interviewers, field editing of questionnaires, short verification interviews with a subsample of respondents and missed households, verification of coding and editing, an independent recode of a sample of questionnaires by NCHS, keypunch verification, and an extensive computer "cleaning" to check for impermissible codes, missing data, and response inconsistencies. One source of bias that can be evaluated through special studies but cannot be controlled is respondent error, whether deliberate or unwitting. In this as in other surveys, the data are subject to problems of accurate recall and of the stability of respondents' views from one time to the next.

———— O O O ————

CALCULATION OF BIRTH PROBABILITIES

The basic statistic presented in this report is the cumulative probability of having a birth within x months after the beginning of a birth interval. The beginning of the first birth interval is defined as the date of first marriage, the beginning of the second birth interval as the date of birth of the first child, and so on. Since cumulative probabilities are calculated separately for specified subgroups of women, intergroup differences in the timing of births during each interval can be determined from these data.

The cumulative probabilities of having a birth by the end of each month are computed using a life table procedure and require two sets of tabulations from each woman's fertility history: (1) the number of months between marriage and first birth, between first and second birth, and so on, (for closed birth intervals); and (2) the number of months between marriage or last birth and the interview or separation date (for the open birth interval).[7] Tabulations of these data are then produced for each subgroup of sample women for each birth interval, and the tabulations are used to calculate each B_x and T_x. These B_x and T_x, in turn, are used to derive the life table probabilities in the manner described below.

In algebraic notation let

B_x = the number of women who had a birth during the xth month after the beginning of the birth interval.

T_x = the number of women who were either interviewed or experienced marital disruption during the xth month after the beginning of the birth interval without an additional birth.

L_x = the number of women at risk of having a birth at the beginning of the xth month after the beginning of the birth interval.

L_{x+1} = the number of women at risk of a birth at the beginning of the $(x+1)$th month.

L_x^* = the adjusted number of women at risk of having a birth at the beginning of month x.

P_x = the probability of *not* having a birth during the xth month after the beginning of the birth interval.

Q_x = the probability of having a birth during the xth month after the beginning of the birth interval.

CP_x = the cumulative probability of *not* having a birth by the end of the xth month after the beginning of the birth interval.

CQ_x = the cumulative probability of having a birth by the end of the xth month after the beginning of the birth interval.

NOTE: A list of references follows the text.

then

$$L_1 = \sum_{x=1}^{n} (B_x + T_x)$$

where n is the greatest number of months after the beginning of the interval that any woman was observed;

$$L_{x+1} = L_x - B_x - T_x$$
$$L_x^* = L_x - \tfrac{1}{2} T_x$$
$$Q_x = B_x / L_x^*$$
$$P_x = 1 - Q_x$$
$$CP_x = (CP_{x-1})(P_x)$$
$$CQ_x = 1 - CP_x$$

———— O O O ————

DEFINITION OF TERMS

Marital status.—Marital status was a criterion of sample selection. The National Survey of Family Growth (NSFG) sampled women who were currently married at the time of interview, who had ever been married, or who had never been married but had offspring (that is, children born to them) in the household. Current marital status was recorded in seven categories in response to the question, "Is (PERSON) now married, widowed, divorced or annulled, separated, or has he/she never been married?" The seven categories in which answers were recorded were: married, informal union, widowed, divorced or annulled, separated, single with own children, and never married. Women in the last category were not eligible for the survey.

Married women include those who are legally or formally married whose husbands are living in the household or are temporarily absent on business, illness, vacation, etc., and those who are informally married or "living together" with a male partner whose usual residence is the same household. Women currently in informal unions were reported separately but are too few to be separately classified for analytical purposes. Information on informal unions was obtained only if volunteered by the respondent in the course of listing household members and their relationship to the head of the household.

Divorced women include those legally separated from their former spouses by a legal decree of divorce or annullment and free to remarry. While those legally separated but without freedom to remarry belong in the latter category of separated, there was no direct question in the interview to establish the issue of freedom to remarry with certainty. The term divorce is pre-

sumed to refer most generally to "absolute" decrees.

Widowed women are those previously married women whose most recent spouses are deceased.

Separated women are those legally or informally separated from their former spouses. Included here would be cases of desertion, informal separation by mutual agreement, and legal separations in which the partners are not free to remarry.

Single with own children is a category of women who have begun their childbearing and have never been married. However, some of these women were probably missed in the survey because this category was not identified by a direct question. These are single women who have one or more children born to them and living with them in the household. Single women who gave a child up for adoption or who board the child elsewhere and those who have not had a live birth are not included in the survey.

Religion.—Women were classified by religion in response to the question, "Are you Protestant, Roman Catholic, Jewish, or something else?" In addition to the three major religious groupings, two other categories—other and none—were used. Since the category of Protestant includes numerous individual denominations, these respondents were further asked to identify the denomination to which they belonged. Those who answered "other" to the original question and then named a Protestant denomination were then included with their own groups. Although specific denominational names were obtained and recorded, the numbers of cases for most denominations were too few to

produce reliable estimates, so they have been combined in larger categories. Data on religious denominations were reported for all but 26 respondent cases, more than 99 percent, and these few cases were imputed.

Race and ethnicity.—Women were classified as white, black, or "other races" according to the interviewer's observations at the time of interview. Agreement between this classification and the respondent's own reports of ethnic origin, also obtained in the interview, was very high; for instance, of those classified as "black" by interviewer observation, 100 percent reported their ethnic origin as at least partly "black, African, or Negro"; and of those who reported their ethnic origin as "black, African, or Negro," 96 percent were classified as "black" by interviewer observation. Race was imputed for 10 cases.

Information about ethnic origins was obtained for the woman by asking, "What is your origin or descent?" Persons were classified as being of Hispanic origin if any of the following responses were given: Mexicano, Chicano, Mexican American, Puerto Rican, Cuban, Hispano, or any other Spanish origin or descent. Persons who did not give any of those responses were classified as being not of Hispanic origin. Persons may have more than one origin or descent, and multiple responses to the questions were recorded. However, any of the responses listed above resulted in classification of the person as being of Hispanic origin regardless of any other responses which may have accompanied it. It should be noted that in this report the classifications of race and ethnicity are independent; each ethnic category may include persons of all races, and each racial category may include persons of all ethnic groups. Ethnicity was reported for more than 99 percent of respondents.

Farm background.—Women were asked, "When you were growing up, that is, between the ages of 6 and 16, did you live on a farm most of the time (half of the time or more)?" Women who answered affirmatively were classi-

fied as having a farm background, and others were classified as having a nonfarm background. Responses were obtained from more than 99 percent of sample women. Note that the term "farm" was not defined for respondents, so there may be considerable variation in the childhood experience of those who reported a farm background.

Education.—Education is classified according to the highest grade or year of regular school or college that was completed. Determination of the highest year of regular school or college completed by the respondent is based on responses to a series of questions concerning (a) the last grade or year of school attended, (b) whether or not that grade was completed, (c) whether any other schooling of a vocational or generally nonacademic type was obtained, and (d) whether or not such other schooling was included in the years of regular school or college reported in (a). Information on education was reported almost completely. Only about 1 percent of the data was imputed.

Education at first marriage refers to the number of years of regular schooling completed by the respondent at the time of her first marriage.

Age.—The age of a person at a given event is the number of whole years completed, or the age at the birthday preceding the event. Age at a given event is calculated by subtracting the reported date of birth from the date of the given event. The respondent's age at first marriage and age at the birth of each successive child are used in this report.

Premarital birth.—This refers to a first or subsequent birth that occurred before the respondent's first marriage.

Year of first marriage.—Year of first marriage refers to the calendar year in which the woman was first married.

Fecundability.—This refers to the probability that a woman will conceive within one menstrual cycle, or one month, in the absence of any attempt to prevent conception.

———— O O O ————

APPENDIX IV

SELECTED ITEMS FROM THE NSFG QUESTIONNAIRE

10. Have you ever been married before? Yes . . (ASK A) . 1 ⎱ RECALL   51
                                        No . . . . 2 ⎰ CHART Ⓐ

    A. IF YES: Including your present marriage, how
    many times have you been married?
                                            (Number of Times)   52

11. When were you and Mr. (NAME OF   ☐☐ ☐☐ ☐☐   53 58
    PRESENT HUSBAND) married?   (Month) (Day) (Year)

    IF R MARRIED ONLY ONCE: YEAR ON RECALL CHART Ⓑ;   CHECK ☐ IF   59
                      AND SKIP TO SEC. II, P. 4.   INFORMAL UNION

ASK Q'S 12-15 FOR EACH PREVIOUS MARRIAGE BEFORE GOING ON TO NEXT MARRIAGE.   60 72/R

BEGIN DECK 02

12.	13.				14.		15.
IF MARRIED MORE THAN ONCE: When were you married the (1st/2nd/3rd, etc.) time? CHECK BOX BELOW DATE IF INFORMAL UNION	How did that marriage end? (READ CATEGORY IF NECESSARY)				IF DIVORCE OR ANNULMENT:	IF DEATH:	IF DIVORCE, ANNULMENT, OR SEPARATION: When did you and your (1st/2nd/ etc.) husband stop living together?
	Di-vorce/ Annul-ment	Separ-ation (SKIP TO Q.15)	Death of Hus-band		What was the date of your (divorce/ annulment)?	When did your (1st/ 2nd/ etc.) husband die?	
☐☐ ☐☐ ☐☐ (MONTH DAY YEAR OF 1st MARRIAGE) 10 15 INFORMAL ☐ 16 RECALL CHART Ⓑ	1	2	3 17		☐☐ ☐☐ (MONTH) (YEAR)	18 21	☐☐ ☐☐ (MONTH) (YEAR) 22 25
☐☐ ☐☐ ☐☐ (MONTH DAY YEAR OF 2nd MARRIAGE) 26 31 INFORMAL ☐ 32	1	2	3 33		☐☐ ☐☐ (MONTH) (YEAR)	34 37	☐☐ ☐☐ (MONTH) (YEAR) 38 41
☐☐ ☐☐ ☐☐ (MONTH DAY YEAR OF 3rd MARRIAGE) 42 47 INFORMAL ☐ 48	1	2	3 49		☐☐ ☐☐ (MONTH) (YEAR)	50 53	☐☐ ☐☐ (MONTH) (YEAR) 54 57 58 73

IF MORE THAN FOUR MARRIAGES, GO TO CONTINUATION BOOKLET, PAGE 3.

In a study of family growth in this country, one of the most important things is knowing some basic facts about pregnancies and births that women have.

18. Have you had a baby born to you at any time?

Yes . . . (ASK A) 1   10

No . (SKIP TO Q. 21) . . 2

    A. IF YES: Altogether, how many babies have you had born to you, including any who died very young? (Number of live births) [____] Recall Chart ©
                      11 12

19. Now I'd like to get some information about (each of) your (baby/babies).

(ASK A-F FOR EACH LIVE BIRTH.) A. When was your (first, second, etc.) child born? (ENTER DATE IN COL. Y OF BIRTH & PREG. RECORD BETWEEN HEAVY LINES.)	FIRST CHILD	SECOND CHILD	THIRD CHILD
B. What did you name the baby? (ENTER IN COL. Z OF BIRTH & PREG. RECORD NEXT TO DATE OF BIRTH.)			
(ENTER C-F IN CHILD COLS. TO RIGHT) C. Was that baby a boy or a girl?	Boy Girl 1 2	Boy Girl 1 2	Boy Girl 1 2

c

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