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Remarriages of Women 15-44 Years of Age Whose First Marriage Ended in Divorce: United States, 1976¹

INTRODUCTION

In the United States in 1976 there were about 6 million women 15-44 years of age whose first marriage had ended in divorce. About 21 percent of these women had entered a second marriage during the first year following divorce, and about 71 percent had remarried within 5 years after divorce. However, the likelihood of remarriage varied depending on the social and demographic characteristics of these women. The most important of these characteristics were race, age at divorce, and educational attainment. Data provide evidence that during the first 5 years after divorce the likelihood of remarriage was greater for white than for black women, greater for those who were divorced before age 25 than for those who were divorced later, and greater for those with less than a high school education than for those with one or more years of college.

These statistics on remarriage are from the National Survey of Family Growth, Cycle II, conducted by the National Center for Health Statistics in 1976. Data were collected through personal interviews with women who were selected in a multistage probability sample of the household population of the conterminous United States. Women 15-44 years of age who were currently married or previously married or were never married but had offspring living in the household at the time of the survey were eligible for inclusion in the sample.

The interview focused on the respondent's marital and pregnancy histories; use of contra-

ception; planning status of each pregnancy; intentions regarding number and spacing of future births; use of maternal care and family planning services; and a broad range of social, demographic, and economic characteristics. For Cycle II, 3,009 black women and 5,602 women of other races were interviewed from January through September 1976. Further discussion of the survey design and sampling variability is in the Technical Notes.

In this report statistics are presented on the likelihood of second marriage for women whose first marriage ended in divorce and on group differences in the likelihood of second marriage. The basic statistics presented are cumulative probabilities of remarriage for each of the first 5 years following divorce. The probabilities shown for women with each characteristic indicate the approximate proportion of a group of women with that characteristic that remarried by the end of each year since divorce occurred. For example, the .731 probability at the end of 4 years for women who divorced before age 25 (see table 1) indicates that about 73 percent of women who divorced before that age remarried within 4 years. By comparing different groups in terms of their probabilities of remarriage at the end of each year following divorce, group differences in the timing and frequency of remarriage can be determined.

Two types of probabilities are presented in this report. The unadjusted probabilities found in table 1 are calculated, as described in the Technical Notes, directly from the marital experiences of women with each characteristic. The adjusted probabilities for the various subgroups of each characteristic in table 2 are those that would have occurred if the different sub-

¹ This report was prepared by William R. Grady, M.A., Division of Vital Statistics.

Table 1. Number of women, cumulative probabilities of remarriage by number of years after divorce and median years to remarriage, by selected characteristics, with standard errors: United States, 1976

Characteristic	Number of women in thousands	Years after divorce					Median years to remarriage
		1	2	3	4	5	
		Probability					
All women	6,029	.206	.395	.553	.644	.705	2.7
<u>Race and origin</u>							
White	5,244	.221	.414	.578	.668	.731	2.5
Black	710	.097	.231	.342	.445	.485	5.0+
Hispanic ¹	339	.202	.494	.761	*	*	2.0
<u>Age at divorce</u>							
Under 25 years	2,882	.230	.459	.624	.731	.785	2.3
25 years and over	3,147	.182	.328	.478	.545	.611	3.3
<u>Year of divorce</u>							
Before 1970	2,782	.238	.457	.604	.695	.752	2.3
1970 or later	3,247	.177	.331	.498	.577	.628	3.0
<u>Duration of first marriage</u>							
Less than 5 years	2,598	.233	.443	.595	.712	.755	2.4
5 years or more	3,431	.184	.354	.517	.579	.633	2.9
<u>Number of living children at divorce</u>							
No children	1,448	.184	.408	.578	.679	.763	2.5
1 child	1,753	.214	.433	.602	.693	.720	2.4
2 children	1,485	.242	.381	.537	.622	.660	2.8
3 children or more	1,342	.181	.345	.479	.561	.672	3.3
<u>Education</u>							
Less than 12 years	1,964	.268	.507	.622	.731	.804	2.0
12 years	2,756	.201	.392	.570	.658	.715	2.6
More than 12 years	1,309	.137	.253	.426	.487	.532	*4.3
<u>Religion</u>							
Catholic	1,111	.197	.362	.501	.599	.625	3.0
Protestant	4,281	.209	.404	.572	.665	.728	2.6
Other or none	637	*.203	.397	.494	.603	.694	*3.1
<u>Place of residence</u>							
Metropolitan	4,447	.186	.350	.514	.607	.665	2.9
Nonmetropolitan	1,582	.261	.514	.657	.740	.804	1.9
<u>Geographic region</u>							
Northeast	799	.277	.361	.551	.645	.700	2.7
North Central	1,772	.176	.391	.510	.625	.693	2.9
South	2,087	.206	.408	.573	.659	.731	2.6
West	1,371	.213	.399	.580	.649	.683	2.6

See footnote at end of table.

Table 1. Number of women, cumulative probabilities of remarriage by number of years after divorce and median years to remarriage, by selected characteristics, with standard errors: United States, 1976—Con.

Characteristic	Standard error of number of women in thousands	Years after divorce					Standard error of median years to remarriage
		1	2	3	4	5	
		Standard error of probability					
All women	182	.024	.016	.020	.021	.024	.09
<u>Race and origin</u>							
White	164	.026	.020	.021	.022	.027	.09
Black	39	.010	.028	.042	.042	.046	---
Hispanic ¹	43	.088	.099	.109	---	---	.33
<u>Age at divorce</u>							
Under 25 years	145	.038	.035	.030	.060	.051	.19
25 years and over	130	.025	.027	.033	.060	.062	.45
<u>Year of divorce</u>							
Before 1970	123	.035	.026	.024	.023	.025	.14
1970 or later	133	.022	.023	.031	.034	.034	.31
<u>Duration of first marriage</u>							
Less than 5 years	118	.042	.038	.033	.037	.034	.23
5 years or more	136	.025	.018	.027	.028	.030	.17
<u>Number of living children at divorce</u>							
No children	88	.032	.029	.027	.049	.040	.12
1 child	97	.034	.024	.035	.051	.048	.15
2 children	89	.036	.038	.033	.024	.024	.19
3 children or more	84	.029	.030	.048	.055	.053	.60
<u>Education</u>							
Less than 12 years	103	.029	.036	.038	.035	.042	.20
12 years	122	.031	.026	.024	.015	.027	.11
More than 12 years	84	.022	.017	.068	.081	.081	1.31
<u>Religion</u>							
Catholic	77	.043	.052	.036	.039	.041	.31
Protestant	152	.029	.024	.022	.048	.041	.12
Other or none	58	.061	.064	.063	.078	.085	.90
<u>Place of residence</u>							
Metropolitan	155	.028	.014	.027	.025	.029	.15
Nonmetropolitan	92	.028	.038	.036	.042	.045	.15
<u>Geographic region</u>							
Northeast	65	.059	.058	.091	.070	.057	.39
North Central	98	.027	.032	.048	.041	.027	.38
South	106	.029	.032	.043	.041	.041	.22
West	86	.046	.051	.039	.037	.042	.23

¹Includes all women reporting any Hispanic origin, regardless of race or other ethnic origins reported; estimates for the 4th and 5th years of divorce are not shown because the conditional probabilities produced for those years, from which the cumulative probabilities are calculated, are based on fewer than 10 unweighted cases. Data for women of Hispanic origin are also included in the statistics by race.

Table 2. Number of women, adjusted¹ cumulative probabilities of remarriage by number of years after divorce and median years to remarriage, by selected characteristics, with standard errors: United States, 1976

Characteristic	Number of women in thousands	Years after divorce					Median years to remarriage
		1	2	3	4	5	
		Probability					
All women	6,029	.206	.395	.553	.644	.705	2.7
<u>Race and origin</u>							
White	5,244	.219	.408	.574	.663	.731	2.6
Black	710	.114	.279	.382	.492	.493	5.0+
Hispanic ²	339	*.213	.461	.757	*	*	2.1
<u>Age at divorce</u>							
Under 25 years	2,882	.204	.433	.615	.710	.758	2.4
25 years and over	3,147	.208	.357	.491	.574	.649	3.1
<u>Year of divorce</u>							
Before 1970	2,782	.223	.432	.577	.665	.720	2.5
1970 or later	3,247	.191	.357	.530	.622	.695	2.8
<u>Duration of first marriage</u>							
Less than 5 years	2,598	.243	.398	.524	.648	.727	2.8
5 years or more	3,431	.181	.397	.580	.644	.689	2.6
<u>Number of living children at divorce</u>							
No children	1,448	.166	.398	.571	.651	.734	2.6
1 child	1,753	.204	.419	.583	.673	.686	2.5
2 children	1,485	.248	.389	.536	.631	.676	2.8
3 children or more	1,342	.206	.369	.517	.616	.736	2.9
<u>Education</u>							
Less than 12 years	1,964	.260	.493	.604	.713	.791	2.1
12 years	2,756	.198	.390	.567	.656	.714	2.6
More than 12 years	1,309	.155	.279	.459	.525	.563	*3.6
<u>Religion</u>							
Catholic	1,111	*.192	.375	.497	.602	.621	3.0
Protestant	4,281	.206	.395	.571	.661	.722	2.6
Other or none	637	*.229	.430	.511	.576	.709	*2.9
<u>Place of residence</u>							
Metropolitan	4,447	.190	.361	.524	.620	.674	2.9
Nonmetropolitan	1,582	.250	.485	.630	.709	.786	2.1
<u>Geographic region</u>							
Northeast	799	.285	.384	.587	.671	.732	2.6
North Central	1,772	.170	.389	.512	.612	.663	2.9
South	2,087	.205	.400	.567	.655	.733	2.6
West	1,371	.219	.403	.570	.659	.698	2.6

See footnotes at end of table.

Table 2. Number of women, adjusted¹ cumulative probabilities of remarriage by number of years after divorce and median years to remarriage, by selected characteristics, with standard errors: United States, 1976—Con.

Characteristic	Standard error of number of women in thousands	Years after divorce					Standard error of median years to remarriage
		1	2	3	4	5	
Standard error of probability							
All women	182	.024	.016	.020	.021	.024	.09
<u>Race and origin</u>							
White	164	.026	.019	.023	.023	.029	.10
Black	39	.021	.023	.051	.044	.057	---
Hispanic ²	43	.091	.108	.112	---	---	.35
<u>Age at divorce</u>							
Under 25 years	145	.031	.037	.041	.042	.037	.18
25 years and over	130	.030	.040	.038	.033	.033	.41
<u>Year of divorce</u>							
Before 1970	123	.033	.026	.027	.028	.030	.15
1970 or later	133	.025	.028	.030	.039	.038	.17
<u>Duration of first marriage</u>							
Less than 5 years	118	.050	.060	.059	.053	.051	.48
5 years or more	136	.031	.047	.049	.045	.045	.23
<u>Number of living children at divorce</u>							
No children	88	.028	.029	.037	.048	.046	.16
1 child	97	.039	.025	.043	.052	.048	.16
2 children	89	.040	.043	.035	.024	.030	.23
3 children or more	84	.037	.036	.054	.058	.054	.28
<u>Education</u>							
Less than 12 years	103	.027	.035	.037	.033	.041	.27
12 years	122	.032	.027	.027	.015	.025	.13
More than 12 years	84	.022	.022	.070	.078	.076	1.04
<u>Religion</u>							
Catholic	77	.049	.057	.052	.045	.055	.45
Protestant	152	.030	.022	.024	.026	.032	.11
Other or none	58	.067	.073	.070	.047	.079	.81
<u>Place of residence</u>							
Metropolitan	155	.027	.028	.021	.020	.026	.12
Nonmetropolitan	92	.026	.044	.042	.064	.058	.28
<u>Geographic region</u>							
Northeast	65	.062	.077	.091	.056	.050	.40
North Central	98	.025	.031	.040	.041	.032	.32
South	106	.030	.031	.041	.038	.043	.20
West	86	.049	.052	.040	.036	.034	.25

¹Probabilities for each characteristic are adjusted for the effects of all other characteristics in the table by means of dummy-variable multiple regression analysis. See the Technical Notes for further discussion of the adjustments.

²Includes all women reporting any Hispanic origin, regardless of race or other ethnic origins reported; estimates for the 4th and 5th years of divorce are not shown because the conditional probabilities produced for those years, from which the cumulative probabilities are calculated, are based on fewer than 10 unweighted cases. Data for women of Hispanic origin are also included in the statistics by race.

groups of a particular characteristic had included exactly the same proportions of women with each of the other characteristics in the table. For example, consider the characteristic "duration of first marriage," which has been divided into the two subgroups, "less than 5 years" and "5 years or more." The adjusted probabilities of remarriage for each of these two subgroups are those that would have occurred if both groups of women (those married less than 5 years and those married 5 years or more) had contained exactly the same proportions of white women, black women, and Hispanic women; the same proportions of women who were divorced prior to age 25 and at 25 or older; the same proportions from metropolitan and nonmetropolitan areas; and so on. This adjustment permits comparisons of the effects of each characteristic on the chances of remarriage independent of the effects of all other characteristics. Further discussion of this adjustment procedure can be found in the Technical Notes.

In addition to cumulative probabilities of remarriage, both table 1 and table 2 include the median years to remarriage for each group of women. This statistic represents the number of years it took for the cumulative probability of remarriage to reach .50: the number of years it took for half the women to remarry.

DIFFERENTIALS IN PROBABILITIES OF REMARRIAGE

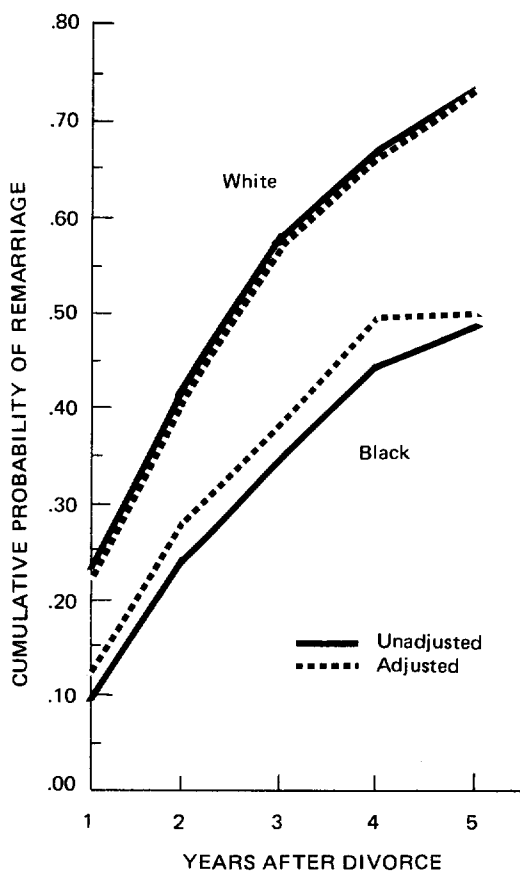
An examination of table 1 reveals that white women had a higher probability than black women of remarrying within 1 year after divorce; the probability was .221 for white women compared with only .097 for black women. Further, this racial differential increased during the second and third years following divorce, so that by the end of the third year the difference was .236, nearly twice the difference found at the end of 1 year. The difference was then maintained at about this level during the next 2 years following divorce, and by the end of 5 years the probability of remarriage was .731 for white women and .485 for black women.

The magnitude of the racial difference in the likelihood of remarriage is illustrated in the number of years it took for the probability of remarriage to reach .50 (median years to remar-

riage). For white women this occurred after about 2.5 years, but for black women the probability was still less than .50 after 5 years.

An adjustment for the effects of the other characteristics in the table has little effect on the racial differences shown in table 1 (see figure 1). Although the racial differences in the adjusted probabilities shown in table 2 are somewhat smaller at each duration after divorce, all differences remain statistically significant. That the adjustment has little effect indicates that racial differences in the probability of remarriage are largely unrelated to the other characteristics in the table; that is, the greater probability of remarriage for white women was not due to other characteristics in the table associated with high probabilities of remarriage.

Figure 1. UNADJUSTED AND ADJUSTED CUMULATIVE PROBABILITY OF REMARRIAGE FOR WOMEN AGED 15-44 YEARS WHOSE 1ST MARRIAGE ENDED IN DIVORCE, BY RACE AND NUMBER OF YEARS AFTER DIVORCE: UNITED STATES, 1976

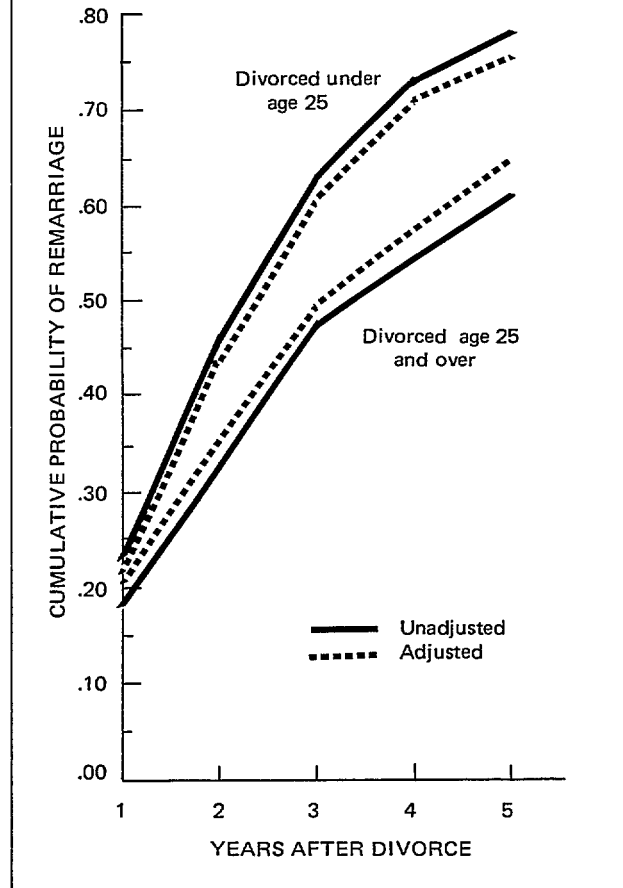


During the first year following divorce the probability of remarriage for Hispanic women was not significantly different from that found for either all white women or all black women. However, their probability of remarriage increased rapidly over the next 2 years following divorce and by the end of the third year had reached .761. Although that probability is not significantly different from the .578 found for all white women, it is greater than the .342 found for black women. Adjustment for the effects of the other characteristics in the table has no effect on these relationships.

Women whose divorce occurred prior to age 25 had higher probabilities of remarriage by the end of both the second and third years after divorce than those whose divorce occurred at an older age. There is also some evidence that the probabilities of remarriage were higher for the younger women at the end of the fourth and fifth years following divorce as well. The difference in probabilities between the two groups of women ranges from a nonsignificant .048 at the end of the first year to .186 at the end of 4 years. When the probabilities are adjusted for the effects of the other characteristics, the differences are reduced, but the relationship persists: The younger women were more likely to have remarried by the end of the third and fourth years after divorce, and there is some evidence they were more likely to have remarried within 5 years as well. However, the difference at the end of the fifth year is reduced from .174 to .109 (see figure 2).

A comparison of women who divorced before 1970 with those who divorced in 1970 or later shows that both groups of women had a similar probability of remarrying within 1 year after divorce, but that at higher durations of divorce (second through fifth years), women who divorced during the earlier time period were more likely to have remarried (see table 1). This does not mean that the probability of remarriage has decreased over time for all groups, however. Year of divorce and likelihood of remarriage are related because women who were divorced before 1970 were more likely to have other characteristics in the table associated with high probabilities of remarriage. The factors probably accounting for most of the difference in the unadjusted probabilities are age at divorce and educational attainment. Women divorced before 1970 were

Figure 2. UNADJUSTED AND ADJUSTED CUMULATIVE PROBABILITY OF REMARRIAGE FOR WOMEN AGED 15-44 YEARS WHOSE 1ST MARRIAGE ENDED IN DIVORCE, BY AGE AT DIVORCE AND NUMBER OF YEARS AFTER DIVORCE: UNITED STATES, 1976



more likely to have divorced prior to age 25 than those divorced after 1970 (about 60 percent compared with about 39 percent) and to have had less than a high school education (about 39 percent compared with about 25 percent). When the effects of these characteristics are removed through the adjustment procedure, no statistically significant differences in the probabilities of remarriage between the two groups of women remain (see table 2).

Similar results were found when the relationship between duration of first marriage and probability of remarriage was examined. By the end of the fourth year following divorce, women whose first marriage lasted less than 5 years had a significantly greater probability of having re-

married than women whose first marriage lasted 5 years or longer. This excess was also maintained during the fifth year, and there is some evidence that it had already existed at the end of the second and third years as well. When the probabilities are adjusted, however, only nonsignificant differences remain, and no clear pattern of differences is evident. The effects of the adjustment demonstrate that the duration of a woman's first marriage had little or no effect on the likelihood of her remarriage. Differences in the probability of remarriage by length of first marriage were due to differences in other characteristics in the table that were associated with a high probability of remarriage. The factor probably accounting for most of the differences in the unadjusted probabilities is age at divorce. Women who had first marriages lasting less than 5 years were more likely to have divorced before age 25 than those married 5 years or longer (about 77 percent compared with about 12 percent).

Table 1 shows no statistically significant differences in remarriage probabilities by number of children at any duration of divorce. Women with no living children or only one child did have consistently higher probabilities at each duration than those with two or more living children, but even these nonsignificant differences are reduced by the adjustment procedure. The number of children a woman had when she divorced had little influence on her probability of remarriage during the first 5 years after divorce.

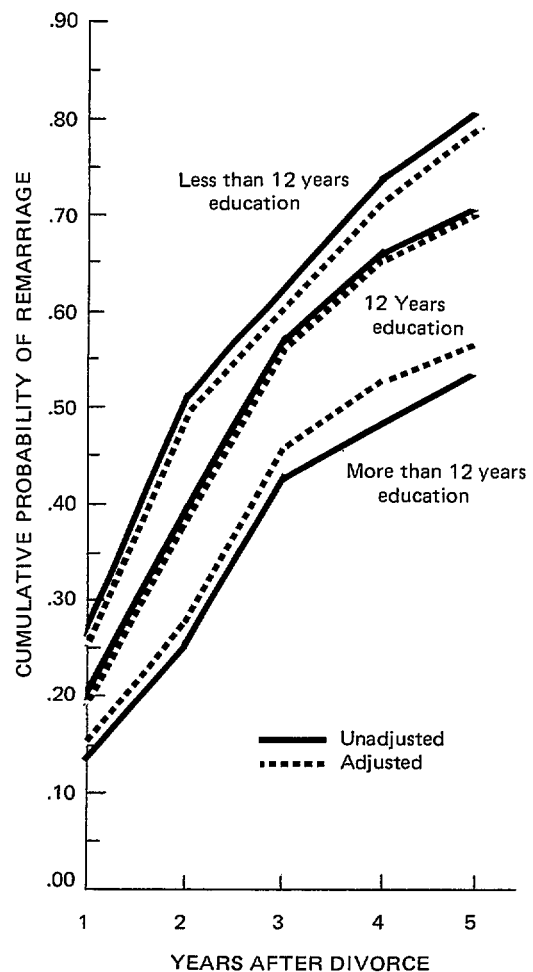
Probabilities of remarriage show a consistent relationship with educational attainment at all durations of divorce: the greater the educational attainment, the lower the probability of having remarried. At the end of the first year following divorce, women with less than 12 years of education were about twice as likely to have remarried as those with more than 12 years. They were also significantly more likely to have remarried by the end of the first, second, and fifth years after divorce, and there is evidence that they were more likely to have remarried by the end of the third and fourth years. The difference between those with less than 12 years of education and those with more than 12 years ranges from .131 at the end of 1 year of divorce to .272 at the end of 5 years.

These substantial educational differences are also reflected in the time it took for the proba-

bility of remarriage to reach .50. Although the differences are not statistically significant, the median number of years to remarriage was 2 years for women with less than 12 years of education compared with more than 4 years for women with more than 12 years of education.

The statistical adjustment for the effects of the other characteristics in the table has little influence on the relationship between educational attainment and probability of remarriage (see figure 3). Women with less than 12 years of education remain significantly more likely than

Figure 3. UNADJUSTED AND ADJUSTED CUMULATIVE PROBABILITY OF REMARRIAGE FOR WOMEN AGED 15-44 YEARS WHOSE 1ST MARRIAGE ENDED IN DIVORCE, BY EDUCATION AND NUMBER OF YEARS AFTER DIVORCE: UNITED STATES, 1976



college-educated women to have remarried during the first and second years after divorce, and some evidence of a difference by the end of the fifth year also remains. After adjustment, the difference in remarriage probabilities between the two groups of women ranges from .105 at the end of 1 year to .228 at the end of 5 years.

The religion of a woman appears to have little relationship to her probability of remarriage. Although Catholic women had consistently lower probabilities of remarriage at every duration than Protestant women, no differences by religion are statistically significant.

The probabilities of remarriage shown for residents of metropolitan areas are lower than those shown for residents of nonmetropolitan areas in the second through fifth years following divorce, and there is some evidence of a differ-

ence in the first year. When the probabilities are adjusted for the other characteristics in the table, however, a substantial convergence occurs, with statistically significant differences remaining for only the second and third years after divorce. Thus, much of the residential difference in the likelihood of remarriage was due to residential differences in the likelihood of having the other characteristics in the table. In particular, metropolitan residents were more likely than nonmetropolitan residents to be college educated (about 24 percent compared with about 15 percent) and more likely to be black (about 15 percent compared with about 4 percent).

There is no consistent relationship between geographic region of residence and the probability of remarriage. All differences for both unadjusted and adjusted probabilities are statistically nonsignificant.

TECHNICAL NOTES

SURVEY DESIGN

The National Survey of Family Growth (NSFG) was designed to provide data on fertility, family planning, and related aspects of maternal and child health. The NSFG is a cyclic survey; that is, data are collected every few years by means of a sample survey. Fieldwork for Cycle II was carried out by Westat, Inc., from January through September 1976.

A multistage probability sample of women in the household population of the conterminous United States was used in both cycles. Each time, approximately 33,000 households were screened to identify the sample of women eligible for NSFG: women 15-44 years of age who were either currently married, previously married, or never married but with offspring presently living in the household. For Cycle II, interviews were completed with 3,009 black women and 5,602 women of other races. A detailed description of the sample design for Cycle II is in preparation.

RELIABILITY OF ESTIMATES

Since the statistics presented in this report are based on a sample, they may differ somewhat 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. In addition, the results are subject to nonsampling error due to respondent misreporting, processing errors, and nonresponse. It is very difficult, if not impossible, to obtain accurate measures of nonsampling errors. These types of errors were kept to a minimum by the quality-control procedures and other methods incorporated into the survey design and administration.

Sampling error, or the extent to which samples may differ by chance from a complete count, is measured by a statistic called the standard error of the estimate. Estimates for standard

errors of estimated numbers, probabilities, and medians, all calculated by pseudoreplication, are shown in tables 1 and 2.

The chances are about 68 out of 100 that an estimate from the sample will differ from a complete census by less than the standard error. The chances are about 90 out of 100 that the differences between the sample estimate and a complete count will be less than 1.8 times the standard error and about 95 out of 100 that the difference will be less than 2.2 times the standard error. The relative standard error is the ratio of the standard error to the statistic being estimated. In this report, numbers, probabilities, and medians having a standard error more than 25 percent of the estimate itself are considered unreliable. They are marked with an asterisk to caution the user when interpreting results involving unreliable estimates.

In this report, terms such as "similar" and "the same" mean that any observed difference between two estimates being compared is not statistically significant. Similarly, terms such as "greater," "less," "larger," and "smaller" indicate that the observed differences are statistically significant at the .05 level. Statements about differences that are qualified in some way (e.g., by use of the phrase "some evidence") indicate that the difference is significant at the .10 level but not the .05 level. Significance at the .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 level means that such a large difference would be expected to be found in less than 10 percent of such repeated samples. The t-test (with 10 degrees of freedom) was used to test all comparisons. Lack of comment in the text does *not* mean that the difference between any two statistics was tested and found not to be significant.

Adjustment for nonsampling error due to nonresponse is made in two ways. Nonrespondent cases, as distinct from missing data items, are imputed by weighting for nonresponse within each primary sampling unit, stratum, and age-race category. Cases with missing data are allocated among the cells of a table in proportion to the distribution of known cases with the same characteristics.

CALCULATION OF REMARRIAGE PROBABILITIES

The basic statistics in this report are unadjusted and adjusted cumulative probabilities of remarriage for selected subgroups of the population of women whose first marriage ended in divorce. They are calculated as follows.

Unadjusted Probabilities

The unadjusted probabilities of remarriage are calculated for each group by

- (1) Determining the *conditional* probability of remarriage for each of the first 5 years after divorce (the probability that a woman will remarry during each year *given* that she had not remarried during any of the previous years).
- (2) Converting conditional probabilities of remarriage to nonconditional ones (probabilities of remarrying during each year following divorce).
- (3) Cumulating nonconditional probabilities to produce cumulative probabilities of remarriage (probabilities of remarrying within a given number of years after divorce).

In algebraic notation, let

- | | | |
|--------|---|--|
| x | = | number of years after divorce occurred; |
| M_x | = | number of women whose divorce occurred at least x years ago who remarried during the x th year following divorce; |
| N_x | = | number of women whose divorce occurred at least x years ago who had not remarried by the end of the x th year following divorce; |
| CQ_x | = | <i>conditional</i> probability of remarriage during the x th year following divorce; |
| Q_x | = | <i>nonconditional</i> probability of remarriage during the x th year following divorce; and |

$CUMQ_x$ = cumulative probability of remarriage within x years following divorce.

Then

$$CQ_x = M_x / (M_x + N_x);$$

$$Q_x = CQ_x (1 - \sum_{n=0}^{x-1} Q_n); \text{ and}$$

$$CUMQ_x = \sum_{n=1}^x Q_n.$$

The quantity described as the unadjusted probability of remarriage and discussed in detail in this report is $CUMQ_x$, the cumulative probability of remarrying within x years following divorce.

Since CQ_x is based on the marital experiences of women who were divorced at least x years before the survey date, the experiences of women divorced less than 5 years are not represented in all CQ_x values. For example, the experiences of women divorced only 3 years are included in the calculation of CQ_1 , CQ_2 , and CQ_3 , but not in CQ_4 and CQ_5 . Thus $CUMQ_x$ is interpreted with the assumption that women not yet divorced for x years have the same probability of remarriage during year x as those divorced x years or longer.

Adjusted Probabilities

The technique used to produce the *adjusted* cumulative probabilities of remarriage for this report is dummy-variable multiple regression analysis. The effects of the adjustment are discussed in detail in the text, and the adjustment procedure is discussed here.

Five separate regressions, one corresponding to each 1-year interval in the first 5 years following divorce, are used to produce the adjusted probabilities. The dependent variable for each interval-specific regression is a dichotomous variable on which all women who remarried during the interval are assigned a score of 1, and all other women are assigned a score of 0. Since all women who remarried during an interval are deleted from all regressions specific to subsequent intervals, and since only women who were exposed to the chances of remarriage for the entire interval are included in the regression for that interval, the mean value of the dependent

variable for each regression is the *conditional probability* of remarriage for all women in that interval.

The independent variables representing the characteristics of women are also represented by dichotomous, "dummy," variables. The coefficients of these dummy independent variables can be used to directly calculate *adjusted* conditional probabilities for women of each subgroup. For example, adjusted conditional probabilities for metropolitan and nonmetropolitan residents are calculated as follows.

Let

CQ_x = conditional probability of remarriage for all women during the x th year following divorce;

\widehat{CQ}_x^n = adjusted conditional probability of remarriage for nonmetropolitan residents during the x th year following divorce;

\widehat{CQ}_x^m = adjusted conditional probability of remarriage for metropolitan residents during the x th year following divorce;

A_x = constant for the regression specific to the x th year following divorce;

B_{1x} = coefficient for the dummy independent variable, place of residence;

D_{1x} = mean value of the dummy independent variable, type of residence (where metropolitan = 1 and nonmetropolitan = 0);

B_{ix} = coefficient for the i th independent variable in the regression equation for the x th year following divorce; and

D_{ix} = mean value for the i th independent variable in the regression for the x th year following divorce.

Then

$$CQ_x = A_x + B_{1x} \cdot D_{1x} + \sum_{i=2}^n B_{ix} \cdot D_{ix}$$

where n = the number of independent variables in the equation;

$$\widehat{CQ}_x^n = A_x + \sum_{i=2}^n B_{ix} \cdot D_{ix}; \text{ and}$$

$$\widehat{CQ}_x^m = A_x + B_{1x} + \sum_{i=2}^n B_{ix} \cdot D_{ix}$$

The same general procedure is used to calculate adjusted probabilities for women with other characteristics. After adjusted conditional probabilities are determined for each subgroup and

year in the above manner, the conditional probabilities are converted to nonconditional probabilities and then to cumulative probabilities by using the same procedure outlined for unadjusted probabilities.

SYMBOLS

Data not available.....	---
Category not applicable.....	---
Quantity zero.....	-
Quantity more than 0 but less than 0.05.....	0.0
Figure does not meet standards of reliability or precision.....	*

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