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RESEARCH ON PAPERS

RECENT FERTILITY CHANGE AMONG HIGH FERTILITY

MINORITIES IN THE UNITED STATES

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ABSTRACT

This paper examines fertility levels and differentials within three high-fertility minority populations: Southern Rural Black, Spanish surname, and American Indian. Each of these populations had very high fertility levels in the late 1950s, and each experienced rapid decline during the 1960s. Demographically, the decline was accomplished by a great reduction in fourth and higher order births, although there were also significant reductions in the rates of second and third births. Fertility declined at similar rates for the poorly-educated as well as for the well-educated, for the poor as well as for the more affluent. Differentials in fertility within these populations are also examined.

RECENT FERTILITY CHANGE AMONG HIGH FERTILITY MINORITIES IN THE UNITED STATES

In this paper, we will examine both trends and differentials in fertility for three racial and ethnic minorities in the United States. In the past 15 years, the reproductive patterns of the white majority population in the United States have undergone a very rapid transformation. We are now reproducing at a record low rate. While the fertility of the urban white population was rather high as late as 1960, the fertility of Southern rural blacks, Mexican-Americans, and American Indians was very much higher than that of the urban white population. In this paper, we address ourselves to the questions: Has the fertility of these high fertility minority groups changed significantly since 1960? If so, in what subgroups has it changed disproportionately? And, how do the fertility levels and patterns of differentials within these three minority populations compare with those of the urban white majority population?

The period under consideration in this paper is the interval between 1957-60 and 1967-70. We are dealing here with period fertility rather than cohort fertility and our universe includes only currently married couples with wife under age 40 as reported in the 1960 and 1970 Censuses.

The data for this analysis are derived from the 1960 and 1970 United States Censuses of Population. We are making use of data contained on the 1/100 data files for those Censuses. Our measure of fertility is the number of own children under the age of 3 enumerated in households with their mothers. With this information, we can more or less identify for each woman the number of births that she has had in the past three years. This measure has a number

of shortcomings including the problem of infant and child mortality between the time of birth and the time of enumeration, the problem of children not living with their mothers, and the problem of mothers acquiring children by adoption or by marriage to a man with his own children from a previous marriage rather than by childbirth. We have investigated as carefully as we can the extent to which these difficulties are biasing our results and we are persuaded that our measure is reasonable. A detailed methodological report is in preparation.

This paper deals with fertility change between the period 1957-60 and 1967-70. We will not, in this paper, deal with the second period of accelerated fertility decline which started in 1970. We are currently replicating some of the analyses reported here using the March 1973 Current Population Survey for the period 1970-73.

The age, marital status, and marital duration classifications are with respect to the time of enumeration in the Census and not necessarily the marital status, age, or marriage duration at which the child was born to the woman. So, for example, our measure of marital fertility could include births to a woman that occurred prior to her marriage. We would not cover a legitimate birth in the past three years to a woman who by the time of enumeration had become separated or widowed. The marriage duration interval "less than three years" includes a period for most women during which they were not yet married.

Our classification of individuals into these various ethnic minority groups is somewhat unique and should be explained here. We classify a married couple as being black or Mexican-American or American Indian if either one spouse or the other is a member of the group. Thus a couple in which the wife is an American Indian and the husband is black would be included in both of these groups. An American Indian man married to a white woman would be counted as an American Indian couple for purposes of our analysis. In the regression analyses which we have done to examine differential fertility within the ethnic minority groups a variable classifying the couple's homogamy or heterogamy by ethnic classification is included in the analysis.

Another issue which can only be mentioned here is the apparent increase in the reporting of "American Indian" in the racial classification. The census survival ratios for all ages of adults exceed unity for American Indians. This increase in reporting may have an impact of unknown magnitude or direction on the fertility level of American Indians.

We also have difficulty in measuring trend for American Indians because in 1960 our sample size is extremely small, consisting of only 545 couples. For 1970 we have used a one percent sample for Southern rural black and Mexican Americans, but we have used a 3 percent sample of Indian couples, by combining the 5 percent State-County group, and Neighborhood Characteristics Public Use files, giving us a sample size of 2926 cases.

One final issue relates to the definition of the Mexican-American population. In this paper we use the Spanish surname population in five Southwestern states (Arizona, California, Colorado, New Mexico, and Texas) because it is the only definition that is inclusive enough, for which there is comparability between 1960 and 1970 and for which data on marriage duration are available. In more detailed analyses of 1970 data which will be reported elsewhere, we will utilize alternative definitions of the Mexican-American population. (For an excellent discussion of the identification of this population, see Hernández, Estrada, and Alvírez, 1973.)

Fertility Change for Major Racial and Ethnic Groups

Using our measure, number of own children under the age of three, we find that for urban white married women fertility declined from .529 in 1957-60, to .398 in 1967-70--a 24.8 percent decline. (See Table 1.) The rate for blacks declined from .656 to .436--a 33.6 percent decline. We have analyzed the fertility decline of blacks separately for three groups: blacks who are living in the non-southern states, blacks who are living in urban places in the southern region, and blacks who are living in the rural South. In the period 1957-60, all three of these groups of blacks had a fertility level that was substantially higher than the urban white rate. The uncorrected* rate of fertility for blacks living outside of the South (predominately urban population) was 13 percent greater than the rate for urban whites while the rates for Southern urban

^{*} See later discussion of underestimation.

blacks and Southern rural blacks were 22 and 52 percent greater than the urban white rates, respectively. The rates for all three groups of blacks declined by more than 30 percent, with the largest decline of 36 percent for Southern rural blacks. Thus, by 1967-70 the differential in fertility between blacks and urban whites diminished considerably. The uncorrected nonsouthern black rate was only 4 percent greater than the urban white rate, while the Southern urban rate was 9 percent and the Southern rural rate 29 percent greater than the urban white rate in 1967-70. Looked at in another way, we see that the fertility levels of all three groups of blacks including the Southern rural blacks were lower in 1967-70 than the urban white rate was a decade earlier in 1957-60.

Three other racial and ethnic groups had rather high fertility in 1957-60. The fertility level of American Indians was considerably higher even than the Southern rural black population (.88 versus .80) while the fertility of Mexican-Americans was approximately the same as that of the Southern rural blacks. Americans of Puerto Rican origin had a fertility level that was approximately 20 percent greater than the urban white level, but this higher crude rate of fertility was high in large part because of their concentration in the young adult ages where reproduction is concentrated. Chinese-Americans and Japanese-Americans had fertility levels that were approximately the same as those of the urban white population.

The fertility rates for American Indians who started the period with the highest fertility of all groups considered here

Indians declined by 45 percent. The rate for Mexican-Americans declined slightly faster than the rate for urban whites by about 30 percent. By the end of the decade, American Indian fertility (standardized) was 25 percent above that of urban whites while that for Mexican-Americans was about 43 percent above urban whites. The rate for Puerto Rican persons living in the United States declined by only 18 percent and the standardized differential between Puerto Ricans living in the United States and the whole urban white population actually increased from 7 percent in 1960 to 20 percent in 1970. (Migration patterns may be responsible for this increase. We are currently undertaking an investigation of fertility change for all Puerto Ricans--including both those living in Puerto Rico and those living in the United States.)

Included in Table 1 are figures showing rates for the various ethnic groups as a ratio to the rates for urban whites. These comparisons are probably less valid than within-group comparison of changes and differentials. Our fertility measure assumes that groups being compared have identical ratios of own children under 3 to births in the last three years. This requires that the cumulative effect of the following factors is the same among groups being compared:

- (1) infant and early childhood mortality;
- (2) mortality of mothers;
- (3) census underenumeration of children and of women in the reproductive ages;

- (4) children living apart from their mothers;
- (5) marital disruption of mothers in relation to presence of children under 3.

Rindfuss has shown that the own child measure understates blackwhite aggregate fertility differentials by approximately 17 percent
(Rindfuss, 1974). This 17 percent should be thought of as an upper
limit of underestimation for blacks. Rindfuss's estimate is for all
women irrespective of marital status. Our comparison of marital fertility in the past three years based on birth history and on own children from the Survey of Economic Opportunity shows an almost negligible
underestimate for blacks. These comparisons will be reported in more
detail in a later paper. It is not possible to make precise comparisons
of the underestimation for other groups. Indirect measures suggest
among urban whites, lower "status" categories of the various characterastics tend to have higher levels of underestimation than higher
"status" categories. These differentials are, however, much smaller
than the black-white differences. This evidence will also be presented
fin a later paper.

In the footnote to Table 1, we have shown the black rate as a ratio of the white rate when we apply Rindfuss's estimate of the relative underestimate for 1957-60 and 1967-70 to the rates for blacks. We assume in these estimates that the same correction factor applies to each of the three groups of blacks. There is, however, no evidence to support this assumption. In general we are convinced that there is a fairly high degree of temporal stability within

groups, and a reasonable similarity of underestimation of rates within groups under consideration here. Until more information is included on the birth record and until more of the information currently on the record is tabulated, or until complete reproductive histories are collected of very large samples, we cannot be sure of this.

Demographic Components of Fertility Decline

Let us first turn to an examination of the demography of the fertility decline: the pattern of decline by marriage duration and parity. (We classify women by "initial parity," or simply the number of children ever born prior to the three-year reference period during which children under 3 would have been born. Thus, for 1970 the initial parity would refer to our estimate of the women's parity as of April 1, 1967.) In Figure 1, we see that in 1960 the marriage duration specific rates for Southern rural blacks and the Spanish surname population were very similar in both shape and level. (Because of small sample size 1960 data are not shown for American Indians.) The Spanish surname population had a higher fertility rate during the first ten years or so of marriage, and then beyond ten years or so the Southern rural black population's fertility was considerably higher.

Fertility levels fell for both groups at all marriage durations between 1960 and 1970. The shape of the relationship remained quite similar to that observed in 1960. The rate of decline tended

to be somewhat higher, particularly in the marriage duration intervals 6 years through 17.9 years, for the Southern rural blacks.

By 1970, the Spanish surname population continued to have considerably higher fertility than the Southern rural black or American Indian populations in the first 9 years of marriage, but in the interval from 9 to 18.9 years of marriage the rates of the three groups were almost identical. Southern rural black women continue to have considerably higher fertility in the interval after 19 years of marriage than did the Spanish surname population.

Thus it is clear that fertility decline between 1960 and 1970 for these groups occurred throughout the entire marriage duration range. It is not simply a matter of young, recently married women in 1970 behaving differently than young, recently married women did a decade earlier. Whatever the cause of the decline in fertility, it has affected women at all stages of the reproductive process. It is possible that the decline early in marriage is primarily a childspacing phenomenon, while the decline after, say, the first 8 or 9 years of marriage is a termination phenomenon. But it is clear that women at all stages of the reproductive process are in greater control of their fertility and/or have lower fertility intentions in 1970 than they had a decade earlier.

In Figure 2, we show the same sorts of measures for the same populations in relation to their initial parity. In 1960, the relationship for Southern rural blacks was positive, with higher fertility for women with higher initial parities. For Spanish

surname population, the levels were very high for women with initial parities 0 and 1, and then lower and rather constant for parities 2, 3, and 4 or more. By 1970, this relationship had shifted downward and had become inverse for all three groups. The 1970 relationship for Spanish surname had essentially the same shape as that for the urban white population in 1970, while the pattern for Southern rural blacks and American Indians had shifted to a monotonic negative shape.

For Southern rural blacks, the fertility at initial parity 3 and higher declined by about 50 percent and the fertility level of women of first and second parity declined by about one-third. For the Spanish surname population, the decline at initial parity 4+ was approximately one-half and for parities 2 and 3 somewhat more than one-third. (See Tables 2, 3, and 4.)

What this probably suggests is a significant increase in longer childspacing at early parities and a very substantial increase in termination of completed families, particularly among Southern rural blacks with 3 and 4 children. In spite of this reduction of fertility at high parities by almost 50 percent, all three groups had fertility rates at parities 3 and 4 or more that were almost double the urban white rate in 1970.

Socio-economic Differentials in Rates of Fertility Decline

In Tables 2, 3, and 4, we show crude and marriage duration standardized fertility rates for subgroups within each of the three

racial and ethnic minorities under consideration. The standardized rates reported here are marriage duration standardized rates. standardized on the 1960 marriage duration distribution of the subpopulation in question. Thus, the figure 52.2, the second entry in the third column of Table 2, shows that if we apply the 1970 marriage duration specific rates for women with 5-8 years of education to the 1960 marriage duration distribution of women with 5-8 years of education, we get a rate of 52.2. The lower crude rate shown in column 2 for that group indicates that women with 5-8 years of education in 1970 have a somewhat shorter marriage duration than women in that category did a decade earlier. The column labeled "decline, crude absolute" is simply the difference between the crude 1960 rate and the crude 1970 rate. The column labeled "decline, crude percentage" is the crude decline taken as a percentage of that group's 1960 crude rate. The column labeled "decline, standardized percentage" is the difference between the crude 1960 and the standardized 1970 rate as a percentage of the crude 1960 rate. For our purposes, we will focus our attention on the column "standardized percentage decline."

The computations reported in Tables 2, 3, and 4 are intended to provide standardized measures of change in fertility for subpopulations. In each case the group's 1970 fertility rates are standardized on its own 1960 marriage duration composition. It is not valid, therefore, to use standardized figures in Tables 2, 3, and 4 to draw conclusions about differential fertility. We will turn to differentials within the three minority groups in a later section.

Education

For all three groups*, there was a substantial fertility decline for virtually all education categories with the single exception of college educated Southern rural black women. With that exception, women in all education groups experienced a fertility decline of at least 20 percent for each of the minority populations.

For Southern rural blacks, the fertility decline was greatest for women who had less than a high school education and somewhat less for women with high school education or more. For the Spanish surname population, the rate of fertility decline seems to be approximately equal for all education groups, with a decline ranging between 22 and 29 percent (with the exception of the small group of women with 13-15 years of education). For American Indians, the rate of decline was also approximately the same at every educational level, ranging from 35 percent for women with 9-11 years of schooling to 45 percent for women with less than 5 years.

Income

For purposes of comparison, we have converted 1970 income into its 1960 constant dollar equivalent using the Consumer Price Index as our inflation factor.** We have previously observed that rate of fertility decline for urban white women was somewhat higher for women married to men with low incomes than for women married

Data are presented for American Indians, but because of the small sample size in 1960 the measures of 1960 levels and 1960-70 change are very unreliable.

The inflation factor used here is 1.26, i.e., the income reported in 1970 is divided by 1.26.

to men with higher incomes. The same thing tends to be true for Southern rural blacks, although the pattern is somewhat unstable. For Spanish surname women and for American Indians this pattern is not observed. In particular, for American Indians there is a higher rate of decline for high income couples than for low income couples, but we must repeat here a warning that the data for American Indians are suspect because of the apparent increase in reporting of American Indian as race as indicated by the higher than unity survival ratios and also because of the very small sample of American Indians in the 1960 1 percent sample.

Age at Marriage

In all our analyses of differential fertility we have found a persisting and very large effect of age at marriage, particularly with women marrying prior to their eighteenth or twentieth birth-days having considerably higher fertility than women marrying at older ages even after controlling on education and other associated factors. We have been particularly interested, therefore, to see whether the fertility decline that has been occurring in the United States in the past decade has included women marrying in their teens. For urban whites, we found that the rate of fertility decline between 1960 and 1970 was approximately the same for women married in their teens as for women married in their twenties. The three racial and ethnic minorities that we are considering in this paper tend to marry at younger ages than does the urban white population. For all three groups, there has been considerable

reduction in fertility among women married at ages 14-17 and 18-19. The rates of decline for women marrying at these ages tend to be as high or higher than those for women marrying at older ages.

Ethnic Status of Spouses

The rate of decline for Spanish surname population was greater for couples in which the wife was born in the United States, whether or not the husband was U.S. born, and the rate of decline for couples in which both spouses were born outside the United States was only about 15 percent.

For American Indians, we have computed the rate of fertility decline by ethnic status of spouses. For couples in which both spouses are American Indian, the 1970 rate was 40 percent less than the 1960 rate. For couples in which the wife was not American Indian but the husband was, the rate was slightly less (38 percent), whereas for those couples in which the wife was American Indian and the husband was not, the rate of decline was slightly more than 50 percent.

Region and Rural Urban Residence

There were fertility declines exceeding 40 percent for American Indians living in each of the four regions with a slightly higher rate of decline for those living in the South. The rate of decline for American Indians living on farms was 53 percent, those living in rural nonfarm territory 44 percent, and those living in urban places approximately 37 percent. For the Spanish surname population, farm residents experienced a more rapid rate of fertility decline than urban residents.

Differentials in Recent Fertility for Three High Fertility Minority Groups

In this section, we report on the results of a multivariate analysis of fertility differentials within the Southern rural black, Spanish surname, and American Indian population as of 1970 (Tables 5, 6, and 7, respectively). In each case, we are comparing fertility within the minority group itself. We present three comparisons—one, an unadjusted or gross effect; another, adjusted or net effect in which we standardize for the composition with respect to each of the other variables included in the analysis; and the third, an adjusted comparison in which the occupation of the husband is not included, in order to avoid confounding income differences with occupational differences. Table 8 showing similar results for urban whites is included for comparison.

Education

Education differentials in fertility have persisted for the population at large but become somewhat attenuated over the years. In our analysis of the urban white fertility differentials we found a persisting inverse relationship between education and fertility after controlling for other variables such as age at marriage and husband's income. There was, however, no zero-order relationship between education and fertility for the urban white population. For both the American Indian and Spanish surname population, there continues to be a considerable fertility differential by education. In the case of the Spanish surname

population, there is very little difference among the three groups with less than 12 years of schooling, but a difference of about 9 points between the 9-11 and 12 year groups, and another 4 points between the 12 and 13-or-more groups. For American Indians there is again very little difference in the range less than 5 to 9-11, a difference of 4 points between 9-11 and 12, and a difference of approximately 7 points between high school graduates and women who attended college. For Southern rural blacks, the fertility differentials are much smaller. Women with less than 5 years of schooling have a rate that is 7 points below that of women with 5-8 years of schooling. This difference is reduced slightly when we control on other factors, but the overall pattern of differentials by education for Southern rural blacks is not very orderly and the differentials between groups are rather small in comparison to the Spanish surname and American Indian groups.

Husband's Income (Constant 1960 Dollars)

For urban whites, in 1960 the relationship between husband's income* and recent fertility was in the shape of an inverted U with relatively low fertility at the extreme categories of less than \$1,000 and \$10,000 and over (data not shown). The decline in fertility during the 1960s was more rapid at the low income thevels, particularly under \$4,000, than for the higher income categories. Consequently, by 1970 we find a tendency for fertility to increase with income through the categories \$3,000-\$3,999, remain relatively

In this paper all incomes are expressed in constant 1960 dollars.

constant through the \$10,000 category and then fall off to a rather low level for persons with \$10,000 or more of income. These figures are not a completely accurate description of differential fertility by income since they do not adjust for confounding factors such as age, education, or marriage duration. When we control on marriage duration and a number of other potentially confounding factors the relationship between income for urban whites and fertility is definitely positive.

For all three racial and ethnic minorities considered here, there is a strong inverse zero-order relationship between fertility and income. Women whose husbands are earning less than \$2,000 or \$3,000 have very high fertility; there is a decline in fertility levels at each successive higher income level with women whose husbands are earning \$7,500 or more having extremely low fertility. The inverse relationship between income and fertility tends to persist when other factors are controlled, although it is attenuated considerably (see Figure 3).

Age at First Marriage

For urban whites, women marrying in their teens had rates that are 3 points higher than those women marrying at ages 20-21 and women marrying at age 22 and beyond had rates that were 10-15 points below those for women marrying at younger ages. (See Table 8.)

Among urban whites, 18 percent of the women have married before age 18 and 49 percent have married before age 20. These proportions are considerably higher for the three groups being considered here. For Spanish surname women, 28 percent are married by age 18 and 56 percent by age 20. For American Indians, the figures are 29 percent by age 18 and 59 percent by age 20. For Southern rural blacks, early marriage is much more frequent with 35 percent marrying by age 18 and 62 percent marrying by age 20. After adjusting for the other factors considered here, each of the three populations has higher fertility among women marrying in their teens than among those marrying at later ages. Spanish surname and American Indian women marrying at ages under 18 have rates that are 4 to 5 points higher than the average, while for Southern rural blacks such women have rates that are 9 points above average. groups, the relationship is monotonic, but there is considerably greater spread in the coefficients for the Southern rural blacks than for the other two groups.

Husband's Occupation

For urban whites, the effect of occupation on fertility net of the other variables considered in this analysis was relatively small. Wives of laborers had a rate that was 8 points above the mean, while clerical workers had a rate that was about 6 points below the mean, whereas women married to men who are not in the labor force had a rate that was about 8 points below the mean. With these three exceptions, all the other coefficients were within 3

points of the mean. The differentials within the American Indian population are also relatively small with craftsmen. managers, officials, and proprietors, and wives of men in the armed forces, having lower than average fertility. Women whose husbands are operatives, unemployed, or not in the labor force have higher than average fertility. There is not an obvious white collar-blue collar split and the wives of farmers and farm laborers have slightly lower than average fertility. For Southern rural blacks, there does seem to be a tendency for wives of white collar men to have lower than average fertility, for wives of blue collar men to have fertility rates that are about average, and for wives of farmers and farm laborers to have higher than average fertility. Two interesting exceptions to this pattern arise: the first is that wives of professionals have fertility that is approximately equal. to that of farm laborers; the second is that wives of service workers have lower than average fertility. Wives of men who are unemployed tend to have higher fertility, while those who are not in the labor force and who are in the armed forces have rates that are very close to the mean.

Among Spanish surname women, wives of farm laborers have a fertility rate that is about 14 points above the average while wives of white collar men and craftsmen have rates that are 4 to 10 points below the average. A high rate is also found for wives of laborers (11 points above the average). Wives of men who are not in the labor force, unemployed, service workers, or transport workers have rates that are very close to the mean while wives of operatives have a rate that is 4 points above the mean.

Ethnic Status of Husbands and Wives

Since we include in the minority population any couple in which either the husband or the wife is a member of the minority group, we can look at differentials in fertility by the ethnic status of husbands and wives. We find that for couples in which both the husband and the wife are classified as American Indian, the fertility rate is 8 points above the mean; where the wife is American Indian and the husband is white, the fertility rate is 17 points below the mean; and where the husband is Indian and the wife is white the rate is 9 points below the mean. Evidently, the fertility level tends to be reduced somewhat more in a mixed marriage if the husband is white than if the wife is white. The fertility level of American Indians married to persons of other races (i.e., other than American Indian or white) is about as high as or slightly higher than the rate for couples in which both spouses are American Indian.

For the Spanish surname population, we have classified couples with respect to the place of birth of each spouse. Couples, neither of whom were born in the United States, have a rate about 8 points above the mean. Those who were both born in the United States have a rate about 2 points below the mean. When one spouse was born in the United States and the other outside the United States, the rate is approximately at the sample mean. In this classification we have not attempted to look specifically at couples born in Mexico. We have taken U.S. birth as the reference point and

classified with respect to whether the person was born inside or outside the United States. Consequently, some of the Spanish surname people born outside the United States may well have been born in other Latin American countries or even, for example, in Europe.

Table 1. Duration Standardized Recent Fertility Rates

	196	50	19	70	% Change		Relative Level (Urban White = 1.000)			0)
V v							Cru	đe	Sta	nd.
	Crude	Stand.	Crude	Stand.	Crude	Stand.	1960	1970	1960	1970
Blacks										· .
Southern Rural	.803	.824	.515	.515	35.9	37.5	1.52	1.29	1.56	1.33
Southern Urban	. 644	.637	.433	.406	32.8	36.3	1.22	1.09 ^T	1.20	1.05
Non-South	.598	.593	.414	.390	30.8	34.2	1.13	1.04	1.12	1.01
American Indian	.881	. 886	.498	.487	43.5	45.0	1.67	1.25	1.67	1.26
Japanese American	.553	.451	.385	. 352	30.3	22.0	1.05	0.97	0.85	0.91
Chinese American	.550	.523	. 425	.389	22.7	25.6	1.04	1.07	0.99	1.01
Puerto Rican American	.634	.568	.521	.465	17.8	18.1	1.20	1.31	1.07	1.20
Mexican American	.798	.779	.568	.548	28.8	29.7	1.51	1.43	1.47	1.42
Spanish Surname***	.775	.768	.550	.537	29.0	30.1	1.47	1.38	1.45	1.39
Urban White	. 529	.529	. 398	.387	24.8	26.8	1.00	1.00	1.00	1.00
Rural Farm	.581	.636	. 393	. 469	32.4	26.3	1.10	0.99	1.20	1.21

 $[\]mbox{\ensuremath{\bigstar}}$ Standardized on 1960 Urban White Marriage Duration Distribution

Definitions differ between 1960 and 1970. Change measures are therefore not strictly correct. For 1960 these groups include first and second generation Mexican Americans and Puerto Rican Americans. For 1970, they include persons who report themselves as being of Mexican or Puerto Rican descent.

^{***}Spanish Surname in 5 Southwestern States.

^{*}Rindfuss (1974) has estimated that the own children method of estimating fertility rates produces a total fertility rate for whites that is about 93% and about 77% for non-whites of that produced by vital statistics. His sample (continued)

(footnote + continued):

includes all women 15-44, rather than currently married women under 40. If we adjusted our rates by his relative undercoverage rates we would get relative rates for three groups of blacks of:

	Cr	rude	Standa	rdized
	1960	1970	1960	1970
Southern rural	1.82	1.59	1.87	1.64
Southern urban	1.46	1.34	1.44	1.29
Non-southern	1.36	1.28	1.34	1.24

It is not possible to estimate adjusted rates for other groups since vital statistics are not published, and/or we do not have reliable Census estimates for them. We do not necessarily regard the "adjusted" rates shown here as more nearly correct than the rates shown in the table. For explanation, see text, pages 4 and 5.

Table 2. Change in Recent Fertility of Southern Rural Black Couples, 1960-1970

		Rate	•		Decline	
	Crude 1960	Crude 1970	Standardized* 1970	Crude Absolute	Crude Percentage	Standardized* Percentage
Education						
Less than 5 years	77.3	44.3	44.3	33.1	42.8	42.7
5-8	80.3	51.2	52.2	29.1	36.3	35.0
9–11	89.7	52.0	54.6	37.7	42.0	39.1
12	72.4	52.3	53.0	20.2	27.9	26.8
13-15	67.7	56.6	47.5	11.1	16.4	29.8
16+	36.5	48.8	46.5	-12.3	-33.7	-27.3
Age at Marriage						
14-17	88.6	51.7	53.5	36.9	41.6	39.6
18-19	85.1	56.0	54.7	29.1	34.2	35.8
20-21	75.4	52.4	45.6	22.9	30.4	39.5
22-24	68.2	46.7	42.7	21.5	31.5	37.4
25-29	63.0	43.4	41.6	19.6	31.1	33.9
30-39	38.5	33.3	41.1	5.1	13.3	- 4.3
Husband's Income						
Less than \$1000	84.2	41.0	35.5	43.2	51.3	57.8
\$1000-1999	85.5	49.9	45.0	35.6	41.6	47.4
\$2000-2999	80.1	50.7	46.6	29.4	36.7	41.8
\$3000-3999	70.6	44.7	36.9	25.9	36.7	47.7
\$4000-4999	60.4	44.3	34.4	16.1	26.7	43.0
\$5000-7499	51.8	37.0	32.4	14.8	28.6	37.5
\$7500-9999	60.0	34.9	33.4	25.1	41.8	26.6
\$10,000+	66.7	34.6	27.2	32.1	48.1	39.5
Age						
14-19	92.6	72.3	15.4	20.4	22.0	83.4
20-24	114.0	81.0	81.8	33.0	29.0	28.3
25–29	92.2	58.3	57.7	. 33.9	36.7	37.4
30-34	71.9	35.0	35.2	36 . 9	51.3	51.0
35-39	48.7	28.0	28.8	20.7	42.5	40.8

Table 2. (continued)

		Rate		Decline			
	Crude 1960	Crude 1970	Standardized* 1970	Crude Absolute	Crude Percentage	Standardized* Percentage	
Initial Parity							
0	73.2	74.9	70.0	- 1.7	- 2.4	4.4	
1	70.4	56.4	49.1	13.9	19.8	30.2	
2	72.4	48.2	47.4	24.2	33.3	34.4	
3	83.8	40.1	44.8	43.7	52.2	46.5	
4+	90.2	41.1	42.3	49.1	54.4	53.1	
Duration Since First Marri	.age						
0 - 2.9 years	78.6	68.1		10.5	13.4		
3 - 5.9	120.2	80.6	 ·	39.6	33.0		
6 - 8.9	93.9	57.3		36.6	39.0		
9 - 11.9	84.7	46.7		38.0	44.9		
12 - 14.9	69.6	37.9		31.7	45.6		
15 - 17.9	61.1	26.3		34.8	57.0		
18 - 20.9	51.7	31.2		20.5	39.6		
21 - 23.9	43.7	26.0		17.7	40.5		

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Table 3. Change in Recent Fertility of Couples with Spanish Surname, 1960-1970

		Rate			Decline	
	Crude 1960	Crude 1970	Standardized* 1970	Crude Absolute	Crude Percentage	Standardized* Percentage
Education						
Less than 5 years	85.8	60.8	61.9	25.0	29.1	27.9
5–8	80.7	59.4	61.0	21.3	26.4	24.5
9-11	76.0	58.3	59.5	17.6	23.2	21.7
12	68.8	49.3	49.0	19.5	28.4	28.8
13-15	72 . 9	45.3	44.9	27.6	37.8	38.4
16+	58.1	46.0	44.7	12.1	20.8	23.0
Age at Marriage						
14-17	82.2	56.0	57.2	26.2	31.8	30.4
18-19	75.5	53.6	51.5	21.9	29.0	31.7
20-21	81.7	51.1	49.9	30.6	37.4	39.0
22-24	69.3	56.0	54.1	13.3	19.2	21.9
25-29	75.9	62.9	59.5	12.9	17.0	21.5
30-39	67.0	66.2	64.5	.8	1.2	3.7
Constant \$ Husband's Income						
Less than \$1000	82.1	63.0	63.8	19.1	23.3	22.3
\$1000-1999	88.4	58.3	58.0	30.1	34.1	34.4
\$2000-2999	87.1	71.8	71.9	15.3	17.6	17.5
\$3000-3999	81.9	62.3	62.2	19.6	23.9	24.1
\$4000-4999	77.4	62.3	60.4	15.1	19.5	22.0
\$5000-7499	67.6	47.2	45.7	20.4	30.2	32.4
\$7500-9999	55.3	42.8	35.3	12.5	22.6	36.2
\$10,000+	53.2	33.6	33.7	19.6	36.8	36.7
Place of Birth						
Both U.S.	77.4	51.4	52.0	26.0	33.6	32.8
Husband U.S., Wife Not U.S.	79.4	57.0	57.4	22.4	28.2	27.7
Husband Not U.S., Wife U.S.	75.4	59.4	51.7	16.0	21.3	31.4
Neither U.S.	79.4	68.0	67.3	11.4	14.3	15.2

Table 3 (continued)

		Rate		Decline			
	Crude 1960	Crude 1970	Standardized* 1970	Crude Absolute	Crude Percentage	Standardized, Percentage	
Region of Residence							
South (Texas)	82.7	59.2	58.2	23.5	28.4	29.6	
West (Calif, Col, Ariz, NM)	73.0	52.1	52.0	20.9	28.6	28.8	
Place of Residence							
Rural Farm	93.4	54.0	50.0	39.5	42.2	46.4	
Rural Non-farm	87.2	59.9	59.2	27.3	31.3	32.1	
Urban	75.0	54.4	54.1	20.6	27.4	27.9	
Initial Parity							
0	86.6	73.3	72.2	13.3	15.4	16.6	
1	92.2	77.5	73.1	14.8	16.0	20.8	
1 2	68.4	44.9	44.7	23.6	34.4	34.7	
3	67.4	41.8	43.4	25.6	38.0	35.6	
4+	72.2	36. 3	37.4	35.9	49.7	48.3	
Duration Since First Marriage							
0 - 2.9 years	72.2	62.3		9.9	13.7		
3 - 5.9	129.3	97.7		31.6	31.6		
6 - 8.9	98.2	65.5		32.7	24.4		
9 - 11.9	74.0	46.1		27.9	33.3		
12 - 14.9	55.3	38.1		17.2	37.7	- -	
15 - 17.9	47.3	27.8		19.5	31.1	'	
18 - 20.9	40.3	17.9		22.4	41.2		
21 - 23.9	40.0	17.8		22.2	55.6		

Table 4. Change in Recent Fertility of American Indians, 1960-1970

	. ,	Rate		·	Decline	
	Crude 1960	Crude 1970	Standardized* 1970	Crude Absolute	Crude Percentage	Standardized Percentage
Education	······································					·
Less than 5 years	100.0	51.4	55.5	48.6	48.6	44.5
5-8	94.9	53.6	56.2	41.3	43.5	40.8
9-11	82.8	52 .9	53.8	29.9	36.1	35.0
12	81.5	48.9	46.6	32.6	40.0	42.8
13-15	76.7	42.4	44.7	34.3	44.7	41.7
16+	100.0	32.7	58.2	67.3	67.3	41.8
•						
lge at Marriage						
14-17	88.1	47.8	48.6	40.3	45.7	44.8
18-19	93.2	51.7	48.3	41.5	44.5	54.0
20-21	91.8	51.6	49.1	40.2	43.8	46.5
22-24	88.6	48.7	49.5	39.9	45.0	44.1
25–29	76.7	47.3	37.7	29.4	38.3	50.8
Constant \$ Husband's Income						
Less than \$1000	87.6	59.7	58.2	27.9	31.8	33.6
\$1000-1999	76.4	56.2	57.1	20.2	26.4	25.3
\$2000-2999	86.7	61.6	58.7	25.1	29.0	32.3
\$3000-3999	100.0	53.9	54.6	46.1	46.1	45.4
\$4000-4999	80.3	47.1	46.3	33.2	41.3	42.3
\$5000-7499	94.5	46.5	45.3	48.0	50.8	52.1
\$7500-9999	88.9	39.6	33.4	49.3	55.5	62.4
\$10,000+	75.0	26.5	24.7	48.5	64.7	67.1
Ethnicity						
Both Indian	96.9	58.9	57.7	38.0	39.2	40.5
Wife Indian, Husband Other	83.3	55.7	40.5	27.6	33.1	51.4
Wife Other, Husband Indian	51.8	63.3	32.3	-11.5	- 2.2	37.6

Table 4 (continued)

		Rate		Decline			
	Crude 1960	Crude 1970	Standardized* 1970	Crude Absolute	Crude Percentage	Standardize Percentage	
Region of Residence							
Northeast	82.1	44.6	47.5	37.5	45.7	42.1	
North Central	83.6	54.0	50.1	29.6	35.4	40.1	
South	85.4	43.5	44.0	41.9	49.1	48.5	
West	93.2	52.7	51.5	40.5	43.5	44.7	
Place of Residence							
Rural Farm	103.9	46.5	49.1	57.4	55.2	52.7	
Rural Non-farm	95.9	56.3	54.1	39.6	41.3	43.6	
Urban	76.1	47.1	47.8	29.0	38.1	37.2	
Initial Parity							
0	99.2	62.9	34.3	36.3	36.6	65.4	
1	95.2	57.2	57.6	68.0	71.4	39.5	
2	75.8	43.7	45.9	32.1	42.3	39.4	
3	75.0	41.2	44.9	33.8	45.1	40.1	
4+	87.1	37.8	37.8	49.3	56.5	56.5	
Duration Since First Marriag	ge						
0 - 2.9 years	87.6	58.0	and take	29.6	33.8		
3 - 5.9	142.7	76.0		66.7	46.7		
6 - 8.9	92.1	66.6		25.5	27.7		
9 - 11.9	82.6	41.8		40.8	49.4		
12 - 14.9	76.8	34.2		42.6	55.5		
15 - 17.9	63.8	27.7		36.1	56.5		
18 - 20.9	58.1	19.9		38.2	65.7		
21 - 23.9	38.1	14.1		24.0	63.0		

Table 5. Differentials in Recent Fertility for Southern Rural Blacks: 1970.

		terre de la companya	Deviation	from grand	mean
	N	Percent Distribution	Gross	Net ₁	Net ₂
Wife's Education					
< 5 years	131	5.2	072	031	027
5–8	639	25.1	003	.025	.031
9-11	8 84	34.7	.004	007	010
12	708	27.8	.008	015	020
13-15	99	3.9	.050	.031	.029
16+	84	3.3	027	.031	.047
Age at Marriage					
14-17	902	35.4	.002	.080	.084
18-19	682	26.8	.045	.043	.042
20-21	450	17.7	.009	026	027
22-24	300	11.8	048	130	135
25-29	166	6.5	081	200	205
30-39	45	1.8	182	388	390
Occupation					
Professional	74	2.9	.079	.074	
Manager	35	1.4	201	144	
Sales	21	.8	134	128	
Clerical	82	3.2	064	045	
Craftsmen	381	15. 0	.002	.004	
Operatives	512	20.1	015	024	
Transport	266	10.5	053	014	
Laborers	395	15.5	.011	001	
Farmers	38	1.5	.064	.121	
Farm laborers	288	11.3	.086	.061	
Service	167	6.6	114	089	
Unemployed	63	2.5	.279	.239	
Armed Forces	36	1.4	015	035	
NILF	187	7.4	.004	.000	
onstant \$ Husband's Income	,				·
< \$1000	345	13.6	.033	021	.000
\$1000-1999	434		.116	.073	.093
\$2000-2999	698	27.4	001	.011	.009
\$3000-3999	455	17.9	038	026	041
\$4000-4999	277	10.9	028	001	015
\$5000-7499	299	11.8	090	050	060
\$7500-9999	24	.9	265	135	147
•					
\$10,000-14,999	9	• 4	293	230	209

Table 5 (continued).

`.			Deviatio	on from gran	nd mean
	N	Percent Distribution	Gross	Net $_1$	Net ₂
Initial Parity					
0	533	20.9	.234	.098	.097
1	397	15.6	.049	066	065
2	382	15.0	034	060	067
3	307	12.1	114	084	089
4+	926	36.4	104	.024	.030
Duration Since					
First Marriage					
0-2.9 years	477	18.7	.166	.143	.144
3-5.9	408	16.0	.291	.337	.337
6-8.9	342	13.4	.058	.115	.118
9-11.9	349	13.7	048	025	023
12-14.9	311	12.2	136	132	~.133
15-17.9	293	11.5	252	283	284
18-20.9	221	8.7	-,203	271	277
21-23.9	127	5.0	255	342	349
24+	17	. 7	.000	524	541

Table 6. Differentials in Recent Fertility for Spanish Surname Population: 1970.

			Deviation	ı from gran	d mean	
		Percent		,	i	
	N	Distribution	Gross	Net $_1$	$\frac{\text{Net}}{2}$	
Wife's Education						
< 5 years	526	11.0	.058	.102	.115	
5-8	1202	25.2	.044	.056	.061	
9-11	1200	25.2	.033	.025	.024	
12	1411	29.6	058	072	079	
13-15	331	6.9	-,097	119	122	
16+	100	2.1	090	112	119	
Age at Marriage			•			
14-17	1357	28.4	.010	.046	.046	
18-19	1315	27.6	014	.013	.013	
20-21	947	19.8	039	034	034	
22-24	734	15.4	.010	028	029	
25-29	340	7.1	.079	044	044	
30-39	77	1.6	.112	141	147	
Constant \$ Husband's Income						
< \$1000	292	6.1	.080	.000	005	
\$1000-1999	326	6.8	.033	021	025	
\$2000-2999	543	11.4	.168	.098	.097	
\$3000-3999	839	17.6	.073	.025	.026	
\$4000-4999	579	12.1	.071	.065	,063	
\$5000-7499	1368	28.7	074	043	043	
\$7500-9999	540	11.3	124	051	046	
\$10,000-14,999	228	4.8	221	086	080	
\$15,000+	55	1.2	-,150	.018	.026	
Place of Birth						
Both U. S.	3302	69.2	036	019	019	
Husband U.S., Wife Other	365	7.6	.020	.001	004	
Husband Not U.S., Wife U.S.	374	7.8	.043	.008	.013	
Neither U. S.	729	15.3	,130	.081	.082	
Occupation		e y e e			•	
Professional	310	6.5	095	008		
Manager	239	5.0	061	.057		
Sales	133	2.8	062	050		
Clerical	. 284	6.0	054	043		
Craftsmen	1008	21.1	040	002		
Operatives	857	18.0	.044	.009		
Transport	345	7.2	017	022		
Laborers	441	9.2	.114	.066		
Farmers	19	. 4	077	.066		
Farm Laborers	282	5.9	.141	.056		
Service Workers	353		004	021		
Unemployed	211	4.4	.009	038		
Armed Forces	79	1.7	133	157		
NILF	209	4.4	010	004		

Table 6 (continued).

			Deviation	on from gran	nd mean
	N ··	Percent Distribution	Gross	Net ₁	Net ₂
Times Married					
Once	4327	90.7	.011	.007	001
More than Once	443	9.3	108	001	.006
Initial Parity					
0	1320	27.7	.182	.108	.107
1	728	15,3	.224	.046	.046
2	782	16.4	102	097	098
3	706	14.8	132	059	059
4+	1234	25. 9	187	048	046
Duration Since					
First Marriage					
0-2.9 years	915	19.2	.073	003	005
3-5.9	816	17.1	.426	.385	.387
6-8.9	702	14.7	.105	.149	.149
9-11.9	742	15.6	089	041	041
12-14.9	588	12.3	169	127	126
15-17.9	493	10.3	272	243	245
18-20.9	386	8.1	372	361	362
21-23.9	118	2.5	372	416	417
24+	10	.2	.000	169	169

Table 7. Differentials in Recent Fertility for American Indians: 1970.

	N	% Distribution	Deviation from Grand Mean		
			Gross	Net	
Wife's Education					
Less than 5 years	142	4.9	.016	.068	
5-8	446	15.2	.038	.063	
9-11	912	31,2	.030	.026	
12	1069	36.5	009	021	
13-15	250	8.5	074	093	
16+	107	3.7	171	146	
Age at Marriage					
14-17	844	28.9	021	,038	
18-19	890	30.4	.019	.026	
20-21	597	20.4	.018	010	
22-24	357	12.2	011	050	
25-29	188	6.4	025	121	
30-39	50	1.7	018	161	
Constant \$ Husband's Income					
Less than \$1000	298	10.2	.099	.020	
\$1000-1999	267	9.1	.064	.006	
\$2000-2999	318	10.9	.118	.066	
\$3000-3999	475	16.2	.041	.000	
\$4000-4999	343	11.7	041	027	
\$5000-7499	755	25.8	027	.011	
\$7500 - 9999	306	10.5	100	031	
\$10,000-14,999	129	4.4	266	131	
\$15,000+	35	1.2	127	026	
, ,	55	* 6	6 J /	.020	
Ethnicity Both Indian	1297	44.3	.091	.082	
	61	2.1	.059	.102	
Wife Indian, Husband Other	49	1.7	.134	.099	
Husband Indian, Wife Other	807	27.6	084		
Wife Indian, Husband White Husband Indian, Wife White	712	24.3	084	175 089	
	,	2-7.0	•004		
Occupation Professional	228	7.8	.002		
Manager	134	4.6	237		
Sales	78	2.7	024		
Clerical	124	4.2	.034		
Craftsmen	565	19.3	058		
Operatives	450	15.4	.046		
-	182	6.2	037		
Transport Laborers	276	9.4	.020		
	35	1.2	013		
Farmers					
Farm laborers	86 104	2.9	022		
Service workers	184	6.3	.045		
Unemployed	188	6.4	.055		
Armed forces	93	3.2	165		
Not in labor force	303	10.4	.135		

Table 7 (continued).

		%	Deviation from Grand Mean	
	N	Distribution	Gross	Net
Region of Residence				
Northeast	213	7.3		
North Central	552	18.9		
South	798	27.3		
West	1363	46.6		
Rural/Urban				
Urban	1940	66.3		
Rural farm	114	3.9		
Rural non-farm	872	29.8		
Times Married				
Once	2453	83.8		
More than once	473	16.2		
Initial Parity				
0	873	29.8	.131	.075
1	465	15.9	.074	043
2	499	17.1	061	054
3	393	13.4	086	033
4+	696	23.8	120	008
Dur ation Since First Man	rriage			
0-2.9 years	628	21.5	.081	.049
3-5.9	491	16.8	.261	.274
6-8.9	434	14.8	.168	.196
9-11.9	402	13.7	080	066
12-14.9	363	12.4	157	132
15-17.9	303	10.4	221	220
18-20.9	216	7.4	299	337
21-23.9	78	2.7	357	404
24+	11	• 4	~-	****

Table 8. Differentials in Recent Fertility for Urban White Married Couples, Wife Under Age 40, 1970.

		Dans	Deviation from grand mean		
	N	Percent Distribution	Gross	Net	Net ₂
Wife's Education	,				
<pre>< 5 years</pre>	129	1.0	.013	.128	.140
5-8	860	6.6	012	.068	.074
9-11	2310	17.8	.013	.061	.062
12	6255	48.3	,005	005	006
13-15	1933	14.9	029	057	058
16+	1450	11.3	.003	050	051
Age at Marriage					
14-17	2365	18.3	024	.042	.043
18-19	3916	30.2	.014	.033	.033
20-21	3357	25.9	.005	002	003
22-24	2283	17.6	011	046	047
25-29	848	6,5	.005	101	101
30-40	179	1.4	.026	152	151
Husband's Occupation					
Professional	2409	18.6	.025	.01.7	
Manager	1504	11.6	051	022	
Sales	955	7,4	.008	.009	
Clerical	882	6.8	053	-,060	
Craftsmen	2705	20.9	003	005	
Operatives	1454	11.2	.050	.017	
Transport workers	. 656	5.1	.006	.014	
Laborers	445	3.4	.084	.076	
Farmers	18	.1	010	020	
Farm laborers	36	.3	.157	.187	
Service	605	4.7	.017	.024	
Unemployed	263	2.0	.000	.012	
Armed Forces	585	4.5	019	010	
NILF	429	3.3	125	080	
Metropolitan Residence				,	
In SMSA	9674	74.7	.006	.002	.002
Outside SMSA	2195	16.9	021	012	010
NA*	1078	8.3	008	.005	.005
Constant \$ Husband's Inco	me				
< \$1000	383	3.0	124	130	151
\$1000-1999	452	77 - 7	036	091	104
\$2000-2999	555	4.3	042	121	124
\$3000-3999	1031	8.0	.034	040	037
\$4000-4999	1078	8,3	.039	020	019
\$5000 - 7499	4018	31.0	.025	009	007
\$7500-7499 \$7500-9999	3017	23.3	.023	.041	.041
\$10,000-14,999	1722		052	.041	.044
	1 / 4.7.	.L.J.a.J	4 11.12	4 1 / 100 . 3	4 V TT

Table 8 (continued)

		Percent Distribution	Deviation from grand mean		
	N		Gross	Net ₁	Net ₂
Region of Residence	······································				
Northeast	3096	23.9	.021	.021	.022
North Central	3553	27.4	.019	.010	.012
South	3537	27.3	024	017	020
West	2761	21.3	017	015	014
Initial Parity					
0	4435	34.3	.133	.107	.105
1	2297	17.7	.186	.063	.064
2	2675	20.7	112	105	104
3	1868	14.4	205	122	122
4+	1672	12.9	202	066	065
Ouration Since					
First Marriage					
0-2.9 years	2514	19.6	.005	036	035
3-5.9	2162	16.7	.356	.296	.298
6-8.9	1998	15.4	.187	.189	.189
9-11.9	1869	14.4	050	010	011
12-14.9	1711	13.2	-,176	130	131
15-17.9	1468	11.3	264	225	227
18-20.9	951	7.3	305	285	288
21-23.9	248	1.9	318	316	320
24+	26	. 2	245	237	241

^{*}Not available for states in which the metropolitan or nonmetropolitan population is less than 250,000.

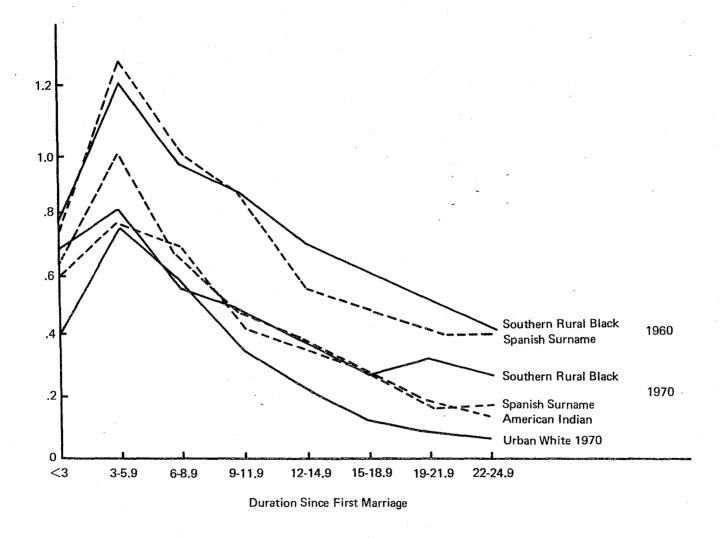


Figure 1. Number of Own Children Under Three by Duration Since First Marriage

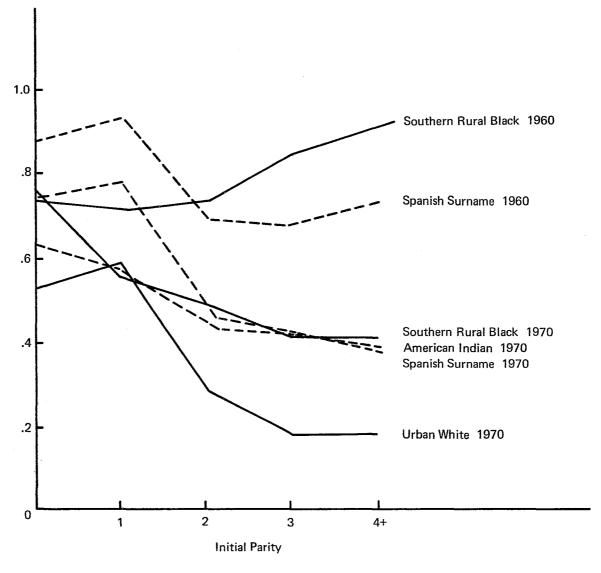


Figure 2. Number of Own Children Under Three by Initial Parity.

Constant Dollar Income Net .20 -Gross .15 -.10 -Spanish Surname Southern Rural Black Southern Rural Black American Indian -.05 --.10 **-**1. < \$1,000 , American Indian 2. \$1,000-1,999 3. \$2,000-2,999 -.15 **-**Spanish Surname 4. \$3,000-3,999 5. \$4,000-4,999 6. \$5,000-7,499 7. \$7,500-9,999 -.20 -8. \$10,000-14,999 9. \$15,000+ -.25 **-**

Figure 3. Effect of Husband's Income on Recent Fertility for Three Racial and Ethnic Minorities: 1970

1 2 3 4 5 6 7 8 9

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