A Racial and Ethnic Comparison of Family Formation and Contraceptive Practices Among Low-Income Women

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Synopsis

Low-income women's histories of pregnancies, their use or nonuse of contraception, and their marital status showed racial and ethnic differences in family formation patterns and fertility control practices. Data were analyzed from a survey of 918 low-income women in Los Angeles County. The sample contained about equal numbers of non-Hispanic whites, blacks, and Hispanics. The use of stratified samples equalized the poverty-level composition of the three racial and ethnic groups.

First pregnancies for white and black women resulted primarily from nonuse of contraception while unmarried, but almost half of first pregnancies among Hispanics were intentional. Marital dissolution following pregnancy or childbearing was common among low-income whites and blacks, but Hispanics were more likely to have an intact marriage along with a higher average parity.

Analyses of histories of pregnancies while controlling for demographic characteristics showed that racial and ethnic differences in rates of different types of pregnancies (classified as intended, accidental, or unprotected) and rates of abortion did not remain significant after adjustment for respondent characteristics and years of exposure to possible pregnancy. Actual parity, however, remained significant when these factors were controlled. Thus, results document distinctive patterns of family formation for low-income women in racial and ethnic subgroups of this population. Implications of these patterns of family formation for economic well-being are discussed.

HISTORICAL CHANGES IN THE STRUCTURES OF FAMILIES and in patterns of family formation, particularly of households headed by women, are important because of their economic impact on racial and ethnic groups (*1*).

In 1940, one in seven American households was headed by a female. By 1981 the ratio was more than one household in four. The number of fatherless families has doubled since 1970 (*2, 3*). The overrepresentation of households headed by poor women (*4*) has led to wide use of the term *feminization of poverty* (*5*).

Households headed by women now comprise 19 percent of the population, but they account for 61 percent of those persons persistently poor, defined as below the poverty level for 8 of 10 years (*6*). Households headed by women come about for different reasons among racial and ethnic subgroups because of distinctively different patterns of family formation, such as the timing and sequence of fertility, both intended and unintended; marriage; and marital dissolution.

Whereas white women typically marry in their early to mid-20s and bear their first child several years later (*7*), black women tend to enter marriage much later, with parenthood occurring sooner. For Hispanic women, both marriage and parenthood occur sooner than for whites (*8*).

Racial and ethnic differences in patterns of family formation and in subsequent marital dissolution, leading to households headed by women, derive from fertility-related factors. Because black women tend to initiate premarital intercourse at an earlier age than white women (*9*) and are less likely to use contraception (*10*), black women have more exposure to risks of premarital pregnancy (*11*). Black women are less likely than white women to marry (*8*), their marriages are more likely to dissolve (*12*), and they are less likely to remarry if they are divorced (*13*).

Marital disruption is the leading cause of both white and black women becoming heads of households, but a significantly greater cause for black than white women is childbearing outside of mar-

riage (*14, 15*). As a result, the proportion of households headed by women among blacks is three times that among whites (*16*).

For Hispanic women, the average age at first intercourse is similar to that for non-Hispanic whites (*12*). But Hispanic women are substantially less likely to use a contraceptive method at the time of their first premarital intercourse, 22.1 percent compared to more than half for non-Hispanic whites (*10*). For this reason, together with a lower rate of abortion compared to non-Hispanic whites (*17*), the fertility rate for young Hispanic women falls midway between the relatively low rates for white women and the relatively high rates for blacks (*18*). The overall rate of births to unmarried Hispanic mothers also lies between, about 30 percent compared with 12 percent for whites and 61 percent for blacks (*19*). However, Hispanic women's marital patterns are more similar to those of whites than to those of blacks (*8, 12, 13*).

Apart from these differences, research on contraceptive efficacy has identified racial and ethnic differences in first year failure rates. When method-specific failure rates among unmarried women are standardized for age, contraceptive failure rates for all methods are lowest for white women and are highest for black users of diaphragms and for Hispanic users of all other methods. Results show a consistent and inverse relationship between income level and contraceptive failure, regardless of the method employed (*20*). Thus, studies point to a number of possibly interrelated features of childbearing patterns that differ among racial and ethnic subgroups and that have implications for both educational needs and the provision of family planning services.

However, available population-level data do not focus specifically on the needs of the low-income populations that subsidized family planning services are directed toward, and do not help explain the life event sequences associated with low-income and unmarried parent status.

This study was designed so that patterns of family formation by low-income women could be examined using information on pregnancy intentions, outcomes, and use or nonuse of contraception for each pregnancy. The sequential data obtained from respondents' pregnancy histories produced a greater level of detail on the process of family formation than is typically found in fertility studies.

The study's perspective was derived from the literature on fertility among minority groups, in which a *characteristics* hypothesis is compared with a *minority group status* hypothesis (*21, 22*). In this model, which has served as a principal theoretical guide for recent studies of minority group fertility, the characteristics hypothesis holds that differences in the fertility of majority and minority populations should be substantially reduced when social characteristics associated with ethnicity are controlled.

The minority group status hypothesis, which has found consistent support in the fertility literature (*23*), maintains that there are between-group differences that persist after accounting for variation owing to group composition. In this study, pregnancy history data are used to examine differences in precursors of fertility, including respondents' intentions and contraceptive failure. Contraceptive failure has been shown to differ substantially across population subgroups (*24*). In the analysis, observed differences are computed and an attempt is made to explain those differences by controlling for intergroup variation in respondent characteristics.

Methods

Study data came from two surveys of low-income women conducted in Los Angeles County (CA) in 1985 and 1986. The surveys were designed using a common sampling frame and stratification scheme. Both contain identical questions on respondents' histories of pregnancies, fertility-related attitudes, contraceptive use, and background variables. Results of questions on health care utilization that are specific to each of the two surveys have been reported previously (*25, 26*).

Sampling procedures. Survey respondents were drawn from a sample of women living in low-income areas of Los Angeles County, defined as a census tract in which the income of at least 60 percent of the population was below 200 percent of the Federal poverty level in the 1980 census. A two-stage random sample was used to select blocks, and dwelling units within those blocks, for 63 census tracts identified as low income from a total of 1,644. The resulting sampling frame was concentrated in the downtown area, South-Central Los Angeles, and Hollywood, with additional census tracts in outlying areas of Los Angeles County.

Qualified respondents were identified by means of a screening questionnaire. The 1985 survey of 454 women included women who had visited a physician or clinic for family planning purposes within the preceding 3-year period. The 1986 survey

Table 1. Percent distribution of characteristics of 918 low-income women in Los Angeles County, by race or ethnicity

Characteristic	Race or ethnicity			
	White[1] (N = 294)	Black (N = 287)	Hispanic (N = 337)	Total (N = 918)
Age in years:[2]				
17–19	8.0	13.6	7.0	9.4
20–24	27.2	29.7	24.8	27.1
25–29	23.3	30.1	28.5	27.3
30–34	18.1	15.4	23.0	19.1
35–39	12.9	8.2	10.9	10.7
40–44	10.5	2.9	5.8	6.4
Marital status:[2]				
Married	30.3	18.5	59.2	37.2
Cohabiting	12.6	9.8	17.9	13.6
Divorced, separated, or widowed	20.4	24.0	10.7	18.0
Never married	36.7	47.7	12.2	31.2
Years of education:[2]				
0–8	2.7	1.1	46.3	18.3
9–11	19.5	22.2	23.7	21.9
12	27.1	37.0	18.7	27.1
13–15	24.3	32.0	8.3	20.8
16 or more	26.4	7.7	3.0	11.9
Employment status:[2]				
Working, full or part time	49.7	47.9	30.3	42.0
Unemployed	11.6	17.1	9.5	12.5
Keeping house	32.3	26.9	58.5	40.2
In school	6.1	7.0	1.5	4.7
Other	0.3	1.0	0.3	0.5
Religious preference:[2]				
Protestant	36.2	71.2	7.7	36.6
Catholic	23.2	14.0	83.4	42.5
Other	13.3	6.7	2.7	7.3
None	27.3	8.1	6.2	13.6
Parity:[2]				
No live births	46.6	32.1	14.2	30.2
One	21.1	25.8	25.5	24.2
Two or more	32.3	42.2	60.2	45.6

[1] Nonblack, non-Hispanic.
[2] Chi-square less than 0.01.

of 464 women focused on nonusers of formal family planning services using the same sampling frame, including potential respondents identified during the first survey.

Identifying eligible respondents. The survey population was defined as women 18–44 years of age, or younger than 18 years if married or cohabiting. The surveys used stratified samples, with strata defined by three racial or ethnic groups, white (nonblack and non-Hispanic), black, and Hispanic; and three levels of poverty, below poverty level, 100 to 149 percent of poverty level, and 150 percent or more of poverty level. The surveys excluded Asian respondents, who were the intended population for a family planning survey conducted at about the same time in the San Francisco area (*27*).

A screening questionnaire was used to determine eligibility of potential respondents and to obtain required numbers within strata of the sample. The combined group of 918 respondents was about equally divided into three racial or ethnic groups and three poverty level strata. In this study, the stratified design provided equivalent numbers of respondents in the three racial or ethnic groups, with the poverty level distribution in each group fixed at one-third below poverty, one-third from 100 to 149 percent of poverty, and one-third 150 percent or above. The combined response rate for the two surveys was 82.9 percent; the nonresponse group was the 7.2 percent of eligible respondents who refused to participate and the 9.9 percent estimated to be eligible who failed for various reasons to complete the screening questionnaire.

Survey interviews. Eligible respondents were surveyed by women interviewers using a detailed protocol. The interviews averaged 49 minutes in length and covered pregnancy history, use of contraception, other fertility-related subjects, and demographic characteristics. Twenty-five percent of the interviews were conducted in Spanish.

Respondents were asked about their pregnancy histories to determine the number of known pregnancies, whether or not carried to term, and an extensive series of questions concerning pregnancy, outcome, and the woman's circumstances at the time of conception. The question on the number of pregnancies is comparable to that used in the National Survey of Family Growth. Subsequent questions concerning each pregnancy, adapted from a survey of adolescent fertility (*17, 28*), were used to determine the respondent's intentions at the time of the pregnancy and whether a contraceptive method was used. The respondent was asked either about the type of contraception used, or if appropriate, the reasons for nonuse. Additional questions were asked to determine the outcome of the pregnancy, or the respondent's intended outcome if she was pregnant, as well as her marital status at the time of conception.

In this study, combinations of these variables were used for sequential comparisons of pregnancy histories in which patterns for first and subsequent pregnancies were compared for the three racial or ethnic groups.

Results

The distributions of respondents' characteristics for the three racial or ethnic groups are shown in table 1. All of the racial or ethnic group compari-

sons in the table were statistically significant. The age distribution of the subjects was youngest for blacks and oldest for whites. Hispanic women were significantly more likely to be married, and blacks were most likely never to have married. There were substantial differences in educational attainment, with more than one-quarter of whites having completed college, compared with 3 percent of Hispanic women. More of the Hispanic women kept house as an occupation, and there were significant differences in religious preference. Finally, parity was lowest for whites and highest for Hispanics. These differences in socio-demographic composition for the three groups were used as controls in examining differences in other characteristics of respondents.

Data on respondents' pregnancy histories revealed that 71.8 percent of whites had been pregnant at least once, compared to 76.3 percent of blacks and 90.8 percent of Hispanics. The average number of pregnancies reported was 1.90 by whites, 2.15 by blacks, and 2.55 by Hispanics. In table 2, data on pregnancy intentions and outcomes are shown for first pregnancies and subsequent pregnancies. Current as well as past pregnancies are included in the data. Ninety-six of the respondents (10.5 percent) were pregnant at the time of the interview.

In table 2, data on respondents' intentions and use of contraception at the time of conception were used to differentiate among pregnancies that were intentional, those that were accidental (resulting from the failure of a contraceptive method), and those that resulted from unprotected intercourse (no contraception used) by either a married or unmarried woman. The percentage of first pregnancies that were intended ranged from 46.9 percent for Hispanics to 21.1 percent for blacks. For both black and white women (in contrast to Hispanics), unprotected intercourse while unmarried was the single largest category accounting for first pregnancies (50.0 percent for blacks and 35.9 percent for whites). Although the pattern of these racial or ethnic differences was generally maintained for pregnancies after the first one, the differences diminished somewhat, with a lower percentage of intended pregnancies for Hispanic women relative to the first pregnancy, and higher percentages of intended pregnancies for whites and blacks.

Data on pregnancy outcomes in table 2 show the highest percentages of live births for Hispanic women, especially first pregnancies, when 80.9 percent kept the child and 5.4 percent gave birth and gave up the child. The highest percentage of abortions of first pregnancies was for whites, 24.5 percent. For white women, rates of abortion declined after the first pregnancy, consistent with the increase in intended pregnancies shown in the other portion of the table. The percentage of abortions remained virtually the same, less than 15 percent, for first and subsequent pregnancies among black women and increased slightly for Hispanic women.

Table 2. Intention at conception and outcomes of the pregnancies of 918 low-income women in Los Angeles County, by race or ethnicity and number of pregnancy[1]

Race or ethnicity and pregnancy characteristic	Percent of pregnancies		
	1st	2d–11th	All
Intention			
White:			
Number of pregnancies	*209*	*348*	*557*
Intended	27.3	34.8	32.0
Unintended:			
Accidental, using contraception	21.6	30.1	26.9
Unprotected, married	15.3	13.2	14.0
Unprotected, unmarried	35.9	21.8	27.1
Black:			
Number of pregnancies	*218*	*401*	*619*
Intended	21.1	28.7	26.0
Unintended:			
Accidental, using contraception	16.5	25.7	22.5
Unprotected, married	12.4	17.7	15.8
Unprotected, unmarried	50.0	27.9	35.7
Hispanic:			
Number of pregnancies	*305*	*552*	*857*
Intended	46.9	37.1	40.6
Unintended:			
Accidental, using contraception	7.9	21.9	16.9
Unprotected, married	19.7	23.2	21.9
Unprotected, unmarried	25.6	17.8	20.5
Outcome			
White:			
Number of pregnancies	*200*	*322*	*522*
Live birth, kept child	60.0	62.4	61.5
Live birth, gave up child	3.5	1.6	2.3
Still birth, miscarriage	12.0	20.5	17.2
Abortion	24.5	15.5	19.0
Black:			
Number of pregnancies	*213*	*378*	*591*
Live birth, kept child	72.3	68.5	69.9
Live birth, gave up child	1.9	1.1	1.4
Still birth, miscarriage	11.3	15.6	14.0
Abortion	14.6	14.8	14.7
Hispanic:			
Number of pregnancies	*299*	*518*	*817*
Live birth, kept child	80.9	76.6	78.2
Live birth, gave up child	5.4	5.0	5.1
Still birth, miscarriage	8.4	11.6	10.4
Abortion	5.4	6.8	6.2

[1] Differences between 1st and subsequent pregnancies are statistically significant (chi-square less than 0.05) except for pregnancy outcome for blacks (chi-square = 0.37) and for Hispanics (chi-square = 0.39). Differences in totals across racial or ethnic groups are significant.

Table 3. Marital status at conception and current marital status of 918 low-income women in Los Angeles County, percent distribution by race or ethnicity and number of pregnancy[1]

Race or ethnicity and status	At pregnancy		Currently[2]
	1st	2nd–11th	
White:			
Number of women	*210*	*354*	*294*
Married	42.9	56.8	30.3
Cohabiting	20.5	18.4	12.6
Divorced, separated, widowed	1.0	8.2	20.4
Never married	35.7	16.7	36.7
Black:			
Number of women	*219*	*408*	*287*
Married	25.6	47.6	18.5
Cohabiting	12.8	13.2	9.8
Divorced, separated, widowed	0	4.1	24.0
Never married	61.6	35.0	47.7
Hispanic:			
Number of women	*304*	*560*	*336*
Married	59.2	68.0	59.2
Cohabiting	24.0	21.8	17.9
Divorced, separated, widowed	1.0	3.5	10.7
Never married	15.8	6.6	12.2

[1] Differences between 1st and subsequent pregnancies are statistically significant (chi-square less than 0.05), as are differences in totals across racial or ethnic groups.

[2] Marital status at the time of interview. The case-base for this column reflects numbers of respondents, rather than numbers of pregnancies for which marital status is reported.

In table 3, marital status at the time of the first and subsequent pregnancies is compared with respondents' marital status when they were surveyed. At their first pregnancy, 59.2 percent of Hispanic women were married, as were 42.9 percent of whites and 25.6 percent of blacks. The percentage of women married at the time of subsequent pregnancies increased for all three groups and almost doubled for blacks, but the comparison of marital status at the time of pregnancies with respondents' current marital status revealed a dramatic decline in the proportion of white and black women still married. For whites, 56.8 percent were married at the time of pregnancies after their first, but 30.3 percent were married at the time of the interview. Similarly, 47.5 percent of blacks were married at the time of their second and subsequent pregnancies, compared to 18.5 percent at the time of the interview. For Hispanic women there is only a slight decline from the proportion married at the time of pregnancy to the proportion at the time of the interview.

Data from respondents' histories of pregnancies included the type of contraception being used at the time of pregnancy for accidental pregnancies, and the reason for not using contraception in the case of unprotected pregnancies. Results of these questions are shown in table 4, with types of contraceptive method and reasons for nonuse shown in decreasing order of overall frequency. Blacks were the most likely to report birth control pills as the method being employed at the time of a pregnancy (63.9 percent at first pregnancy and 48.9 percent overall), and Hispanic women were the group most likely to report rhythm (19.3 percent overall) as the method that failed.

For blacks, the association of pill use with accidental first pregnancies is undoubtedly attributable to their greater use of birth control pills (*9*) and to higher first-year failure rates on the pill, which are about double the rates for whites among both unmarried and married women (*20*). Among those using contraception at first intercourse, black and white women are nearly equally likely to use birth control pills, but long-term use of birth control pills among blacks using contraception is 44 percent higher than among whites (*9*).

For Hispanic women, use of the intrauterine device (IUD) was reported to be more than 2.5 times greater compared with non-Hispanic women in the 1982 National Survey of Family Growth, corresponding to the more than twofold difference in IUD-associated accidental pregnancies between Hispanics and non-Hispanic whites (table 4). This heavy reliance on the IUD by Hispanics probably continued until it was withdrawn from the market in 1986 (*29*).

Diaphragm failure was a significant factor in accidental first pregnancies among white women (22.0 percent of accidental first pregnancies). Failure of contraception by withdrawal contributed more to accidental pregnancies among Hispanics than other groups (8.7 percent of all accidental pregnancies, compared to 2.5 percent for whites and 4.3 percent for blacks).

Among women who had unprotected intercourse resulting in pregnancy, the leading reason for not using contraception was *didn't think about it*, which exhibited a similar pattern of decline between the first and subsequent (2nd–11th) pregnancies for women in each racial or ethnic group. Concerns about health and safety (*thought it was dangerous*, and *made me ill*) increased between first and subsequent pregnancies, whereas other beliefs or objections (*believed it was wrong*, and *partner objected*) exerted only a minor impact on the nonuse of contraception by study respondents.

In table 5, pregnancy history data were used to assess aggregate racial or ethnic differences in mean

Table 4. Type of contraception method used at time of accidental pregnancy and reason for unprotected pregnancy reported by 918 low-income women in Los Angeles County, percent distribution by race or ethnicity and number of pregnancy[1]

	Pregnancies among whites			Pregnancies among blacks			Pregnancies among Hispanics		
	1st	2d–11th	All	1st	2d–11th	All	1st	2d–11th	All
Type of contraception method used at time of accidental pregnancy									
Number	*50*	*110*	*160*	*36*	*103*	*139*	*26*	*124*	*150*
Birth control pills	24.0	44.5	38.1	63.9	43.7	48.9	34.6	33.1	33.3
IUD	10.0	7.3	8.1	5.6	12.6	10.8	3.8	22.6	19.3
Condom	18.0	9.1	11.9	8.3	1.9	3.6	11.6	9.7	10.0
Diaphragm	22.0	8.2	12.5	0	13.6	10.1	3.8	2.4	2.7
Rhythm	2.0	10.0	7.5	2.8	8.7	7.2	11.5	8.9	9.3
Withdrawal	2.0	2.7	2.5	2.8	4.9	4.3	7.8	8.9	8.7
Other[2]	22.0	18.1	19.5	16.7	14.6	15.0	26.9	14.5	16.7
Reason for unprotected pregnancy[3]									
Number	*108*	*122*	*230*	*136*	*183*	*319*	*138*	*227*	*365*
Didn't think about it	44.4	26.2	34.8	44.8	23.5	32.6	42.8	23.3	30.7
Didn't want to use it	11.1	11.5	11.3	12.5	29.0	21.9	7.2	15.0	12.1
Thought it was dangerous to health	3.7	24.6	14.8	6.6	10.4	8.8	6.5	11.0	9.3
Didn't know about contraception or where to get it	9.3	4.9	7.0	10.3	2.7	6.0	22.6	8.4	13.7
Made me ill	3.7	8.2	6.1	9.6	15.8	13.2	0.7	5.3	3.6
Didn't expect to have intercourse	7.4	5.7	6.5	5.1	3.3	4.1	6.5	5.7	6.0
Didn't have sex often enough to use	4.6	3.3	3.9	5.1	1.1	2.8	4.3	6.2	5.5
Had sex at time of cycle when didn't expect to become pregnant	3.7	3.3	3.5	0	0.5	0.3	1.4	5.7	4.1
Too much trouble to use	4.6	2.5	3.5	0	2.2	1.3	2.2	2.6	2.5
Partner objected	1.9	0	0.9	0	1.1	0.6	0.7	6.6	4.4
Believed it was wrong to use contraception	0.9	2.5	1.7	1.5	3.3	2.5	0.7	1.8	1.4
Other	4.6	7.4	6.1	4.4	7.1	6.0	4.3	8.4	6.8

[1]Differences between 1st and subsequent pregnancies are statistically significant (chi-square less than 0.05) except for contraceptive method named by Hispanics (chi-square = 0.38). Differences in totals across racial or ethnic groups are significant.

[2] Includes a variety of over-the-counter contraceptives, other than condoms.

[3] Response categories ranked in decreasing order of frequency.

numbers of pregnancies, abortions, and parity, followed by mean numbers for five subcategories of pregnancy. Based on the woman's intentions at the time of conception (table 2) and the type of contraception used (table 4), the five categories include (*a*) intended pregnancies, (*b*) accidental pregnancies that occurred using effective contraception, (*c*) accidental pregnancies that occurred using ineffective contraception, (*d*) unprotected pregnancies while the woman was married, and (*e*) unprotected pregnancies while the woman was single. Effective contraception was defined as birth control methods with first-year failure rates of 5 percent or less, sterilization, the birth control pill, and the IUD. Less effective methods were all other methods listed in table 4. Unprotected pregnancies were those resulting from contraception not being used when the pregnancy was not desired.

Each comparison was adjusted for religion, education, and marital status to provide a partial test of the characteristics hypothesis by controlling for socio-demographic differences known to exist among the three racial or ethnic groups (table 1). Comparisons were adjusted also for years of exposure to sexual intercourse (age minus age at first intercourse).

In table 5, a clear continuum of total pregnancies (from a mean of 1.90 for whites to 2.55 for Hispanic women) diminished and became nearly significant ($P = 0.07$) when adjusted for respondent characteristics. Similarly, the differences in mean numbers of reported abortions became nonsignificant when adjusted. However, total parity significantly differentiates among the three racial or ethnic groups, with the highest adjusted mean being 1.84 for Hispanics and the lowest being 1.38 for whites.

Among the subcategories of pregnancies in table 5, there was a near-significant ($P = 0.07$) adjusted difference in numbers of unprotected pregnancies while the respondent was married, ranging from 0.27 for white women to 0.50 for Hispanics. None of the remaining comparisons remained significant when adjusted for respondent characteristics, supporting the *characteristics* hypothesis that racial or ethnic differences are substantially reduced after

Table 5. Summary of pregnancy histories of 918 low-income women in Los Angeles County, by race or ethnicity

History	White (N = 294)	Black (N = 287)	Hispanic (N = 337)	Statistical significance P value
Total pregnancies:				
Observed mean	1.90	2.15	2.55	<0.01
Adjusted mean[1]	2.10	2.48	2.34	0.07
Abortions:				
Observed mean	0.34	0.26	0.15	<0.01
Adjusted mean[1]	0.28	0.29	0.27	0.94
Parity:				
Observed mean	1.16	1.54	2.06	<0.01
Adjusted mean[1]	1.38	1.79	1.84	<0.01
Intended pregnancies:				
Observed mean	0.61	0.56	1.03	<0.01
Adjusted mean[1]	0.73	0.83	0.81	0.61
Accidental pregnancies using effective contraception:[2]				
Observed mean	0.25	0.30	0.23	0.47
Adjusted mean[1]	0.29	0.31	0.24	0.73
Accidental pregnancies using less effective contraception:[2]				
Observed mean	0.25	0.18	0.20	0.33
Adjusted mean[1]	0.24	0.22	0.18	0.74
Unprotected pregnancies while married:				
Observed mean	0.27	0.34	0.56	<0.01
Adjusted mean[1]	0.27	0.40	0.50	0.07
Unprotected pregnancies while unmarried:				
Observed mean	0.52	0.77	0.53	<0.01
Adjusted mean[1]	0.57	0.72	0.61	0.31

[1] Adjusted for religious preference, years of education, current marital status, and years of exposure to pregnancy (age minus age at first intercourse).
[2] Effective contraception refers to sterilization, the pill, and IUD (failure rates less than 5 percent per year); less effective contraception refers to all methods with failure rates greater than 5 percent per year.

controlling for social characteristics associated with the racial or ethnic groups. Note that controls for socio-economic status and residential location were present in the study design.

The comparison of reported abortions supported the characteristics model, as the statistically significant continuum from 0.34 abortions per woman for whites to 0.15 per woman for Hispanics virtually disappeared ($P = 0.94$) when adjusted for respondent characteristics. By contrast, the parity comparison in table 5 showed residual variation across race or ethnicity (with highest parity for Hispanics and lowest parity for whites) following adjustment for intergroup differences in social characteristics, consistent with the minority group status hypothesis (*21*).

Discussion

Both the status attainment of populations and the life course of a woman have been shown to be influenced by the onset, timing, and spacing of births (*30, 31*). The impact of early childbearing on subsequent economic well-being of women (primarily because of lower education attainment and larger families to support) has been documented (*31*), and birth data for 1984—88 from Cycle IV of the National Survey of Family Growth show that low-income women continue to exhibit higher rates of unintended births. For women below the poverty level, 6 out of 10 births during this 5-year period were unintended, that is, unwanted or mistimed, compared to 3 out of 10 births to women above 200 percent of poverty (*32*). Further, the 1988 National Survey of Family Growth data showed that both low-income women and those in racial or ethnic minority groups were about twice as likely to report no current contraceptive use when at risk for unintended pregnancy (*32, 33*).

In this study, differences in overall parity among low-income white, black, and Hispanic women persisted when adjusted for differences in other social characteristics, but aggregate numbers of subcategories of pregnancies (such as intended or accidental) were found to be explained by racial or ethnic differences in characteristics. However, the data showed notable differences in the circumstances associated with the sequence of subcategories of pregnancies. Whereas about 60 percent of first pregnancies for Hispanics occurred within marriage and almost half were intended, low-income whites and blacks were most likely to first conceive as a result of having unprotected intercourse while unmarried. The proportion of intended pregnancies increased for white and black women with subsequent pregnancies, but decreased for blacks.

Although white women have been shown to be more likely to use contraception at first intercourse (*10*), first pregnancies for whites in this low-income population were associated with high rates of contraceptive failure (21.6 percent) and a higher rate of abortions (24.5 percent), compared to black and Hispanic women. Although data on the type of contraception associated with contraceptive failure (table 4) showed racial or ethnic differences in the specific methods used, the finding that accidental pregnancies attributable to contraceptive failure continued to account for substantial numbers of pregnancies after the first (and increased in percentage as unprotected pregnancies declined) carries implications for the reinforcement of contraceptive information within this population.

Trend data for 1973 through 1988 from the National Survey of Family Growth showed that a

50 percent decline in unwanted births to ever-married women during the first 10 years (attributed to widespread acceptance of effective contraceptive methods in the 1970s) has been partially offset by an increase in unwanted births to both white and black women during the subsequent 5-year period (*34*). Data on contraceptive use during the same period indicated that this increase was not from any concomitant decrease in self-reported contraceptive use among those at risk for unintended pregnancy (*35*).

Previous data on method-specific failure rates suggest that incorrect or inconsistent patterns of contraceptive use contribute to higher first-year failure rates among low-income women (*20*); this study's finding of an increase in nonuse of contraception (owing to perceived health dangers) between first and subsequent pregnancies (table 4) points to an additional need to reinforce specific contraceptive information long after a first visit for family planning or the initial use of a particular contraceptive method.

Two limitations apply, however, to conclusions concerning racial or ethnic differences in fertility control derived from pregnancy histories. First, because the information was elicited based on the respondents' circumstances at the time of each pregnancy, whether intended or not, the data omit information on periods of successful family planning during which potential pregnancies were prevented or delayed.

Second, although the use of a low-income sample stratified by poverty level facilitated racial or ethnic comparisons that are standardized for socioeconomic status, its use produced comparison groups that were somewhat truncated with respect to background characteristics, perhaps limiting some of the types of family background effects reported elsewhere (*7, 36*).

Although confined to a poverty-level and near-poverty-level survey population, the study demonstrates a number of racial or ethnic differences in family formation and fertility control. Majority and minority differences in fertility behavior have long been of interest to demographers and social scientists. Statistics dating back a century and a half show high fertility rates for both Hispanic women (*37*) and black women (*38*), whereas more recent data show distinctive patterns of family formation by race or ethnicity that suggest differences in the genesis of the low-income household.

Any pattern that leads to a family headed by a woman will carry a greater likelihood of low-income status, as half of single mothers are receiving some form of welfare in any given year (*39*). Although just 2.6 percent of the population is designated as persistently poor, they are concentrated in two overlapping groups, households headed by women and black households (*6*).

Traditionally, the primary cause of households being headed by a woman has been marital dissolution. Out-of-wedlock births, however, have increased from 6 percent of all births in 1960 to 23 percent in 1986, prompting a recent projection that "if trends continue, out-of-wedlock births soon will overtake divorce as the primary cause of families being headed by single mothers" (*40*).

The study reveals that, among this low-income population, initially high levels of out-of-wedlock births for first pregnancies give way to a steady increase for each group in the percentage who are married at the time of subsequent pregnancies, followed by a precipitous drop in the proportion of white and black women who are married, with only a small decline for Hispanics.

Thus, marital dissolution remains an important precipitating factor associated with low-income status for non-Hispanic women, as the economic status of women drops an average of about 30 percent in the first year after divorce (*41*). Higher rates of marital dissolution are themselves associated with patterns of family formation in which the first child is conceived or born out of wedlock (*42*). Therefore, the timing and sequence of events in the process of family formation exert both direct and indirect effects on the economic well-being of households headed by women within racial or ethnic subgroups of the low-income population.

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