

Differences in U.S. Marital Fertility, 1970-73, by Planning Status of Births

JOHN E. ANDERSON, PhD

TWO MAJOR FINDINGS OF THE 1965 and 1970 National Fertility Studies (NFS) were that the rapid decline in the fertility of U.S. married women in the 1960s was due almost entirely to increased control over unplanned fertility and that longstanding social and economic differentials in fertility had greatly diminished (1). These trends were associated with revolutionary changes in contraceptive practice that affected all segments of the population. Analysis conducted at the Center for Disease Control of the data for public use from the 1973 National Survey of Family Growth (NSFG) suggests that the trend toward greater fertility control continued in the early 1970s, but that significant social differentials in fertility remained. In particular, women of low educational attainment and women who scored low on the Federal Poverty Index tended to have had less control over their recent fertility. These findings support the continued need for public family planning programs.

Methods

The 1973 National Survey of Family Growth of the National Center for Health Statistics (NCHS) was of a sample of women 15-44 years old who were ever married or were never married and had their own children living with them. Interviewing took place between July 1973 and February 1974, and the data were made available on tape for public use in 1977. The analysis reported here was performed at the Family Planning Evaluation Division, Center for Disease Control, with data from the NSFG tape as a basis. The results may differ slightly from those of other analysts.

The first step in the analysis was to classify each birth to married respondents in the period July 1, 1970, to June 30, 1973, as either planned, mistimed, or un-

wanted. In the NSFG, each woman had been asked a series of questions regarding her intentions at the time she became pregnant for each time that she had been pregnant. Answers to four of these questions were used to classify births by their planning status: (a) whether the woman was using a contraceptive method at conception, (b) if not, whether she had stopped using it in order to become pregnant, (c) whether she wanted a baby at some time in the future or never, and (d) if she wanted a baby, whether the pregnancy had occurred sooner than she desired. Planned births were those that were desired and did not occur before they were intended; mistimed births were those that were wanted but at some time in the future; unwanted births were those that occurred when the woman wanted no additional ones. Note that planned and mistimed births can be combined into the category "wanted births;" mistimed and unwanted births form the category "unplanned births." A similar classification was used in the 1970 NFS (1a).

The births per woman, the total births, and the total births for each of the three planning categories were calculated. The results of this calculation are "period" fertility rates for the years 1970 to 1973, rates roughly analogous to marital general fertility rates. Period rates can fluctuate more widely than cohort rates, which incorporate the entire childbearing history of a woman and are generally deemed more appropriate than period rates for causal analysis. However, period rates can be meaningful in measuring the actual amount of unplanned or unwanted fertility in a given interval and in indicating what subgroups of a population are in particular need of family planning services.

In order to compare the results of the current analysis with previous ones, attention is confined to currently married women, even though previously married women and a small subset of never married women were included in the NSFG. The results, then, are for marital fertility only. As marital fertility has declined, out-of-

Tearsheet requests to Dr. John E. Anderson, Demographer, Program Evaluation Branch, Family Planning Evaluation Division, Bureau of Epidemiology, Center for Disease Control, Atlanta, Ga. 30333.

wedlock fertility has increased its share of all fertility. As a result, unplanned marital fertility has become a smaller part of total unplanned fertility in recent years (2).

Group differences in the closely related variables of marriage duration, parity, and age can sometimes obscure true differences in fertility. Therefore, in several of the tables, one of these factors—marriage duration—has been controlled through standardization by using the duration categories of “less than 5 years since first marriage,” “5 to 9 years since,” “14 years since,” and “15 or more years since.” The effect of marriage duration is neutralized by calculating the rates that would have occurred if all subgroups had the same marriage duration distribution. The marriage duration distribution of the entire population was used as the standard. (Standardization makes a difference in the level of fertility in some cases, but little difference in the distribution of births by their planning status. For this reason, standardized total rates are shown, but not standardized rates by planning status.)

Finally, since black women are oversampled relative to white women, the survey was not self-weighting. To calculate birth rates and proportions, it was necessary to weight the number of cases by using the post-stratification weights, which take into account unequal selection probabilities. In calculating the birth rates and percentages shown in the tables, weighted values were used, but the numbers of cases shown are unweighted.

General Comparisons

The results of the current analysis show that fertility in the period July 1, 1970, to June 30, 1973, estimated from the survey, is close to the fertility reported in the vital statistics for the same period. The marital general

Table 1. General fertility rates for U.S. married women, by race, 1970-73

Period	All women	White women	Black women	Black-white difference
<i>Average annual rates estimated from National Survey of Family Growth</i>				
July 1, 1970- June 30, 1973	105	103	119	16
<i>Rates based on vital statistics data ¹</i>				
1970	122	121	132	11
1971	114	112	122	10
1972	101	100	108	8
1973	95	92	99	7
1970-73 average	108	106	115	9

¹ Reference 3.

NOTE: Rates are per 1,000 married women 15-44 years old.

fertility rate (GFR) was estimated from the 1973 NSFG by dividing the number of births per married woman for the 3-year period by 3, as shown in table 1. The resulting value, 105, is close to the average marital GFR for the years 1970-73 calculated from vital statistics data—108. (The National Center for Health Statistics does not publish a marital GFR; the values shown are based on published figures on the total number of births, the estimated number of out-of-wedlock births, the GFR, and the rate of births per 1,000 unmarried women.)

Table 1 also shows the survey and vital statistics values of the marital GFR for white and black women. The vital statistics rates illustrate the continuing convergence of the marital fertility of blacks and whites during the 1970-73 period. Note that relative to the vital statistics data, survey estimates appear to exaggerate the differences between blacks and whites. These data are for women who were married at the time of the interview. Some births reported by women who had married in the 3 years preceding the interview could have occurred before the marriage. This tendency, however, would have a greater effect on blacks than whites, since out-of-wedlock fertility is much greater for blacks.

In any case, discrepancies between the sources of data could be due to sampling variation. It is possible to calculate “relative standard errors” for the survey by using estimates produced by NCHS that take into account design effects (4). Based on these relative standard errors, none of the survey estimates for the marital GFR appear to be significantly different from those calculated from vital statistics data.

Overall, 70 percent of the births in this period were classified as planned, 18 percent mistimed, and 12 percent unwanted (table 2). As table 2 shows, the planning status of births by parity is highly ordered. Second-order births are the ones most likely to be

Table 2. Percentage distribution of births, by mother's parity at time of interview and planning status, 1973 National Survey of Family Growth

Parity	Number of births	Planning status ¹		
		Planned	Mistimed	Unwanted
All parities . .	2,493	70	18	12
1	721	73	24	3
2	835	80	16	4
3	424	62	18	20
4	220	62	9	29
5 or more	293	46	14	39

¹ Each horizontal line of percentages adds to 100.

planned, probably because premarital conceptions account for a large number of first-order births. In the current survey, only 3 percent of the first-order and 4 percent of the second-order births were unwanted, a result that reflects the strength of norms against having fewer than two children. Above birth order 2, the percentage of unwanted births increases rapidly.

Comparison of the 1973 results with those of the earlier National Fertility Studies shows that the proportion of births categorized as planned increased from 45 percent for 1960–65 to 57 percent for 1966–70 and to 70 percent for the 1970–73 period (table 3). The method of classifying births in the most recent and the earlier estimates probably differs to a certain extent. The 1961–65 distribution is an approximation based on two published reports that may not have been entirely comparable. In any case, the NSFG distribution shown is plausible, given the trends in fertility control and contraceptive practices of married women (7).

Comparison of the NSFG and the National Natality Survey (NNS) with respect to distribution of births by planning status gives somewhat different results (6*b*). The NNS consisted of followback questionnaires, self-administered in most cases, which were completed by a sample of the women giving birth within wedlock in each year. For 1972, the year in which the NNS distribution most clearly corresponded to that of the NSFG, a higher level of mistimed births and a lower level of unwanted births were found in the National Natality Survey than in the National Survey of Family Growth. These differences are probably related to differences in the questionnaire and survey design. In the National Natality Survey, the planning status of births

was based on the answer to a single question instead of answers to a series of questions. The more elaborate procedure of the NFS and NSFG, together with their use of trained interviewers, might possibly have resulted in more births being classified as unwanted than in the NNS.

Finally, notice should be called to a previously published study of fertility by planning status that was also based on the 1973 National Survey of Family Growth. This study, reported by Weller and Hobbs (8), was confined to currently married women who had been married only once—not to all currently married women, as in the present study. Weller and Hobbs found that about 11 percent of the births in the 1970–73 period were unwanted, compared with 12 percent in the current study. The results of both studies with respect to socioeconomic variation are similar, but in the analysis presented here a larger variety of socioeconomic, religious, and geographic differences in fertility are examined.

Fertility Differences

A number of longstanding fertility differences have been noted in the United States, particularly by race, religion, and educational attainment. The trend in differential marital fertility found in the analysis of the 1965 and 1970 National Fertility Studies was summarized by Ryder as follows: “The differences between religious groups, like those between the races and educational levels, have diminished appreciably during the past decade for wanted fertility, for unwanted fertility, and for the modes of fertility regulation” (5*b*). The 1973 NSFG shows that despite continued overall improvement in fertility regulation, distinct differences in marital fertility existed in the early 1970s, particularly between women of high and low social status.

Education. There is a clear negative relationship between fertility and educational attainment (table 4). The higher fertility of the less educated is due mainly to greater unwanted fertility. Since the educational attainment of the U.S. population is improving, those married women with less than a high school education tend to be older and to have had a longer marriage duration. When marriage duration is controlled to some extent through standardization, the difference in fertility between the highest and the lowest educational groups becomes even wider.

The persistence of educational differentials in fertility was noted in the NFS, despite the convergence of educational attainment categories during the 1960s (1*d*). Also, Vaughan and associates, using the 1973 NSFG in an analysis of contraceptive failure, found

Table 3. Percentage distribution of births in selected national surveys, 1965–73, by planning status

Period of survey	Planning status ¹		
	Planned	Mistimed	Unwanted
	<i>National Fertility Studies and 1973 National Survey of Family Growth</i>		
1961–65 ²	45	31	24
1966–70 ³	57	29	14
1970–73	70	18	12
	<i>National Natality Surveys ⁴</i>		
1968	59	28	13
1969	63	26	11
1972	65	27	8

¹ Each horizontal line of percentages adds to 100.

² Estimated from references 1*b* and 5*a*.

³ Reference 1*c*.

⁴ Reference 6*a*.

that the less educated women were more likely to fail to prevent or delay births (9).

Federal Poverty Index. The Federal Poverty Index is a measure of family income relative to the number of persons in the household (10). For a given household size, a specific family income is designated as the "poverty level." A woman's poverty index score is her income expressed as a percentage of the income level designated as the poverty level for her family size. Thus, a woman with an index of less than 100 is "below the poverty level," a score of 200 is twice the poverty level, and so on. This index has been used to establish the need for subsidized family planning services (11).

Fertility is strongly related to the poverty index (table 5), as can be seen particularly when women whose score is above 200 are compared with those whose score is below 200. Some of this difference is due to planned fertility among the poorer group, but a large share is due to mistimed and unwanted births in this group. (Standardization for marriage duration has little effect on the relationship.) The strong relationship between a woman's fertility and her score on the poverty index corroborates a similar relationship found in a survey in upstate New York covering the same period as the NSFG (12). The relationship between the poverty index and fertility is probably reciprocal, since given a fixed income, the addition of a new family member will reduce the index. This phenomenon, how-

ever, probably cannot explain the wide differences in fertility by poverty index score that the current analysis reveals, particularly between those families with incomes 200 percent above the poverty level and those with incomes 200 percent below it.

Black and white women. Despite the convergence of marital fertility for blacks and whites noted in the NSFG, differences remained in 1970-73 because of the higher unplanned fertility of blacks (table 6). When

Table 5. Births per married woman 15-44 years, July 1, 1970-June 30, 1973, by planning status and woman's score on Federal Poverty Index, 1973 National Survey of Family Growth

Item	Federal Poverty Index (percent of poverty level)			
	Less than 100	100 to 150	150 to 200	200 or more
Number of women ..	719	742	941	5,164
Number of births ..	320	377	404	1,392
<i>Births per woman</i>				
All planning statuses	0.39	0.49	0.45	0.27
Planned	0.23	0.34	0.30	0.19
Mistimed	0.08	0.08	0.09	0.05
Unwanted	0.07	0.06	0.06	0.03
Standardized for marriage duration	0.38	0.48	0.46	0.27
<i>Percent of total births¹</i>				
Planned	60	70	67	73
Mistimed	21	17	21	17
Unwanted	19	13	12	10

¹ Percentages in each column add to 100.

Table 6. Births per married woman 15-44 years, July 1, 1970-June 30, 1973, by planning status and woman's race, 1973 National Survey of Family Growth

Item	Black women	White women
Number of women	2,197	5,301
Number of births	819	1,650
<i>Births per woman</i>		
All planning statuses	0.36	0.31
Planned	0.20	0.22
Mistimed	0.08	0.05
Unwanted	0.08	0.03
Standardized for marriage duration	0.34	0.31
<i>Percent of total births¹</i>		
Planned	54	72
Mistimed	23	18
Unwanted	23	11

¹ Percentages in a column may not add to 100 because of rounding.

Table 4. Births per married woman 15-44 years, July 1, 1970-June 30, 1973, by planning status and woman's education, 1973 National Survey of Family Growth

Item	Woman's education		
	Less than high school graduate	High school graduate	College
Number of women ..	2,234	3,610	1,722
Number of births ..	757	1,245	491
<i>Births per woman</i>			
All planning statuses ...	0.32	0.33	0.28
Planned	0.21	0.23	0.21
Mistimed	0.06	0.06	0.05
Unwanted	0.05	0.04	0.02
Standardized for marriage duration	0.38	0.33	0.25
<i>Percent of total births¹</i>			
Planned	65	71	75
Mistimed	18	19	17
Unwanted	16	11	8

¹ Percentages in a column may not add to 100 because of rounding.

marital fertility is standardized for marriage duration, the black-white difference remains, but it is smaller than the range of difference found for the educational level or the poverty index. One should bear in mind that the survey appears to exaggerate fertility differences between blacks and whites as compared with vital statistics data (table 1). While these survey results show substantially higher unplanned and unwanted fertility for blacks, the NSFG results stand in contrast to the 1972 National Natality Survey, in which a much smaller difference in the percentage of unwanted births was found between blacks and whites (6b). As discussed earlier, part of this difference may be due to different survey procedures. The NSFG and NNS results, then, might lead to widely different conclusions about some items, such as the trends in differences in fertility between blacks and whites.

Many factors underlie racial differences in fertility in the United States, including differences in socioeconomic status. For the 1970 NFS, it was estimated that if blacks had the same educational distribution as whites, the difference in unwanted fertility between blacks and whites would have been reduced by about 20 percent (1e). In a similar standardization analysis, based on data from the 1971 Atlanta Family Planning Survey, it was found that there would have been no difference in recent total marital fertility for blacks and whites had educational attainment been equalized (13).

For the 1973 NSFG, the results are somewhat different. Education was not found to be monotonically related to fertility within racial groups (table 7). Giving blacks a higher educational attainment by standardizing for education, then, does not decrease their fertility; nor does it reduce the difference between blacks and whites in unplanned or unwanted fertility. This result may be related to the increasing contribution of out-of-wedlock births to total fertility for blacks and the reciprocal relationship of low educational attainment and out-of-wedlock childbearing. As noted earlier, the relationship of age and educational attainment may be a factor. Also, as mentioned earlier, these results may be affected by the inclusion of out-of-wedlock births to women who had been married 3 years or less at the time of interview, a source of error that would affect blacks more than whites.

The persistence of the black-white difference is related to a number of findings from national studies. Ryder and Westoff noted, for example, that the earlier childbearing pattern of blacks results in a longer exposure to the risk of unwanted childbearing, so that, other things being equal, they would need to be more efficient at fertility control than whites (1f). An analysis of the 1973 NSFG data indicates that blacks are no

less efficient than whites in using contraception but are more likely to stop using it and become pregnant (9).

While the differences in marital fertility between blacks and whites have decreased, the racial difference in fertility for women of all marital statuses has not. The reason is that out-of-wedlock fertility is vastly different for the two groups. During the 1970-73 period, about 6 percent of white births were out of wedlock, compared with more than 40 percent of black births (3). During this period, the contribution of marital fertility to the total fertility difference between blacks and whites was declining. For example, it has been estimated that in 1969 marital fertility was responsible for 26 percent of the overall black-white difference in the general fertility rate; in 1972 it accounted for only 15 percent of the difference (14). The NSFG data, then, deal with only a small segment of the black and white fertility difference.

Region and residence. Table 8 shows virtually no variations in fertility levels by region. There appears to be a slight tendency for more births to be unwanted in the Northeast and North Central regions, but in general, the variation is much less than for education, poverty, and race. The same is true for metropolitan and nonmetropolitan residence (table 9), although fertility is slightly higher outside metropolitan areas.

Religion. Fertility was found to be greater for white

Table 7. Births per married woman 15-44 years, July 1, 1970-June 30, 1973, by planning status and woman's education and race, 1973 National Survey of Family Growth

Planning status	Woman's education		
	Less than high school graduate	High school graduate	College graduate
Blacks			
Number of women	879	947	371
Number of births	332	376	111
<i>Births per woman</i>			
All planning statuses . . .	0.34	0.41	0.30
Planned	0.18	0.22	0.17
Mistimed	0.06	0.10	0.08
Unwanted	0.10	0.08	0.06
Whites			
Number of women	1,334	2,641	1,326
Number of births	415	864	371
<i>Births per woman</i>			
All planning statuses . . .	0.31	0.33	0.28
Planned	0.21	0.23	0.21
Mistimed	0.06	0.06	0.04
Unwanted	0.04	0.03	0.02

Roman Catholics than for white non-Catholics (table 10). Two features of this difference are noteworthy. First, when standardized, the religious variation in marital fertility is smaller than the variation for education or for the poverty index score. Second, most of the difference is in the planned fertility component. Religious differences therefore do not seem to indicate any large underlying problem in fertility control.

Assessing Statistical Significance

Because the National Survey of Family Growth was a multi-stage survey involving the selection of clusters of sample points, the variances are somewhat inflated relative to those of a simple random sample of the same size. How much variances are increased, a factor called "design effect," depends on the exact design of the survey. Because the design effect is different for various items calculated from the survey and for various subgroups of the sample, sampling variation is difficult to evaluate. Variances have been estimated for the NSFG at the National Center for Health Statistics by the "balanced half-sample replication" method. A simple procedure for estimating variances based on this method is described in an NCHS publication (4).

To test the significance of the differences discussed in this paper, the number of births per woman in the various categories of planning status were assumed to be approximately the same as the proportions of women having a birth, having a planned birth, and so forth, in the 3-year interval. Exceptions would be those few cases in which a woman had more than one birth in the interval, but under the low-fertility conditions of the

Table 8. Births per married woman 15-44 years, July 1, 1970-June 30, 1971, by planning status and geographic region, 1973 National Survey of Family Growth

Item	North-east	North Central	South	West
Number of women	1,472	1,883	3,009	1,202
Number of births	496	628	996	373
<i>Births per woman</i>				
All planning statuses	0.32	0.32	0.31	0.31
Planned	0.22	0.21	0.23	0.22
Mistimed	0.05	0.06	0.05	0.05
Unwanted	0.04	0.04	0.03	0.03
Standardized for marriage duration	0.31	0.32	0.31	0.31
<i>Percent of total births</i> ¹				
Planned	70	66	72	72
Mistimed	17	20	18	17
Unwanted	13	13	10	10

¹ Percentages in a column may not add to 100 because of rounding.

early 1970s, such women would comprise only a small fraction of those surveyed.

The procedure for estimating survey variances is based on the number of primary sampling units in the survey—103. These units were grouped into 48 strata for variance estimation. The *t*-test was used for the difference between two proportions with 48 degrees of freedom. A difference is significant at a 95 percent level if the *t*-statistic is 2.01 or greater.

The *t*-test scores for a number of differences (table 11) do not affect the earlier discussion of differences. Educational differences (between college-educated and

Table 9. Births per married woman 15-44 years, July 1, 1970-June 30, 1973, by planning status and woman's residence, (metropolitan or nonmetropolitan), 1973 National Survey of Family Growth

Item	Metropolitan residence	Nonmetropolitan residence
Number of women	5,428	2,138
Number of births	1,779	714
<i>Births per woman</i>		
All planning statuses	0.31	0.32
Planned	0.22	0.23
Mistimed	0.06	0.06
Unwanted	0.04	0.04
Standardized for marriage duration	0.31	0.33
<i>Percent of total births</i> ¹		
Planned	70	70
Mistimed	18	17
Unwanted	11	12

¹ Percentages in a column may not add to 100 because of rounding.

Table 10. Births per married woman 15-44 years, July 1, 1970-June 30, 1973, by planning status and woman's religion (whites only), 1973 National Survey of Family Planning

Item	Catholic	Non-Catholic
Number of women	1,581	3,720
Number of births	556	1,094
<i>Births per woman</i>		
All planning statuses	0.35	0.29
Planned	0.25	0.21
Mistimed	0.06	0.05
Unwanted	0.04	0.04
Standardized for marriage duration	0.34	0.30
<i>Percent of total births</i> ¹		
Planned	72	71
Mistimed	17	18
Unwanted	10	11

¹ Percentages in a column may not add to 100 because of rounding.

less educated women) and differences by poverty, race, and religion were found to be statistically significant according to this procedure, although not for all categories of birth-planning status. Black and white differences, for example, are significant for total births, mistimed births, and unwanted births, and the Catholic versus non-Catholic differences are significant for total and planned births.

Concluding Comments

This analysis of the 1973 National Survey of Family Growth suggests that the major difference in the control of marital fertility in the early 1970s was between women of high and low social status as measured here by education and the poverty index. A somewhat smaller difference in marital fertility existed between black and white women. Religious differences were found to be due largely to planned fertility. Even though overall fertility rates are currently very low, the results of the analysis indicate the continued need for public family planning services, particularly for programs aimed at the economically disadvantaged.

As control over marital fertility has increased, out-of-wedlock fertility, not covered in the 1973 survey, has increased its share of total fertility. A high percentage of these out-of-wedlock births are unintended or unplanned. In the 1970-73 period, about 11 percent of all births in the United States were out of wedlock, a number approximately equivalent to the number of unwanted marital births found in this analysis. Beginning in 1980, the NSFG will include all women 15-44 years

old, regardless of their marital status, a procedure that will allow for a more comprehensive analysis of the trends and differences in fertility by planning status of the births.

References

1. Westoff, C. F., and Ryder, N. B.: The contraceptive revolution. Princeton University Press, Princeton, N.J., 1977: (a) pp. 249-276 and 302-309; (b) table 2-18, p. 307; (c) p. 303; (d) p. 293; (e) pp. 272-274; (f) pp. 267-268.
2. Anderson, J. E.: Estimating unplanned fertility for States using national survey data. Paper presented at meeting of Population Association of America, St. Louis, Mo., April 1977.
3. National Center for Health Statistics: Summary report, final natality statistics, 1970, 1971, 1972, and 1973. Monthly Vital Statistics Report: vol. 22, No. 12 (supp.), March 20, 1974; vol. 23, No. 3 (supp. 3), June 7, 1974; vol. 23, No. 8 (supp.), Oct. 31, 1974; and vol. 23, No. 11 (supp.), Jan. 30, 1975, tables 1 and 11.
4. National Center for Health Statistics: National Survey of Family Growth, Cycle 1. Sample design, estimation procedures and variance estimation. Prepared by D. K. French. DHEW Publication No. (PHS) 78-1350. Vital and Health Statistics, Series 2, No. 76. U.S. Government Printing Office, Washington, D.C., January 1978.
5. Ryder, N. B.: Recent trends and group differences in fertility. In *Toward the end of growth: population in America*, edited by C. F. Westoff. Prentice-Hall, Inc., Englewood Cliffs, N.J., 1973: (a) table 6-1, p. 63; (b) p. 65.
6. Weller, R. H.: Number and timing failures among legitimate births in the United States, 1968, 1969, and 1972. *Fam Plann Perspect* 8: 111-116, May-June 1976: (a) table 1, p. 112; (b) p. 111.
7. Westoff, C. F., and Jones, E. F.: Contraception and sterilization in the United States, 1965-1975. *Fam Plann Perspect* 9: 153-157, July-August 1977.
8. Weller, R. H., and Hobbs, F. B.: Unwanted and mistimed births in the United States: 1968-1973. *Fam Plann Perspect* 10: 167-172, May-June 1978.
9. Vaughan, B., Trussell, J., Menken, J., and Jones, E. F.: Contraceptive failure among married women in the United States. *Fam Plann Perspect* 9: 251-258, November-December 1977.
10. U.S. Bureau of the Census: Characteristics of the population below poverty level. Current Population Reports, Series P-60, No. 106. Washington, D.C., 1977.
11. Dryfoos, J. G.: Women who need and receive family planning services: estimates at mid-decade. *Fam Plann Perspect* 7: 172-179, July-August 1975.
12. Anderson, J. E., Morris, L., and Gesche, M.: Planned and unplanned fertility in upstate New York. *Fam Plann Perspect* 9: 4-11, January-February 1977.
13. Anderson, J. E., and Smith, J. C.: Planned and unplanned fertility in a metropolitan area: black and white differences. *Fam Plann Perspect* 7: 281-285, November-December 1975.
14. Anderson, J. E.: Planning births: differences between blacks and whites in the United States. *Phylon* 38: 282 (1977).

Table 11. T-scores for differences in various subgroups in births per woman 15-44 years, by planning status

Subgroups compared	Total births	Planned births	Mistimed births	Unwanted
College versus high school graduates .	3.1	1.4	1.2	3.9
High school graduates versus less than high school graduates	0.6	1.4	0.0	1.4
College versus less than high school graduates	2.2	0.0	1.0	3.7
Below 200 percent Federal Poverty Index versus 200 percent and over .	10.9	6.9	4.8	4.2
Blacks versus whites	3.1	1.5	3.6	6.2
Catholic versus non-Catholic whites	3.9	3.1	1.4	1.6

NOTE: T-scores are based on published "relative standard errors" (see reference 4).