The Journal of Sociology & Social Welfare

Volume 5
Issue 1 *January*

Article 8

January 1978

Parity, Family Size Preference and the "Value Stretch"

Virginia Aldige Hiday
North Carolina State University, Raleigh

Steven Polgar
University of North Carolina, Chapel Hill

PARITY, FAMILY SIZE PREFERENCE AND THE "VALUE STRETCH"

Virginia Aldigé Hiday
North Carolina State University at Raleigh

Steven Polgar
University of North Carolina, Chapel Hill

ABSTRACT

A two-wave survey of women in their reproductive years living in poverty areas of New York City is used to investigate family size preferences among the poor. The hypotheses that parity affects family size preference and that current parity affects future parity are supported. Implications for future trends in family size preference and for family planning programs are discussed.

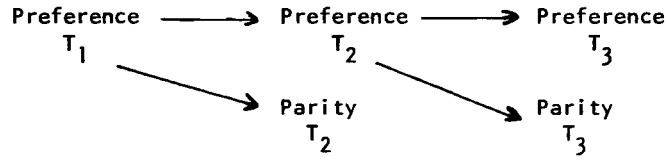
Most explanations of differential reproductive patterns are based upon the assumption of a direct and one-directional causal link from desired family size to actual family size (Figure 1, A) (Easterlin, 1969; Freedman, 1974; Namboodiri, 1970; Votey, 1969). Underlying this assumption is a "motivationalist" view of reproductive behavior (Polgar, 1972). While it is usually recognized that voluntary natality regulation does not operate perfectly, the extent and complex causation of failures in family planning have not been given sufficient attention in most studies of differential birth rates.

We argue that besides family size preference affecting parity, two additional causal mechanisms are operative (Figure 1, B): 1) parity affects family size preference (lines a); and 2) present parity affects future parity (line b). Furthermore, we argue that the concept of "value stretch" (Rodman, 1963) informs the relationship between desired and actual family size among the poor. To investigate these relationships in this paper we examine preference and parity differences in pregnancy experience over a two-year span among women of low income neighborhoods in a metropolitan area.

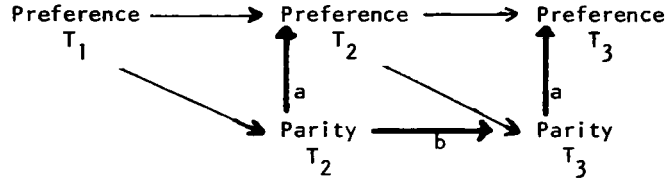
A number of studies in social psychology have emphasized that behavior influences attitudes at least as often as attitudes determine behavior (Deutscher, 1973). Yet, most demographic analyses neglect

Figure 1: Two Causal Models of Preference and Parity

A:



B:



the causal effects of actual childbearing on expressed family size preferences. When environmental circumstances (or physiological problems) reduce the likelihood of successful natality planning, the probability that actual family size will significantly affect desired family size is particularly strong; having unintentionally reached higher parity levels at an early age may influence people to revise their stated family size preferences upward (and problems of sterility downward).

In the United States use of effective contraceptives and voluntary abortion, and success in planning a family have been found to be directly related to such measures of social status as income and education (Jaffe and Guttmacher, 1968; Ryder and Westoff, 1971; Whelpton, et al., 1966; Whelpton and Kiser, 1958). Because couples with low levels of income and education tend to have larger stated family desires and expectations than those of average or higher socioeconomic status (Namboodiri, 1974; Ryder and Westoff, 1969; Whelpton, et al., 1966) as well as more births, it could be argued that the poor and near-poor <u>want</u> to have large families. If this were the case, the increase in public and private expenditures for family planning services for the medically indigent in the last decade might have been largely irrelevant for changing natality among the poor. Indeed, such a line of reasoning has been advanced by some writers (Blake, 1969).[1]

This argument, however, ignores the possibility of behavior influencing attitudes on the one hand, and the obstacles to voluntary control over reproduction among the poor and near-poor on the other. Statements about desired number of children may have been higher on the average among the poor than among others in large part because many poor couples of a given age or marital duration already have more children than the non-poor.

There is considerable evidence that many women living in poverty areas are at risk of having children at an early age and in rapid succession, through an early age at initiation into sexual activity, early marriage, and inadequate access to high quality family planning services (Jaffe and Guttmacher, 1968; Furstenberg, 1971; Zelnick and Kantner, 1972). Early and rapid childbearing leads to relatively high parity levels by the time the woman is in her mid-twenties, with many years of reproductive capacity left. Higher parity itself then may contribute further to the obstacles to regulating childbirth. The added burden of several children when trying to maintain a household in a poverty environment may have a negative influence on contraceptive used, resulting in additional unintended births. Thus, expressed preferences among the poor concerning family size, after three or more children have already been born, may well reflect resignation in the face of reality rather than a value position divergent from the non-poor.

Hyman Rodman has described such a process as it occurs among the lower class for aspects of life other than family size. He terms it the "value stretch." Rodman argues that a large portion of the lower class holds the same values as the middle class; but when they find them impossible to attain, "stretch" them to include other choices which are adaptive to the circumstances under which they live (Rodman, 1963).

Like Haney, et al. (1973), we think it worthwhile to follow the implications of the "value-stretch" for reproductive behavior and attitudes. We hypothesize that poor people have essentially the same family planning desires as the non-poor. Insufficiently able to regulate their natality, these couples "stretch" their values in the direction of the actual reproductive experience. Poor couples who have more than two or three children, therefore, would change their desired number of children upward to a compromise figure between the number they have and the average number wanted in the larger society - i. e., 2 to 3 (Blake, 1974).

Support for the operation of a "value stretch" in shifting attitudes toward actual experience in reproduction may be found not only in the positive relationship between desired and actual number of children (a finding that could as well support the explanation that desired family size causes actual family size), but also by the non-linearity of that relationship (Bauman and Udry, 1973; Bumpass and Westoff, 1970). In the early stages of family building the number of children desired generally exceeds the number actually born. When parity approximates the society-wide average of 2 to 3 children wanted, the desired number of children exceeds the actual number born, but when parity exceeds the societal norm, family size preference falls below the actual number of children already born. Furthermore, the higher the parity above the norm, the greater the difference between desired and actual numbers of children. This phenomenon, of course, is found not only among poor couples in the United States, but in a number of other populations as well (Freedman, et al., 1972; Hawley and Prachuabmoh, 1966).

Additional support for poverty and high parity inducing a value stretch in family size preference is found in studies which show a sizeable reduction in the negative association between education and desired family size when parity is controlled (Ryder and Westoff, 1971). Also, surveys have shown that stated number of unwanted births increase as parity increases and as socioeconomic status declines (Bauman and Udry, 1973; Bumpass and Westoff, 1970; Whelpton, et al., 1966).

The concept of "value stretch" implies a somewhat different set of psychological processes than the "rationalization" of births when family size is different than was desired at an earlier point in time. The term "rationalization" refers to the presumption that an "unwanted" birth has after the fact become a "wanted" one (or vice versa) in the mind of an individual parent. The value stretch hypothesis, by contrast, assumes that in a sub-group of society where it is often very difficult to behave in accordance with the dominant values of society (in this case having a family with two or three children), the values are stretched (in this case, to say that three or four or five children are also acceptable). While rationalization would predict a linear rise in the number desired as the number born increases, the "value stretch" concept would imply an increasing discrepancy between actual family size and number desired as parity increases beyond the third birth; this is because the "stretching" involves a compromise between society-wide values and the alternative values (which are less desirable but not rejected entirely).

At the same parity level that value stretch begins operating on stated family size preference, so also does parity itself become a factor in effective family size regulation. Besides all of the obstacles to regulation of natality found in the environment of the poor, women with three or more children have the added obstacles associated with their large family size. High parity and low income have been found to limit a woman's ability to plan and organize her life in areas besides childbearing. Hiday (1975) found among a sample of low income urban women that as parity increased there was a decrease in ability to organize and run a household to satisfy family needs. A study of mother's management and child care in England reported a marked decline in efficiency with both increasing family size and lower social class (Douglas and Blomfield, 1958). Difficulties in organizing a household, resulting from a combination of the stresses of poverty and large family size, could also affect resort to family planning services and contraceptive practice, causing nonuse, ineffective use or inconsistent use of natality regulating methods. Thus, for at least some people living in poverty, failure in natality regulation affects parity, which - in turn - leads to changes in family size preferences and further use of contraception (c.f. Frisancho et al., 1976).

RESEARCH DESIGN

Interviews were conducted in 1965 in four New York City health districts (in Bronx, Brooklyn and Queens) with 1187 Black, White, Puerto Rican and West Indian women[2] between the ages of 18 and 39, who were residing in randomly selected households. The health districts were chosen on the basis of their designation as a "poverty area" and/or their having the lowest average incomes in the borough, willingness of a neighborhood agency to provide space for family planning services, and absence of any contraceptive clinic in the vicinity. These criteria were established for the purpose of testing a mobile service family planning program (Polgar, et al., 1966).

In 1967, 624 of the panel respondents in the 1965 survey were reinterviewed, along with a new sample of 264 women of the same age and family status from a comparable health district. The original sample was reduced by exclusion of 189 women found to be permanently infertile and 20 women outside the age limits. Although we attempted to trace within New York City respondents who moved from their 1965 residence, an additional 354 women were not possible to locate again. No significant differences were found between those lost and those reinterviewed by ethnic group, education, work status, or interviewer.

However, panel loss was significantly greater among three groups: women not married, women from the poorest group (less than $2600 a year family income), and women who were born in urban areas or whose spouses were born in urban areas (or both). If women in these three groups systematically vary in childbearing attitudes and behavior then our results may be somewhat distorted.

Annual family income was below $3900 for 35.4 percent of our sample, between $3900 and $6500 for 43.1 percent, and above $6500 for 21.5 percent. Education was also relatively low: 31.1 percent held a grade school education or less; 35.4 percent had some high school; 26.6 percent completed high school; and 6.9 percent had attended college.[3]

Because these data were collected for purposes other than testing the effects that parity has on family size preference and future family growth, and because the data are no longer accessible for thorough reanalysis, we were forced to work with previously prepared tables. Hence, the reader will note the new sample is included only in Table II and that different parity categories are used in Table I and Figure 2 than in other tables.

FAMILY SIZE PREFERENCES

The questions for eliciting information on attitudes toward family size included: 1) (in 1965) "Would you like to have any (more) children?"; 2) (in both 1965 and 1967) "If you were starting your family, how many children would you want altogether?"; and 3) (in 1967) "How about your (husband/boyfriend) -- would he like to have any (more) children?"[4] Table I presents a summary of the responses to the first question. Our results are in line with previous research. The proportion of respondents wanting more children declines with increasing levels of parity. These results, controlled for age, are significant ($p < .001$). Approximately 60 percent or more women within each age/parity group want no more children. Desire for no more children is especially marked among women at parity levels above two. Spouses' reported desire for more children (data not shown) significantly declines with increasing parity as well ($p < .001$).

Data on desired number of children (if starting reproductive life anew) at the time of the second interview are summarized in Table II. The relationship between parity and family size preference is positive and nonlinear. Among women below 35 years of age, desired number of children is greater than actual number of children up to parity 2; while at parity 3 or more, the desired number is less than actual

TABLE I: PERCENT WOMEN WANTING MORE CHILDREN IN 1965 BY PARITY AND AGE

Parity*	Age < 25**	25-34***	≥35	N
0-1	90.8	73.6	27.3	151
2	42.6	43.9	36.0	143
3	12.0	29.9	6.3	118
4+	29.2	9.3	10.3	190
N	197	295	110	602

By chi square analysis:

*Parity effects controlling for age are significant ($p<.001$).
**In age groups <35, parity effects are significant ($p<.001$).
***In age group ≥35, parity effects are significant ($p<.001$).
Because of small expected frequencies, these data were collapsed with analysis done for parity ≤ 2 and parity > 2.

TABLE II: MEAN NUMBER OF CHILDREN DESIRED IF STARTING AGAIN IN 1967 BY PARITY AND AGE IN 1965

Parity*	Age < 25**	25-34	≥35	N
0	2.8	2.3	1.0	24
1	2.4	2.4	2.4	169
2	2.7	2.7	2.9	208
3	2.9	2.7	3.3	158
4+	3.7	3.2	3.5	272
N	182	450	199	831

By two-way analysis of variance correcting for unequal cells, F test:

*Parity effects controlling for age are significant ($p<.001$).
**Age effects controlling for parity are nonsignificant.
***Interaction effects are significant ($p<.05$).

number (except among parity 3 women 35 years and over). As expected, women who have more children than the society-wide average number of two or three children wanted raise their desired number. As the actual number of children rises the desired number is also raised; but so does the gap between actual and desired numbers.

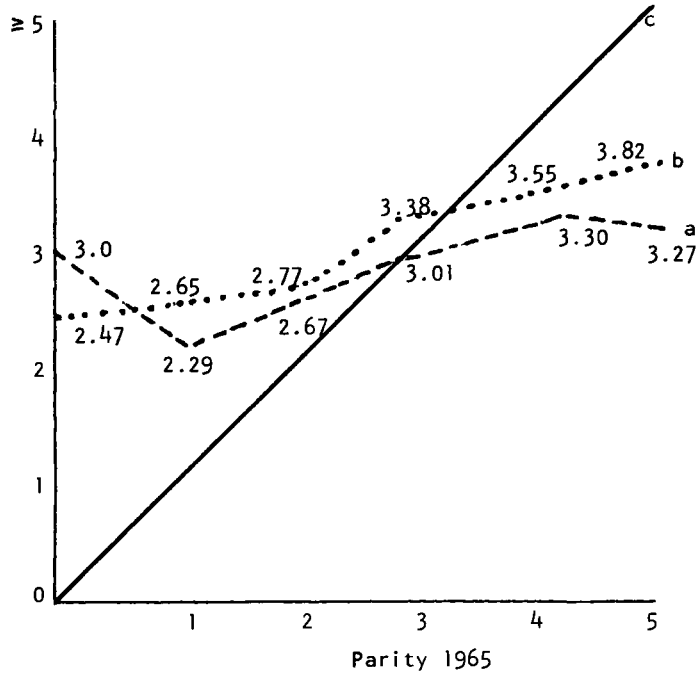
This still leaves open the question of how family size preferences change over time as a result of changes in parity. Our reasoning leads to the expectation that the birth of additional children to women of parity three or above will lead to an increase in stated family size preferences, but to a lesser level than would be the case if such births were retrospectively "rationalized" as wanted. To investigate this hypothesis we studied responses on the number of children desired if starting again, by 1965 parity and by pregnancy experience in the interim between the two interviews, for women who had two or fewer children and for women who had more than two children.

At the time of the first interview women who were to have an additional birth did not desire significantly more children than women who were to have none in the interim, regardless of parity. The expected difference between the two groups of women in desired number of children in the second interview is significant in the predicted direction for women with more than 2 children ($p<.025$); and, as expected, there is no significant difference between the two groups of women with two or fewer children. Figure 2 depicts the progression upward in desired number of children and the increasing gap between desired and actual number of children after parity three. This pattern is as predicted in terms of the value stretch concept: family size preference does not predict interim births, but rather interim births which raise parity also significantly raise family size preference for women who have more than the societal norm of 2-3 children.

FAMILY GROWTH

Besides poverty and high parity leading to "value stretch" in family size preference, we argued that poverty and large family size would also make the practice of family planning difficult. We expected our high parity respondents to have more births between 1965 and 1967, and in particular to have more accidental births. Both of these expectations were fulfilled. Among all respondents pregnancy experience controlled for age increased significantly with parity ($p<.05$). Since some of our respondents wanted to have more children and were not attempting to limit births, we separately analyzed those whom who stated in the first interview that they wanted no more children. Table III

FIGURE 2: MEAN NUMBER OF CHILDREN DESIRED IN 1967 IF START AGAIN BY PARITY IN 1965 AND 1965-1967 PREGNANCY EXPERIENCE



a----women with no additional births in 1965-1967 interim
b•••• women with additional births in 1965-1967 interim
c ——hypothetical line with desired number and actual number identical

By difference of means test:

For women with ≥3 children, the difference in desired number between a and b is significant ($p < .025$).

For women with <3 children, the difference in desired number between a and b is not significant.

presents these results by 1965 parity and age. The incidence of pregnancy increases significantly with parity when age is controlled ($p < .01$). These pregnancies among women who stated two years earlier that they wanted no more children represent failures in attempts to regulate family size.

TABLE III: PERCENT BECOMING PREGNANT BETWEEN 1965-1967 AMONG WOMEN NOT WANTING MORE CHILDREN IN 1965 BY PARITY AND AGE IN 1965

Parity*	Age < 25**	25-34**	≥35***	N
0-1	12.5	0.0	12.5	30
2	25.8	18.8	0.0	83
3	27.3	18.6	0.0	91
4+	58.8	30.6	21.1	167
N	82	198	91	371

By chi square analysis:

*Parity effects controlling for age are significant ($p < .01$).
**Within age groups < 35, parity effects are significant ($p < .05$).
***Within age group ≥35, parity effects are nonsignificant. Because of small expected frequencies, these data were collapsed with analysis done for parity ≤2 and parity > 2.

Our findings describe approximately the same proportion of unwanted births as the data of Bumpass and Westoff (1970). They estimate one-fifth of all births to be unwanted; however, their estimate for unwanted births to the poor and near-poor (32%) is higher than ours. Their measure of unwanted births was based on several questions and was not asked prior to the birth of the child. Given the increase in services available, it is quite possible that couples in poverty areas of New York City were somewhat more successful in family planning in 1965-1967 than poor couples in other parts of the country in 1960-65.

In 1967 we also asked respondents who became pregnant in the interim between the two interviews if those pregnancies were intended or unintended ("Did you want to get pregnant at that time, or did it just happen?"). Table IV presents the responses to this question. Among women under the age of 35 years,[5] the incidence of unintended pregnancy increases with increasing parity ($p < .001$). Unintended

pregnancies represent a very high proportion of all pregnancies (60.9 percent) ranging among parity and age groups from a low of 33.3 percent to a high of 100.0 percent. Because this table includes both women who in 1965 said that they wanted more children and women who wanted no more children, the unintended pregnancies combine "number failures" and "spacing failures."

TABLE IV: PERCENT STATING PREGNANCY UNINTENDED AMONG ALL WOMEN WHO BECAME PREGNANT BETWEEN 1965-1967 BY PARITY AND AGE IN 1965

Parity*	Age < 25**	25-34***	≥35****	N
0-1	37.2	33.3	100	53
2	68.0	54.5	50	38
3	100.0	58.8	--	24
4+	90.9	71.4	76.9	59
N	86	72	16	174

By chi square analysis collapsing the data and analysis done for parity ≤ 2 and parity > 2:

*Parity effects controlling for age among women under the age of 35 are significant ($p < .001$).

**Parity effects within age group < 25 are significant ($p < .001$).

***Parity effects within age group 25-34 are nonsignificant.

****Parity effects within age group ≥35 are nonsignificant.

When unintended pregnancies were cross-tabulated against the respondent's desire for more children stated at the time of the first interview, reporting an unintended pregnancy was found to be more frequent among the women who in 1965 said that they wanted no more children (number failures), than among those who said they wanted more (spacing failures), 76.2 percent, 46.7 percent respectively. Of all unintended pregnancies the majority, 60.4 percent, were number failures.

These reports of unintentional pregnancies, though high, are likely to represent an understatement of total family planning failures. Admitting failure is difficult. Both retrospective rationalization and embarrassment vis-a-vis the interviewer would contribute to the probable undercount of couples who were not successful in family planning. One way to compensate for this is to include with unintended

TABLE V: PERCENT WOMEN WITH PREGNANCIES EITHER STATED AS UNINTENDED OR RATIONALIZED AMONG ALL RESPONDENTS WHO BECAME PREGNANT, BY PARITY AND AGE IN 1965

Parity*	Age < 25**	25-34**	≥ 35***	N
0-1	37.2	33.3	100.0	53
2	72.0	81.8	50.0	38
3	100.0	88.2	-----	24
4+	100.0	94.3	92.3	59
N	86	72	16	174

By chi square analysis collapsing the data and analysis done for parity ≤ 2 and parity > 2:

*Parity effects controlling for age among women under the age of 35 are significant ($p < .001$).

**Parity effects within age groups < 35 are significant ($p < .001$).

***Parity effects within age group ≥ 35 are nonsignificant. Because of the small N, these data were collapsed with Fisher's Exact Test done for parity ≤ 2 and >> 2.

pregnancies those pregnancies which occurred to women who said that they wanted no more children at the time of the first interview but at the second interview stated that their pregnancies were intended. Family planning failures rise from 60.9 percent to 72.4 percent of all pregnancies by this calculation (see Table V). For women below 25 and 25-34 (there were only 16 pregnancies among those over 35) parity is positively associated with accidental pregnancy ($p < .001$). It is possible that some of the pregnancies we are counting as rationalized represent a genuine change of opinion by women either between first interview and pregnancy or after experience with the previously undesired child. On the other hand, any error on this side should be more than compensated by the error of undercounting spacing failures among women who wanted more children.

USE OF NATALITY REGULATING METHODS

It was expected that women at lower parity levels would regulate their family size and spacing intervals by greater use of contraception and greater use of effective methods than women at higher parity. This was not the case among our sample. We studied contraceptive

use by parity and age at the time of the first interview. There were no significant differences by parity. Two years later, at the time of the second survey, there were still no significant differences between parity groups when age was controlled (data not shown). Thus, neither contraceptive use nor use of effective methods can explain the difference in unwanted births. Although there was a tendency for women at parities 2 and 3 to report greater use of abortion, these data were not considered adequate for statistical analysis (see Polgar and Fried, 1976).

We cannot adequately assess the consistency of contraceptive use from our survey data. As we find no differences by parity in the use of effective methods, and yet find significant increases in unintended and rationalized pregnancies with higher parity, we must assume that at higher parity levels contraceptive use is less consistent (or abortion less frequent). Since desire for additional children declines with parity, it would appear that larger family size interferes with consistent use. Among a sample of urban white couples Bumpass and Westoff (1969) found that after the birth of a second child and after reaching the desired number of children, the efficacy of contraceptive practice substantially improved. Our sample is considerably different with its restriction to women living in poverty areas, and its inclusion of nonwhites and unmarried, separated and divorced women. Perhaps it is the combination of poverty conditions with high parity which interferes with the efficacy of contraceptive practice (and — under pre-1973 conditions — lowered the probability of a successful abortion). And perhaps it is knowledge of this effect which causes both Black and White women of the lower class to report an expected number of children greater than their desired number (Preston, 1974).

SUMMARY AND DISCUSSION

Among women in poverty areas in New York City, parity was found to negatively affect desire for additional children, and positively affect family size preference and subsequent natality. The argument that low income women have more children because they really want more is questioned. Although stated desired family size may in general be higher on the average among low income couples than among others at parity levels above two, in this study only a relatively small proportion of low income women said they wanted more children.

The stated number of children desired was higher with increasing parity. However, in contrast to a linear increase in preferred family size that would be predicted on the basis of "rationalization" with

increasing parity, we found a non-linear increase with an increasing gap that is more compatible with the "value stretch" concept of Hyman Rodman. Women of parity three and above who had another birth during the two-year study period reported higher family size desires in 1967 than those who remained at their 1965 parity level. An additional pregnancy had no such effects among women with two or less children. Our data supplement those of Haney et al. (1973) who found among a sample of southern, urban, Black females that social class was negatively associated with "value stretch" as measured by the range of family size preferences. Although they did not test for interaction, they found that the differences between poor and lower middle income women were greater at parity levels above two. Although our data support a value stretch explanation of family size preference among low income women, the study was not designed to test such a hypothesis. More studies, exploring both the psychological phenomena involved in "value stretch" and their implications for attitudes and behavior related to childbearing, would be worthwhile.

A primary purpose of public and private subsidized family planning programs is to reduce unwanted births, particularly unwanted births among those who do not have adequate access to comprehensive medical care. Our findings support the need for such services. Over the two-year period of 1965-1967 the large marjority of our sample's pregnancies were unwanted. Our findings suggest that it is important for family planning services to reach low income women before their first pregnancy or early in the childbearing period. The pressures brought by poverty and high parity seem to impede the translation of desires to regulate childbearing into effective family planning. The expansion of high quality family planning services to the poor and the spread of newer methods of contraception and abortion in the years since this survey have reduced the risk of unintended births. As ability to regulate pregnancy increases among the poor, especially in the early stages of reproductive life, one can expect a decrease in their stated desired number of children. Thus, we would not be surprised if the inverse relationship between income and both actual and desired number of children in the U. S. will soon be greatly reduced, or even reverse direction.

FOOTNOTES

1. The main thrust of the argument is directed to the exclusion of women opposed to family planning and women already practicing adequate methods in estimating the need for contraceptive services of the poor and near-poor. See Blake and Das Gupta, 1972, 1973.

2. Color-ethnic designation was "other" or not ascertained for 2.5 percent of the sample. For earlier reports on this study see Polgar et al., 1966; Polgar and Rothstein, 1970; Polgar and Hiday, 1974; Hiday, 1975; and Polgar and Fried, 1976.

3. Although the sample included women whose income and education exceed the limits of common definitions of poverty, their residence in a poverty milieu permits their description as women of low socioeconomic status.

4. There has been much discussion in the literature over the relative merits and psychological meaning of different questions about family size preferences (Coombs, 1974; Abernathy and Imrey, 1975; Namboodiri, 1970; Ryder and Westoff, 1971; Terhune and Kaufman, 1973). We prefer not to engage in such discussion in this paper, and instead elect to choose two measures: one which refers to the respondent's desire for more children under present circumstances, and one which allows the respondent to imagine undoing her present parity, beginning afresh. Question number three permits a tapping of the husband's/friend's desire for more children under the couple's present circumstances.

5. Only 16 of the women over 35 became pregnant in the interim and 14 of those stated that they wanted no more children prior to this pregnancy and/or that the pregnancy was accidental. Two desired births among women over 35 does not allow variance over four parity levels; therefore, no significant differences could be found in Tables IV and V for women over 35.

REFERENCES

Bauman, K. E. and J. R. Udry
1973 "The Difference in Unwanted Births Between Blacks and Whites." Demography 10 (August):315-28.

Blake, J.
1969 "Population Policy for Americans: Is the Government Being Misled?" Science 164 (May 2):522-29.

1974 "Can We Believe Recent Data on Birth Expectations in the United States?" Demography 11 (February):25-44.

_____, and P. Das Gupta
1972 "The Fallacy of the Five Million Women: A Re-Estimate." Demography 9 (November):569-87.

1973 "Reply to Cutright and Osborn." Demography 10 (November): 679-84.

Bumpass, L. and C. F. Westoff
1969 "The Prediction of Completed Fertility." Demography 6 (November):445-54.

1970 "The Perfect Contraceptive Population." Science 169 (September 18):1177-182.

Coombs, L. C.
1974 "The Measurement of Family Size Preferences and Subsequent Fertility." Demography 11 (November):587-612.

Deutscher, I.
1973 What We Say/What We Do: Sentiments and Acts. Glenview, Illinois: Scott, Foresman.

Douglas, J. W. B. and J. M. Blomfield
1958 Children Under Five. London: George Allen and Unwin.

Easterlin, R. A.
1969 "Towards a Socioeconomic Theory of Fertility: A Survey of Recent Research on Economic Factors in American Fertility." In S. J. Behrman et al., (eds.), Fertility and Family Planning: A World View. Ann Arbor: University of Michigan Press.

Freedman, R.
1974 The Sociology of Human Fertility: An Annotated Bibliography, New York: Appleton, Century, Crofts.

_____, L. C. Coombs and Ming-Chen Chang
1972 "Trends in Family Size Preferences and Practice of Family Planning: Taiwan, 1965-1970." Studies in Family Planning 3 (December):281-96.

Frisancho, A. R., J. E. Klayman and J. Matos
1976 "Symbiotic Relationship of High Fertility, High Childhood Mortality and Socio-Economic Status in an Urban Peruvian Population." In B. A. Kaplan (ed.) Anthropological Studies of Human Fertility. Detroit: Wayne State University Press, pp. 101-11.

Furstenberg, F. F.
1971 "Preventing Unwanted Pregnancies Among Adolescents." Journal of Health and Social Behavior 12 (December):340-47.

Haney, C. A., R. Michielutte, C. E. Vincent, and C. M. Cochrane
1973 "The Value Stretch Hypothesis: Family Size Preferences in a Black Population." Social Problems 21 (Fall):206-20.

Hawley, A. H. and V. Prachuabmoh
1966 "Family Growth and Family Planning: Response to a Family-Planning Action Program in a Rural District of Thailand." Demography 3:319-31.

Hiday, V. A.
1975 "Parity and Well-Being Among Low-Income Urban Families." Journal of Marriage and the Family 37 (November):789-97.

Jaffe, F. and A. Guttmacher
1968 "Family Planning Programs in the United States." Demography 5:910-23.

Koch, G. G., J. R. Abernathy, and P. B. Imrey
1975 "On a Method for Studying Family Size Preferences." Demography 12 (February):57-66.

Namboodiri, N. K.
1970 "On the Relation between Economic Status and Family Size Preferences when Status Differentials in Contraceptive Instrumentalities are Eliminated." Population Studies 24 (July):233-39.

1974 "Which Couples at Given Parities Expect to Have Additional Births?" Demography 11 (February):45-56.

Polgar, S.
1972 "Population History and Population Policies from an Anthopological View." Current Anthropology 13 (April):203-67.

_____, et al.
1966 "The PPFA Mobile Services Project in New York City." Studies in Family Planning 15 (October):9-15.

_____, and E. S. Fried
1976 "The Bad Old Days: Clandestine Abortions Among the Poor in New York City Before Abortion Law Liberalization." Perspectives in Family Planning (in press).

Preston, S. H.
1974 "Differential Fertility, Unwanted Fertility, and Racial Trends in Occupational Achievement." American Sociological Review 39 (August):492-506.

Rodman, H.
1963 "The Lower Class Value Stretch." Social Forces 42 (December):205-15.

Ryder, N. B. and C. F. Westoff
1969 "Fertility Planning Status: United States, 1965." Demography 6 (November):435-44.

1971 Reproduction in the United States, 1965. Princeton: Princeton University Press.

Terhune, K. W. and S. Kaufman
1973 "The Family Size Utility Function." Demography 10 (November):599-618.

Votey, H. L., Jr.
1969 "The Optimum Population and Growth: A New Look, a Modification to Include a Preference for Children in the Welfare Function." Journal of Economic Theory 1 (October): 273-90.

Whelpton, P. K., A. A. Campbell, and E. Patterson
1966 Fertility and Family Planning in the United States. Princeton: Princeton University Press.

_____, and C. Kiser, et al.
1958 Social and Psychological Factors Affecting Fertility. New York: Milbank Memorial Fund.

Zelnick, M. and J. F. Kantner
1972 "Some Preliminary Observations on Preadult Fertility and Family Formation." Studies in Family Planning 3 (April): 59-65.