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LABOR FORCE PARTICIPATION AND FAMILY FORMATION: A STUDY OF WORKING MOTHERS

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Abstract—Drawing upon a sample of 638 mothers aged 18 to 40, with at least some marital work experience, significant associations were found between the extent, kind, and timing of employment and a series of family formation variables. Generally lower fertility, longer first birth intervals, and earlier use of birth control were associated with the longest work durations, the highest status jobs, and work before the birth of the first child. The data failed, however, to differentiate desired family size.

More than 35 million American women, over 43 percent of those in the working ages, are now in the labor force (Keller, 1972). The increase in female labor force participation has not only been quite rapid, but the characteristics of those comprising this segment of the labor force have recently changed. For example, since 1940 middle class women, especially, have been increasingly combining household and employment responsibilities. And quite clearly children are no longer the same deterrent as in the past to the employment aspirations of married women (Oppenheimer, 1969). The most dramatic trend of the past decade, in fact, has been the sharp increase in labor force participation among women with preschool children (U.S. Department of Labor, 1973; U.S. Bureau of the Census, 1970).

These developments obviously involve a change in the traditional pattern of women's marital employment. There is an increasing tendency for women to work at any stage, or all stages, of the family-formation process. With respect to demographic research these trends have long been implicated in differential rates of fertility. The strength of the inverse relationship between fertility and female labor force participation, in fact, has been equaled or surpassed by very few other sociocultural differentials (Blake, 1965).

Studies of fertility–female employment relationships have considered a number of dimensions of work activity, such as current employment status as well as the duration and kind of employment (Fortney, 1972; Pratt and Whelpton, 1958). Similarly, various dimensions of fertility behavior, such as number of children (Sweet, 1968), expected and desired numbers of children (Ridley, 1959; Blake, 1965), and birth intervals (Namboodiri, 1964; Freedman and Coombs, 1966) have been examined as dependent family-formation variables.

Although the existence of an inverse association between fertility and employment histories has been documented in many studies, the causal directions of this association are complex and not very well understood (Terry, 1974). The extent to which either fertility or work experience should be considered the independent variable is the major issue. And central to this issue is the assumption of role conflict generated by competitive sets of familial versus extra-familial obligations (Weller, 1971; Stycos and Weller, 1967; Hoffman, 1974). If fertility is viewed as

the independent variable, then small family size "permits" a woman to work. In other words, the opportunity for work varies with the number of children and duration of birth intervals. On the other hand, when viewed as a dependent variable fertility is regarded as the outcome of a desire or expectation for employment. In this case, family formation should follow patterns of early contraceptive use, childspacing, and ultimate family size that maximize the potential for labor force participation. Each of these models most likely fits some women. It certainly seems, for example, that sub-fecundity promotes higher labor force participation (Whelpton et al., 1966). But we also know that even among fecund women there is an inverse association between work experience and expected as well as actual family size.

Family formation, as several researchers have pointed out, may be viewed as an ongoing system in which fertility is in part a function of events and states defined at earlier stages, and in part determined by events and reevaluations as the process unfolds through time (Bumpass and Westoff, 1970; Goldberg, 1960; Namboodiri, 1972, 1974). Nonetheless, most research on the work-fertility hypothesis has tended to focus on relationships between a given dimension of work activity and one or two dimensions of fertility behavior. What is needed, among other things, is more research on the various points of possible integration between female employment and fertility along different dimensions of the life-cycle stages of family formation. The recent research of Mott (1972), for example, which examines probabilities for labor force participation on the basis of work activity in the early stages of family formation, is clearly along these lines.

The present research is directed toward an examination of family formation as a process encompassing not only current parity, but also desired family size, timing of first contraceptive use, and spacing of the first birth. Female work activity, then, will be viewed as a multi-dimensional factor with several analytically distinct potentials for affecting one or another of the fertility-related variables as the family-forming process unfolds. In addition, this research is deliberately limited to the influence of *marital* work experience among *mothers*. Thus in an attempt to clarify the potential associations between work and fertility, the following analyses are held within a somewhat narrower context than has been the case with much previous research. While the present data cannot directly address the issue of causality in any obtained work-fertility relationships, clues may at least be provided with respect to associations between selected dimensions of both work activity and fertility behavior.

Data and Methods

The subjects for the current research were drawn from a much larger probability sample of married women in the Toledo metropolitan area who responded to a mailed questionnaire designed to investigate social and psychological correlates of fertility. From an initial sample of 3,680 women, usable returns were obtained in 1972 from 2,024 subjects, or 55 percent of those receiving the mailed questionnaire. From these 2,024 subjects, those currently married women between the ages of 18 and 40, with at least one child and at least some marital work experience, were selected for the present analysis. The exclusion of nonwhites and a few subjects with incomplete data yielded a final sample of 638 subjects. By limiting our analysis to mothers, and to those with some marital work experience, we have not only contracted our sample to women with proven fecundity, but also to subjects who have experienced both the mother and worker roles, albeit in various sequential orders. While the inclusion of women who had never worked would probably have increased the significance of some of the differentials, our

purpose was to concentrate on dimensions of the *marital work experience* as they may relate to a series of dependent fertility measures.

Four dependent fertility variables were selected as indices which constitute and bear on the family-forming process. First, the *number of children* designates the parity level attained at the time of data collection in 1972. Second, the *mean number of months between marriage and the first birth* provides a temporal measure of early family formation. And finally, *desired family size* and the *start of birth control use* are two fertility indices permitting inferences with respect to fertility motivations. The first is an attitudinal measure of family size desired by age 45. The second index, of the timing of initial birth control, is a measure of the parity level at which birth control was started, and is intended as an indicator of the point in the family-formation process at which fertility control became salient. The assumption here is that the earlier birth control was begun, the earlier the intent in limiting family size or controlling birth intervals.

In a similar way, multi-dimensional indices of marital work activity were also operationalized. The *proportion of married life employed* indexes the *amount* of marital employment, from less than one-fourth to more than one-half. The *kind* of work experience was operationalized, on the basis of last or current employment, as manual, clerical and sales, and professional. And finally, the assumption of the work role in relationship to the mother role was operationalized by *initial marital work activity before versus after the birth of the first child.* This variable was designed to distinguish between those women with marital work experience prior to motherhood and those with work experience only after the first child.

Because of the potential associations between the dependent fertility measures and *religion, wife's education, age,* and *marital duration,* these were selected as control variables. Throughout the analysis, therefore, the data are presented separately by religion (Catholic versus Protestant), and standardized on education, age, and marital duration.

Empirical Findings

We began our analysis by looking at the effects of proportion of married life employed on the series of dependent family-formation variables. The data, shown in Table 1, are listed separately by religion. Test factor standardization was used to adjust mean scores by wife's education, age, and marital duration. In this way we controlled for several of the variables most relevant to fertility. We recognize that by standardizing the data on these variables we were also likely controlling, in part, for variations in work propensity. In addition, several of our obtained differentials, such as by occupation and for desired family size, may well have been greater without these controls. Our primary concern, however, was to focus as clearly as possible on the obtained differentials in fertility behavior by work history categories, per se.

First, as expected, we see that parity varies inversely, for both Protestants and Catholics, with proportion of married life employed. Similarly, the first spacing variable follows a comparable pattern. The greater the marital work duration, the longer the interval between marriage and the first child. Thus the spacing patterns of regularly employed mothers are consistent with a strategy of minimizing conflicts between work and children. That is, regular employment (over 50 percent of marital duration) was associated with relatively long first birth intervals. In practical terms, this means employment patterns had time to become established prior to the first birth.

While our data do not permit a direct test for motivational factors, the timing of initial contraceptive use at least gives us some insight into fertility intentions in

TABLE 1.—Mean Values of Family Formation Variables for Work-Experienced Mothers Classified by Religion and Proportion of Married Life Employed

Religion and Family Formation Variable	Proportion of Marriage Employed			
	<.25	.25 to .50	>.50	*F*
Protestants				
Number	130	113	146	
Mean number of children	2.8	2.5	2.1	F=13.457 (P<.001)
Mean desired family size	2.8	2.6	2.7	F=1.438 (ns)
Mean parity at which birth control initiated	1.4	1.0	.6	F=8.365 (P<.001)
Mean months between marriage and first child	16.2	20.7	22.2	F=4.268 (P<.05)
Catholics				
Number	70	81	98	
Mean number of children	2.8	2.4	1.9	F=15.320 (P<.001)
Mean desired family size	3.2	3.2	3.0	F=.951 (ns)
Mean parity at which birth control initiated	2.7	2.0	1.8	F=2.244 (ns)
Mean months between marriage and first child	13.3	18.7	17.0	F=5.997 (P<.01)

the early months of marriage. And again, the data are consistent with a strategy of delayed first birth in order to prolong marital employment. With age, education, and marital duration controlled, mothers who had worked the longest began their contraceptive behavior the earliest. Among Protestants, for example, the smallest proportion of marital employment is associated with the use of birth control only after the first pregnancy. By contrast, Protestant mothers who began contraceptive practice early in their marriages fell disproportionately in the category of continuously employed women. The same general pattern held for Catholics, though at each level of marital employment birth control was begun at a later pregnancy than for their Protestant counterparts.

Finally, turning to desired family size by proportions of married life employed, the data show virtually no differences among either Protestants or Catholics.

Clearly the obtained differences in fertility *behavior* are not matched by differences in *desired* family size. If desired fertility were eventually realized by all our respondents, the mean family size of mothers in all three employment categories would be about the same. Our subjects, of course, are still in their childbearing years, and additional fertility is inevitable. Unfortunately, we simply have no way of knowing the extent to which mothers with the greatest amount of work experience in relation to total married life will eventually bring their family sizes up to the level of their expressed desired fertility. Since we have standardized the data on education, age, and marital duration, we can at least be reasonably confident that the lower fertility of the more continuously employed mothers is not due to the hidden effects of these variables. What seems more likely is that our particular measure of desired family size is tapping a dimension of fertility under conditions imagined by the respondents to be more ideal than real.

In addition to the duration of marital employment, the kind of employment is also of potential significance to differential fertility behavior. High status occupations, for example, typically require more formal training and education which in turn are associated with later ages at marriage. Moreover, middle class occupations are presumably more rewarding, intrinsically, than manual labor, and thus in theory should constitute a stronger motivation for the employment versus the mother and homemaker roles (Hoffman and Hoffman, 1973). The data in Table 2 are directed toward these and related issues.

As in Table 1, we have again standardized the data on education, age, and marital duration. Looking first at Protestants, we see that occupational status is significantly related to parity, spacing, and initial use of birth control. Regardless of wife's education, age, or marital duration, high status mothers, in contrast to the other occupational categories, had fewer children, spaced the first child later, and began contraception earlier. And again, desired family size, while in a direction consistent with these findings, was not significantly differentiated by occupational status.

Among Catholics, the data by occupation corroborate the frequently observed curvilinear relationship between socioeconomic variables and fertility. Professionally employed Catholic mothers actually had a slightly higher fertility than the others, even though the first birth interval was longer and birth control was practiced earlier. Thus occupational status, by our data, has a much more profound influence on the fertility behavior of Protestant than of Catholic mothers. The persistence of a religious influence on differential fertility, within our analytic categories, is thus quite clear.

Our next analysis entailed looking at the dependent fertility measures by work in relationship to the birth of the first child. The research literature has frequently pointed toward the potential of early work experience for exposing young women to extra-familial roles which in turn may become permanent alternatives to motherhood or to large families (Blake, 1971; Davis, 1967). With this in mind, work activity only after the first child should, in theory, be associated with larger family size than the experience of mothers who worked first and then started a family. Table 3, then, is directed toward an examination of this hypothesis.

We see from Table 3 that for both Protestants and Catholics the desired number of children by work activity is not differentiated. Nonetheless, within both religious groupings there are significantly great differences in the actual number of children born. Further, work activity prior to the first birth is associated with an earlier start of birth control, and a concomitantly greater first

TABLE 2.—Relation Between Family Formation and Occupation, for Work-Experienced Mothers by Religion (Standardized on Wife's Education, Age, and Marital Duration)

Religion and Family Formation Variable	Type of Occupation			
	Manual	Clerical and Sales	Professional	*F*
Protestants				
Number	99	204	86	
Mean number of children	2.9	2.4	1.9	F=20.929 (P<.001)
Mean desired family size	2.8	2.7	2.5	F=2.935 (ns)
Mean parity at which birth control initiated	1.6	1.0	.7	F=7.814 (P<.001)
Mean months between marriage and first child	15.4	20.7	21.7	F=4.814 (ns)
Catholics				
Number	54	149	46	
Mean number of children	2.6	2.3	2.7	F=2.966 (ns)
Mean desired family size	3.3	3.1	3.2	F=.660 (ns)
Mean parity at which birth control initiated	2.6	2.1	2.0	F=.666 (ns)
Mean months between marriage and first child	13.2	16.9	18.7	F=2.462 (ns)

birth interval. The finding that marital work before the first child is associated with earlier use of birth control suggests a motivation among these women deliberately to delay their childbearing. And since the data shown are standardized on education, age, and marital duration, it seems improbable that any of these extraneous factors are contaminating the findings.

On the basis of the above three tables, then, we find that collectively the lowest fertility is among mothers who have worked the greatest proportions of their married lives, at high status jobs, and before the birth of the first child. The significant parity differences by work experience are not, however, matched by corresponding differences in desired numbers of children. By our data, work experience makes little difference in family size desires. On the other hand, the tim-

ing of both the initial contraception and the first birth are differentiated by variations in the extent, kind, and timing of work experience.

To explore our data further, we have shown the interaction effects between work in relation to the first child and both the start of birth control (Table 4) and the proportion of married life employed (Table 5). If work before childbearing does indeed constitute a motivation for delayed childbearing, then we would expect birth control to be used prior to the first pregnancy among women in this work-experience category. Similarly, if work before the first child becomes a motivational force directing women toward employment as an extrafamilial alternative to childbearing, we would expect women who worked before

TABLE 3.—Relation Between Family Formation and Timing of First Entry into Employed Status After Marriage, for Work-Experienced Mothers by Religion (Standardized on Wife's Education, Age, and Marital Duration)

Religion and Family Formation Variable	Initial Marital Employment: After First Child	Initial Marital Employment: Before First Child	F
Protestants			
Number	123	266	
Mean number of children	2.8	2.3	F=15.870 (P<.001)
Mean desired family size	2.8	2.7	F=.873 (ns)
Mean parity at which birth control initiated	1.3	1.0	F=2.378 (ns)
Mean months between marriage and first child	11.5	25.7	F=61.785 (P<.001)
Catholics			
Number	58	191	
Mean number of children	2.8	2.3	F=7.277 (P<.01)
Mean desired family size	3.0	2.8	F=1.359 (ns)
Mean parity at which birth control initiated	2.1	1.3	F=3.233 (ns)
Mean months between marriage and first child	11.0	23.3	F=34.710 (P<.001)

TABLE 4.—Association Between Birth Control Use Before First Pregnancy and the Timing of First Entry into Employed Status After Marriage, for Work-Experienced Mothers by Religion

	Initial Marital Employment			
	After First Child	Before First Child	After First Child	Before First Child
	Protestants		Catholics	
	N=121	N=268	N=58	N=191
Proportion of married life employed:				
<.25	41%	31%	38%	26%
.25 to .50	34%	28%	38%	33%
>.50	25%	41%	24%	41%
χ^2	8.102 df=2 ($P<.02$)		7.048 df=2 ($P<.05$)	

motherhood to have the greatest percentages of regular or sustained marital employment.

We see from Table 4 that for both Protestants and Catholics significantly greater percentages of mothers who worked before childbearing used birth control before the first pregnancy. In each case more than twice as many working wives, in contrast with nonworking wives,

TABLE 5.—Association Between Marital Employment (Proportion of Married Life Spent in Employed Status) and the Timing of First Entry into Employed Status After Marriage, for Work-Experienced Mothers by Religion

	Initial Marital Employment			
	After First Child	Before First Child	After First Child	Before First Child
	Protestants		Catholics	
	N=121	N=268	N=58	N=191
Used birth control before first pregnancy?				
Yes	23%	57%	16%	38%
No	77%	43%	84%	62%
χ^2	46.687 df=1 ($P<.001$)		12.702 df=1 ($P<.001$)	

used birth control prior to their first pregnancies. Thus work experience may in fact constitute a motivational factor underlying the delay of the first birth.

Similarly, from Table 5 we see that work experience before childbearing is directly related to a pattern of sustained marital employment, for mothers in each religious category. That is, with the data standardized on education, age, and marital duration, early employment is highly associated with subsequent regular employment. This is consistent with Mott's (1972) finding that the wife's work activity before and between early births increases the probabilities of future work activity. Again, then, it seems that work before childbearing may initiate a motivational factor which induces mothers to continue their employment, or return to employment, following the birth of the first child. Nonetheless, the extent to which these data reflect variations in work commitment remains an open question. It may be, for example, that women who initially enter the labor force after the first child must make a greater break from their prior routines. In that case, a more significant work commitment among these women may be indicated. At any rate, our data are consistent with the view that early marital work experience may generate either an important role alternative to childbearing or an important role conflict with childbearing.

Summary and Discussion

Drawing upon a sample of 638 mothers aged 18 to 40, with at least some marital work experience, we found significant associations between the extent, kind, and timing of employment and a series of family-formation variables. Generally lower fertility, longer first birth intervals, and earlier use of birth control were associated with the longest work durations, the highest status jobs, and work before the birth of the first child.

The variable which our data failed to differentiate, however, was desired family size. With controls for education, age, and marital duration, we found virtually no differences in desired family size by any of our independent work history variables. We recognize that desired family size is an ambiguous concept, and that an alternative measure such as expected family size might have resulted in significant differentials by the work history variables. Nonetheless, the desired family size data do suggest that employment for our sample of mothers probably constitutes some combination of both alternative gratifications to and role incompatibilities with large family size. Given the present disadvantages in our society with which working mothers must contend—e.g., inadequate childcare facilities and husbands who typically share unequally in housekeeping responsibilities—it would be surprising if working mothers were not under considerable strain (Hoffman, 1974). Thus we lean toward the notion that smaller family size, longer first birth intervals, and earlier use of birth control, which by our data differentially associate with employment histories, are reflective of a conscious effort on the part of women (or couples) to minimize the incompatibility between basically conflicting roles in American society. Certainly findings from other countries where the inverse relationship between work and fertility has not been found, presumably because of a compatibility between work and childbearing (Stycos and Weller, 1967; Weller, 1971), are consistent with this viewpoint.

If the above argument is valid, then the policy implications derivable from the potential of female employment for decreasing the birth rate (Blake, 1969, 1971; Davis, 1967; Hoffman and Hoffman, 1973) remain somewhat problematic. Several additional research questions come to mind. For example, how important is work, per se, in contrast to perceived incompatibilities between work and childbearing? In other words, how

much incompatibility is generated by inconveniences in the housekeeping and childcare roles, vis-à-vis the part played by varying degrees of work commitment? Our finding that marital employment before childbearing was associated with earlier contraceptive use and continued marital employment implies the importance of the latter. In addition, the kind of job as it relates to the quality of work (e.g., status, earnings, hours, responsibilities) likely affects the strength of a woman's attachment to the labor force. From this perspective, policy concerns regarding the influences on women's work commitment, such as limitations to sex-linked jobs or lower pay relative to men, would clearly be implicated.

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