The Perceived Impact of Child Care Costs on Women's Labor Supply and Fertility*

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In a sample of Detroit-area mothers of preschool-aged children interviewed in 1986, one-third reported that child care problems had constrained their employment. Such reports were relatively prevalent among poor women, those without relatives nearby, and those willing to entrust the care of their children to nonfamily members. Only one-tenth of the sample reported a similar child care constraint on fertility, a phenomenon unrelated to income but relatively prevalent among women with strong labor force attachment. The results suggest that policies to increase the supply of child care or to lower its cost could increase female labor supply by a substantial fraction, with an even greater rise among women most at risk of poverty and reliance on public assistance, but probably would not raise fertility significantly.

To what extent are women's labor force participation and fertility constrained by problems in finding acceptable substitutes for their own care of children? In this paper we analyze women's reports about whether their work and fertility have been constrained by child care problems in order to assess the magnitude of such constraints and to identify the women among whom they are most common. Survey evidence collected since 1977 suggests that a nontrivial minority of American mothers are out of the labor force or are working fewer hours than they would like because of a shortage of high-quality, affordable child care (Bloom and Steen 1990; Kisker et al. 1989; Presser and Baldwin 1980). The evidence also suggests that this situation is especially common among poor women (Presser and Baldwin 1980). Unknown, however, is the relative importance of poverty in comparison to women's child care preferences, their gender-role attitudes, or the availability of potential caregivers in the family in determining whether women leave work because they cannot find substitute caregivers for their children. Also unknown is the extent to which child care problems constrain not only employment behavior, but childbearing as well.

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In this paper we shed further light on these issues by examining social and economic variation in reported child care constraints on both employment and fertility behavior. Using a probability sample of mothers of preschool-aged children living in the Detroit metropolitan area in spring 1986, we investigate the correlates of women's statements that their current or past employment and childbearing have been affected by problems with child care. We also analyze which women are most likely to perceive nearby child care facilities as inadequate.

Two policy concerns underlie our analysis. One is the question of whether public policies designed to increase the supply of day care or lower its cost to the consumer are likely to increase women's labor supply or fertility. Policies of this kind, for example, have been advocated as one solution to what some observers regard as the problem of slow and potentially negative population growth in the United States (e.g., Wattenberg 1987). Such policies, however, are unlikely to raise fertility if low fertility reflects women's fears of divorce (Menken 1985) or anything other than problems in finding acceptable child care while they work. The other issue addressed by the current analysis is the population subgroups to whom public child care policies or programs ought to be aimed. Finding that child care problems constrain the labor supply or fertility of middle-class women as well as the poor would suggest a different policy strategy than the discovery that this is primarily a problem of young, unmarried, poor mothers.

Although the late 1980s witnessed an astonishing flowering of research on child care constraints, many of the studies appearing in this period failed to answer the questions of greatest interest from a policy perspective. For example, several important national surveys collected information on nonmaternal child care only from currently employed women, or made unwarranted assumptions about the costs of care or the circumstances under which child care typically is used. Analysis of these data sets thus cannot provide a full picture of child care problems and their potential impact on women's employment and fertility. In some instances (e.g., Blau and Robins 1988, 1989), analyses have relied on areal measures of child care costs that may be correlated with other, unmeasured areal traits important in determining women's labor force participation; in other instances, child care problems or costs have been assessed only for women using extrafamilial forms of care (Connelly 1989; Maume 1989). Many recent studies, moreover, have been restricted to precisely those women for whom child care and employment may be least problematic, namely currently married women living with a husband (e.g., Blau and Robins 1988, 1989; Connelly 1989; Gustafsson and Stafford 1988; Lehrer and Kawasaki 1985).

Not only are past studies flawed in regard to answering policy questions; in addition, their findings have varied considerably, perhaps because of variation in the types of data and analyses used (Mason and Duberstein 1992). Most studies have found that child care costs influence women's labor force participation negatively, but the estimated magnitude of impact has ranged from very small (Maume 1989) to enormous (Blau and Robins 1988). The estimated impact of child care costs on fertility, which has been studied less frequently, has ranged from virtually nonexistent (Lehrer and Kawasaki 1985) to moderate (Blau and Robins 1989). Thus, although a start has been made in understanding the role of child care problems in women's decisions about employment and fertility, further studies clearly are needed.

HYPOTHESES

Modeling the determinants of perceived child care constraints is complex because such perceptions can be influenced not only by the objective supply of child care, but also by women's demand for certain types or amounts of care. Some women, for example, have no

personal desire or financial need to work for pay while their children are young. Consequently they are unlikely to attribute their labor force status to problems with child care, regardless of the locally available types or amounts of care. On the other hand, among women whose personal aspirations or financial situations lead them to strongly demand nonmaternal child care, the tendency to attribute their labor force status to child care problems is likely to reflect the local supply of care quite strongly.

Because of this complexity, and because of the limited measures available in the data we analyze and the difficulties of making causal inferences, we do not attempt to develop or estimate a full structural model. Instead our analysis is guided by commonsense hypotheses based on the economics and sociology of labor supply and fertility. The only aspect of child care supply that we can measure is the availability of a husband or other relatives in the woman's home or nearby. Women with such caregivers available should be less likely than other women to attribute their labor force status or fertility to child care problems because they should be less likely to find the supply of child care problematic. Insofar as African-American women are more likely than other women to have well-developed networks of assistance from relatives (see studies by Hogan, Hao, and Parrish 1987; Stack 1975), they also should be less likely to report that child care is problematic or constrains their employment or fertility.

On the demand side, the first factor that is likely to affect women's reports of child care constraints is their level of economic resources (wages, nonwage income). Those with greater resources will have a wider array of child care options than will those with fewer resources. Therefore they should be less likely to view child care as problematic and hence less likely to attribute their employment or fertility to child care problems. In other words, women's wage levels and nonwage income should be related negatively to the dependent variable.

Women's intellectual resources — that is, their experience, general wisdom, and ability to acquire new information (indexed by their age and education) — also should affect their reports of child care constraints. All other things being equal, women who are skilled at finding out about the available child care options should be less likely to perceive child care as problematic and hence less likely to attribute their labor force status or fertility to child care problems than should women who are less skilled in acquiring this information. Thus we expect education and age to be related negatively to the dependent variable.²

Also affecting the demand for child care and hence the perception of child care problems should be the amount of child care that women need, as determined both by their employment status or desired labor supply and by their number of preschool-aged children. Because employed women typically require more hours of substitute child care than do nonemployed women (who often use child care for the child's educational benefit rather than to satisfy their own needs), employed women should be more likely to find the supply or cost of child care problematic. So, too, should women with large numbers of children (unless their high fertility is itself due to their lack of desire or need to participate in the labor force). Thus we expect employed women and women with large families to report that child care is problematic more often than do women who are out of the labor force or who have small families.

Women's attitudes toward work and motherhood are the final set of factors that should influence reports of child care constraints. Women who do not wish to enter the labor force, either because they believe they should provide all child care themselves or because they have little interest in or personal commitment to an occupational career, should be less likely to report that child care is problematic or that their employment or fertility reflects child care problems than women who are less opposed to labor force participation. All other things being equal, the committed nonparticipants presumably will feel no need to seek out nonmaternal child care and hence will be unlikely to consider it problematic. They also

should be less likely than other women to attribute their labor force status or fertility to child care problems. Thus we expect measures of women's commitment to remaining out of the labor force to be related negatively to their perceptions of child care problems or constraints.³

In the case of fertility, two additional factors may affect women's reports of a child care constraint: their fecundity status and their cumulative fertility (number of children ever born). Women who are physically unable to bear children should be less likely to report a child care constraint on their fertility than women who have the possibility of childbearing. Similarly, those who already have achieved or exceeded their desired family size (a situation that we equate with higher fertility), although physically capable of bearing children, should be uninterested in doing so. For this reason they may be unlikely to attribute their fertility to the constraints posed by child care problems.

DATA AND METHODS

The data analyzed here derive from personal interviews with a probability sample of mothers of preschool-aged children living in the three-county Detroit metropolitan area in January-June 1986.⁴ In this survey, household screening was used to find eligible respondents at addresses drawn through multistage probability sampling.⁵ To be eligible for the survey, a woman had to be between the ages of 15 and 39 and had to have living with her at least one child born in January 1980 or later.⁶ In all but five of the 1,383 completed interviews, the respondent was the natural mother of the child in question. The response rate was approximately 80% of the eligible respondents contacted through the household screening.

This survey offers two types of dependent variables relevant to the current analysis. The first is a measure of whether respondents perceive the local supply of child care to be problematic. It consists of responses to a question: "In the area close to where you live, do you think that child care facilities are generally adequate or inadequate?" Because this question pertains to child care facilities rather than to all forms of nonmaternal child care, responses are likely to reflect women's perceptions of the local nonfamilial child care market rather than the supply of related child care providers. Nevertheless, it provides one reading on whether women find the current supply of child care problematic.

The second type of dependent variable provided by the survey consists of direct questions about child care constraints on employment and fertility. Women were asked whether their current or past employment status, hours worked, or fertility (timing and numbers) are or were affected by problems with child care. The wording of these questions is shown below.

The analysis has four parts. First, in order to estimate the gross level of child care constraints, we examine the percentages of women reporting that child care problems have constrained their employment or fertility; we also look at the proportions reporting that nearby child care facilities are inadequate. Second, we study variation in women's perceptions of the adequacy of nearby child care facilities using multinomial logit analysis. We do this because most of our hypotheses about variation in perceived child care constraints treat the degree to which available child care is considered problematic as a proximate cause of the child care constraint. Third, in order to understand possible determinants of reported child care constraints on employment, we estimate logistic response models for responses to the three questions concerned with this subject. Because two of the questions were asked only of women with a particular labor force status, this part of the analysis is conducted separately for employed women and for women not currently in the labor force. Finally, for the entire sample, we conduct a logit analysis of two questions

about child care constraints on fertility. Although we attempt to interpret the results in causal terms throughout the analysis, readers should keep in mind that the causal ordering of variables is often ambiguous and that the estimated models are reduced forms rather than structural equations.

RESULTS

Table 1 shows responses to six questions about child care constraints on employment and fertility. (Responses to the question on the adequacy of nearby child care facilities are

Table 1. Perceived Child Care Constraint Items: Detroit Child Care Survey^a

Item	Percentage Saying "Yes"	Base N
Most important reason not working is because unable to find work that pays enough to cover the cost of child care and other expenses.	12.6	628 ^b
If satisfactory child care were available at reasonable cost, would you look for work or return to work at this	12.0	020
time? (WORKIF) If you could find (additional) satisfactory child care at a reasonable cost, would you work more hours than you	23.5	456°
currently are working? (MOREHOURS) Percentage reporting "yes" to either WORKIF or	11.6	569 ^d
MOREHOURS Have problems with the cost, availability, or quality of child care ever influenced your employment in any way, for example, prevented you from working, led you to change jobs, the hours you worked, or to take	16.9	1,025°
up a new line of work? (EMPLOYMENT) Percentage reporting "yes" to WORKIF, MOREHOURS,	26.3	1,202 ^f
or EMPLOYMENT Have problems with the cost, availability, or quality of child care ever led you to postpone having a child you	33.5	1,022 ^e
wanted to have? (TIMING) Have child care problems ever led you to decide to have	3.6	1,203 ^f
fewer children than you had originally planned? (NUMBERS) Percentage reporting "yes" to either of the two items	8.3	1,201 ^f
above	10.4	1,197 ^f

a The data are from interviews with a multistage probability sample of women ages 15-39 residing in the three-county Detroit metropolitan area, each of whom was living with and responsible for the care of at least one child born in January 1980 or later as of spring 1986 (the date of the interviews).

b Women currently unemployed or not in the labor force.

c Women not in the labor force.

d Women currently employed.

e Total sample minus the unemployed.

f Total sample. Ns vary because cases with missing data were excluded.

shown at the top of Table 2.) The first question in Table 1 was asked only of women not employed at the time of the survey; it was part of a battery of possible reasons for not working. The fourth reason was "Unable to find work that pays enough to cover the cost of child care and other expenses." Although this item taps women's ability to find work or jobs paying a particular salary, as well as the availability and cost of child care, child care problems are involved. As the table shows, almost 13% of the sample of nonemployed women gave this as the only or the most important reason for not working. Because this question involves not only child constraints but also issues of unemployment, we ignore it in the remainder of the analysis.

The second question, addressed to women not currently in the labor force, is close in wording to a question used in several national surveys: "If satisfactory child care were available at reasonable cost, would you look for work or return to work at this time? [WORKIF]" Of the sample who are not in the labor force (that is, women neither working nor looking for work), approximately 23% responded "yes" to this question; this finding implies that the labor force participation rate in the total sample would rise by about nine percentage points if all the nonlabor force women were able to find acceptable child care.8 This implied rise is slightly lower than the 10-point rise reported by Presser and Baldwin (1980) from the June 1977 Current Population Survey, or the 13-point rise reported by O'Connell and Bloom (1987) from the June 1982 CPS. The somewhat lower rise in the Detroit sample may reflect the increasing supply of child care over time or the peculiarities of the Detroit metropolitan area, such as its relatively high unemployment rate and hence its higher-than-average proportion of "discouraged workers." Even if the figure from Detroit is slightly lower than in earlier national samples, however, it suggests that a substantial minority of Detroit mothers of preschool-aged children who are currently out of the labor force might be working if less costly or higher-quality child care were available.

The third question in Table 1 parallels the second, but was addressed to employed women. Women were asked whether they would work more hours if additional satisfactory child care were available at a reasonable cost [MOREHOURS]. The percentage responding "yes" (11.6) is far smaller than the percentage of the nonlabor force mothers who said they would seek work, although it climbs to 21% among women working fewer than the median number of hours per week (33). Nevertheless, this percentage is large enough so that when the sample excluding the unemployed is considered as a whole, 17% state that child care problems currently are constraining their labor supply (see the fourth line of Table 1).

Responses to the fourth question in Table 1 also suggest that employment is or has been constrained by child care problems for a substantial proportion of the sample. In this question, women were asked whether problems with the cost, availability, or quality of child care had *ever* influenced their employment [EMPLOYMENT]. Slightly more than one-quarter of the sample answered "yes." When responses to this item are considered together with responses to WORKIF and MOREHOURS, fully one-third of the sample report that child care problems have constrained their employment. This finding suggests that over time, a very substantial proportion of the female population of childbearing age experiences problems with child care, which they perceive in turn as affecting their labor force participation.

In the Detroit survey (but not in earlier surveys), the questions on whether women would work or would work more hours if they had satisfactory child care at reasonable cost were followed by questions on what kinds of child care would be "satisfactory" and what costs would be "reasonable." The follow-up questions were included because the policy implications of responses to the questions on child care constraint hinge on the meaning of "satisfactory" and "reasonable." For example, if most people consider care by the child's father or some other close relative the only satisfactory type of care, or consider free care

the only reasonable cost, then programs to provide more institutionalized child care facilities or to partially subsidize child care costs would be unlikely to affect these women's labor supply.

In fact, only small proportions of the Detroit sample stated that only care by relatives would be satisfactory or that only care at zero cost would be reasonable. Of the women who said they would work or would work more hours if satisfactory care were available, 23% listed only relatives as satisfactory caregivers; 15% said free care would be the only reasonable cost. Thus, even if we ignore the women responding in this way, close to one-fifth of the sample might have increased their labor supply at some point in response to the increased availability or quality or the reduced cost of child care.

In many women's minds, then, child care problems influence their decisions about employment. What about the perceived impact of these problems on their fertility decisions? The last two questions shown in Table 1 suggest that this impact is smaller than the impact on employment. Only 3.6% of the sample reported that child care problems ever had led them to postpone having a child they wanted, while 8.3% reported that such problems had led them to reduce their total number of children. In some groups the impact of child care costs on fertility may be greater, but this impact is weak among mothers of young children as a whole.⁹ An important policy implication of this finding (assuming that women's perceptions predict their behavior accurately) is that programs designed to improve the availability or lower the costs of child care, although likely to increase the labor supply of women with young children, are unlikely to have a substantial direct effect on their fertility.¹⁰

The top three lines of Table 2 show responses to the question on the adequacy of nearby child care facilities. Although women were asked whether they thought nearby facilities were generally adequate or inadequate, a substantial proportion of the sample (approximately one-third) said they had no opinion. Another four-tenths perceived nearby facilities to be adequate; the remaining one-quarter said they were inadequate. Thus, in line with the substantial proportion reporting a child care constraint on employment, a substantial proportion report that they find nearby child care facilities inadequate. As shown by the data in the second and third columns of Table 2, both the perception that nearby child care is adequate and a lack of opinion are more common among women currently not in the labor force than among those who are employed. This finding suggests that nonparticipants are less interested than workers in learning about nearby child care facilities and, even when they are knowledgeable, are more likely to find these facilities satisfactory.

Means for the variables hypothesized to influence the dependent variables are shown in the remainder of Table 2. These means suggest some of the ways in which the Detroit sample differs from the U.S. population as a whole. Although the Detroit sample is about as well educated on average as the U.S. population, it contains a somewhat higher proportion of African-American and Roman Catholic women (latter not shown). The average woman in the sample has borne slightly more than two children and is 29 years of age. Approximately half the sample are employed, but 68% currently have at least one preschool-aged child who is being cared for regularly by someone other than themselves.

Table 2 also suggests some of the social and economic differences between the employed and women who are out of the labor force. As would be expected from the literature on female labor supply, the employed tend to be somewhat better educated than nonlabor force women, have fewer children, are more favorable toward gender-role equality, are less insistent that children be cared for by parents, and are considerably more likely to be using some form of regularly scheduled, nonmaternal child care. (Yet in light of past studies that have asked only employed women about their use of child care, it is noteworthy that 44% of the nonlabor force women also use such care.) As suggested by a comparison of the means for the total sample with the means for both the employed and

Table 2. Means for the Variables Used in the Analysis of Perceived Child Care Constraints: Detroit Child Care Survey

.30 .30 .26 (575)
.30 .26
.30 .26
.30 .26
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.84
(576)
` _ ´
.37
(566)
.14
(576)
(4)
2.59
(576)
(0,0)
.08
(566)
(000)
7.65
(576)
(570)
13.23
(576)
29.76
(576)
(370)
_
_
35.19
(559)
(339)
1.36
1.50
(566)

(continued)

Table 2. (continued)

		Not in	
	All	Labor	
Variable	Women	Force	Employed
Attitudes			
Sex role equality scale ^c	11.31	10.45	11.99
1	(1,194)	(462)	(569)
Work vs. motherhood (work) ^d	.21	.08	`.29 [´]
· · · · · · · · · · · · · · · · · · ·	(1,199)	(466)	(573)
Work commitment ^e	-	_	.67
			(552)
Whether parents are the ideal			()
caregivers at all preschool ages ^f	.53	.62	.48
caregivers at an presented ages	(1,208)	(468)	(576)
Fertility Variables	(1,200)	(400)	(370)
Number of children ever born	2.08	2.19	1.97
Number of children ever both	(1,208)	(468)	(576)
Whather foound (salf remort)	.82	(400)	(370)
Whether fecund (self report)		_	_
a dilla II	(1,204)		
Current Child Care Use			
Whether using non-maternal			
child care	.68	.44	.92
	(1,208)	(468)	(576)

^a "In the area close to where you live, do you think that child care facilities are generally adequate or inadequate?"

b Numbers shown in parentheses are the base Ns for the means above and to the left of them.

^c Summative scale formed from four agree-disagree items. Range is from 4 (strongly traditional outlook) to 16 (strong egalitarian outlook).

^e "If you had enough money to live comfortably, would you continue to work for pay?" Yes = 1; other = 0.

^f Whether the respondent thinks that preschool children should be cared for by the father or mother at all ages until school entry (yes = 1; no = 0).

those out of the labor force, the unemployed are especially likely to be African-American; they also are relatively likely to be living without a husband or partner. This finding suggests that unemployed mothers of preschool-aged children in metropolitan Detroit are more likely than average to experience other determinants of poverty, such as being unmarried.

Determinants of Perceived Adequacy of Child Care

In order to understand which women are most and least likely to perceive child care as problematic, we used the SAS CATMOD procedure (SAS/STAT User's Guide 1990, chap. 17) to estimate a multinomial logit regression model in which responses to the question on nearby child care facilities were a function of women's personal and household

d "Regardless of whether they are working outside the home, some women feel that the work they do as a (wife and) mother is their main career, while others feel that their work outside the home is their main career. Which do you consider your main career, your work as a (wife and) mother, or your work outside the home?" "Work" or "both" = 1; "as a wife/mother" = 0.

characteristics.¹¹ The results appear in Table 3. Each coefficient in Table 3 represents the change in the log odds of being in the top category of the dependent variable, as opposed to the bottom category, that is associated with one unit of change in the independent variable. For example, the coefficient of -.43 for "whether lives with husband or partner," displayed in the first column and first row of the table, shows that living with a partner lowers by .43 the log odds of stating that nearby child care is inadequate, as opposed to adequate. Table 3 contains two sets of results: those for zero-order models in which only one independent variable at a time is included, along with the sampling strata controls (gross effects); and the results from a model that includes all the predictors (net effects).

Respondents' opinions about the adequacy of nearby child care appear to be a function of two factors: economic resources and amount of child care required as indicated by employment status. Not surprisingly, none of the available supply measures, all of which pertain to care provided by relatives, was a significant predictor of perceptions about nearby child care facilities. In keeping with the hypothesis about economic resources, income was related negatively to perceiving nearby child care as inadequate. Because this relationship persisted after the presence of a husband or partner was controlled, it would appear to reflect the economic resources available to women rather than the presence of a potential caregiver in the home. Higher-income women thus are more likely than other women to perceive nearby child care facilities as adequate, presumably because they can better afford the types of care they desire or require or because the child care available in their neighborhood is, in fact, better than that available in low-income neighborhoods. In light of the frequent assertion that families view child care costs as a "tax" against the mother's earnings, the nonsignificance of the respondent's wage level in Table 3 is noteworthy. Apparently the family's overall economic level, rather than the wife's potential earnings, is most important in determining perceptions of child care problems.12

Neither the results for education nor the results for age support the idea that women with greater knowledge or mental skills will be less likely to perceive child care as problematic. Although the results for education are statistically significant, education predicts only whether women have an opinion about nearby child care facilities, not whether that opinion is negative or positive. When other factors are controlled, age has no relationship to opinions about such facilities. Because preliminary analyses suggested that these variables also were unrelated to women's reports of child care constraints on employment, we dropped them from the analysis of the employment constraints, although we retained them in the analysis of fertility constraints.

Whether women are currently employed is one of the strongest net predictors in Table 3 of how they perceive nearby child care facilities. Those who are currently employed are not only more likely than nonlabor force women to have an opinion about nearby facilities; they also are more likely to perceive these facilities as inadequate. These results suggest that working or wanting to work places constraints on the types of child care that women seek, such that women who are employed are ultimately more dissatisfied with nearby child care facilities than are those who are out of the labor force. The nonsignificance of results for number of preschool-aged children suggests that the mother's own schedule, rather than the number of preschoolers she must care for, primarily affects her demand for child care and hence her perceptions of its adequacy.¹³

In sum, then, both the time and the financial constraints that women face appear to affect their perceptions of the adequacy of nearby child care facilities. Women with higher family incomes and more flexible schedules are more likely to perceive child care as adequate than are women with lower incomes and more severe time constraints. In contrast, the availability of potential surrogate caregivers in the woman's home or nearby, the number of preschool-aged children she has, and her intellectual resources do not predict her

Table 3. Zero Order and Multiple Polytomous Outcome Logistic Regression Models Relating Personal and Family Characteristics to the Perceived Adequacy of Nearby Child Care Facilities^a

	Z	Zero-Order Results ^b	ts _b		Multiple Results	
	Inadequate	Inadequate	Adequate	Inadequate	Inadequate	Adequate
Personal Characteristics	Adequate	No Opinion	No Opinion	Adequate	No Opinion	No Opinion
Child Care Supply						
Whether lives with husband or partner	43**	21	.21	40	-,45	05
Whether relatives are available for	12	60. –	9	23	21	.02
child care						
Whether African-American	.01	90:	9.	33	90. –	.27
Economic Resources						
Household income minus R's	12**	.05	.17**	–.14 **	.01	.15**
earnings (\$10,000)						
Whether used food stamps or AFDC	.34**	01	36*	.02	.18	.16
in 1985						
R's hourly wage	.01	.03*	.02	.01	00. –	01
Intellectual Resources						
Education (years)	<u>-</u> .04	.16**	.21**	01	.16**	.17**
Age of respondent	02	.02	.04**	01	.01	.01
Amount of Care Needed						
Whether currently employed	.30*	.73**	***	.54**	**06.	.36*
Whether currently unemployed	.11	40.	07	.15	.47	.32
Number of preschool-aged children	.16	.07	09	.18	.17	02
			-			

^{*} Statistically significant, .05 level.

^{**} Statistically significant, .01 level.

^a N for all models is 1,199. Coefficients in the table show the log odds of being in the top category of the dependent variable as opposed to the bottom category associated with a one-unit change in the independent variable.

b These estimates were made from separate models containing one personal characteristic and two of the three dummy variables representing the sample strata (coefficients not shown).

evaluation of nearby child care facilities. The women most likely to perceive child care as problematic are those with low incomes and those who are working.

Determinants of Child Care Constraints on Labor Supply

Models relating women's personal and household characteristics to their reports of child care constraints on employment are shown in Tables 4 (employed women only) and 5 (women not in the labor force). As noted above, the analyses are performed separately

Table 4. Logistic Response Models Relating Personal and Family Characteristics to Perceived Child Care Constraints on Employment:

Employed Women Only^a

	MOR	EHOURS	EMPL	OYMENT
Personal	Gross	Net	Gross	Net
Characteristics	Effects	Effects	Effects	Effects
Child Care Supply				
Whether lives with				
spouse or partner	- .85**	46	19	54
Whether relatives				
are available for				
care	.22	.34	55**	62**
Whether African-				
American	.33	.44	92**	84 *
Economic Resources				
Household income				
minus R's earnings	23**	27 *	06	10
Whether used food				
stamps or AFDC	1.55**	.90*	.66*	.37
R's hourly wage	02	.01	06**	05*
Amount of Care Needed				
Hours worked	− .06 * *	07**	03**	03*
Number of preschool-				
aged children	26	36	.19	.19
Attitudes				
Gender-role equality	10	1.53	06	.04
Squared term/10	05*	- .68	03	.01
Work vs. motherhood				
(work)	− .62*	25	50*	17
Work commitment	.59*	.55	03	03
Parental child care				
ideal at all ages	22	44	.55**	.49*
Likelihood ratio/df		51.2/15**		74.3/15**

^{*} Statistically significant, .05 level.

^{**} Statistically significant, .01 level.

^a N for all models is 508. See Tables 1, 2, and 3 for variable definitions. Gross effects are from models that include only one personal characteristic plus the sample strata dummy variables; net effects are from a single model that includes all of the predictor variables shown in the table.

Table 5: Logistic Response Models Relating Personal and Family Characteristics to Perceived Child Care Constraints on Employment:

Women Not in the Labor Force Only^a

	wo	RKIF	EMPL	OYMENT
Personal Characteristics	Gross Effects	Net Effects	Gross Effects	Net Effects
Child Care Supply				
Whether lives with				
spouse or partner	-1.07**	.19	05 '	.07
Whether relatives are				
available for care	− .57 *	- .76**	58 *	68*
Whether African-				
American	1.69**	1.31**	21	58
Economic Resources				
Household income minus				
R's earnings	36**	- .24**	15*	30**
Whether used food				
stamps or AFDC in 1985	1.06**	32	01	55
R's hourly wage	03	02	.04	.03
Amount of Care Needed				
Number of preschool-				
aged children	10	02	.08	.13
Attitudes				
Gender role equality	.16**	1.03*	.19*	.49
Squared term/10	.07**	- .44*	.09**	13
Work vs. motherhood				
(work)	1.07**	.93**	.38	.25
Parental child care			•	
ideal at all ages	87**	59*	10	.06
Likelihood ratio/df		36.1/13**		70.1/13**

^{*} Statistically significant, .05 level.

according to labor force/employment status primarily because different questions were asked of the employed and the labor force nonparticipants. Unemployed women, who were asked only the EMPLOYMENT question, are excluded from the analysis because they are too few in number to analyze on their own and because the results they produce when included with either the employed or labor force nonparticipants are difficult to interpret.

Turning first to women who are currently employed, we would not necessarily expect the results for the two questions analyzed in Table 4 to be the same because one question (MOREHOURS) asks specifically about the constraint on the number of hours currently worked, whereas the other (EMPLOYMENT) asks about the constraint on all aspects of labor supply, both past and present. The results for the two questions are indeed somewhat different. Whether currently employed women would work more hours if they were able to find additional satisfactory child care at a reasonable cost (MOREHOURS) is influenced

^{**} Statistically significant, .01 level.

^a N for all models is 439.

directly by two factors: family income and the number of hours currently worked. Low-income women are considerably more likely than affluent women to report a child care constraint on their hours worked, and the more hours a woman already works, the less likely she is to say she would work additional hours. The first of these results is similar to the results for perceptions of the adequacy of nearby child care facilities: low-income women find child care more problematic and hence are more constrained by child care problems than are affluent women. The second result, however, is the opposite of what was found for the perceived adequacy of nearby child care facilities. This finding probably reflects the fact that the amount of time a woman can work is limited by the amount of time available in the day. Women who already are working full-time are less likely to say they would work more hours if they were able to find additional child care simply because they are already working as much as they can, wish, or must.

As for general constraints on women's employment, both past and present (EMPLOYMENT), the supply of relatives has a strong impact on women's perceptions of a child care constraint. Those with surrogate caregivers available in the home or nearby (including African-American women) are less likely than other women to report having experienced a child care constraint on their employment. The supply of related caregivers influences general child care constraints but not current constraints on hours worked; this finding suggests that relatives, if available, can provide the average employed mother with as much child care as she desires, a result that contradicts past results (Presser 1989). If this interpretation is correct, then the availability of relatives should be related significantly to nonlabor force women's current perceptions of child care constraints. Below we ascertain whether this is the case.

In addition to the availability of relatives, economic status is related to employed women's responses to the question on general child care constraints (EMPLOYMENT). In this case, however, the woman's own wage level rather than the family's income is important. High-wage women are less likely than low-wage women to report that child care problems have influenced their employment. Although this relationship has the same form as the relationship between family income and current child care constraints on hours worked (MOREHOURS), the finding that woman's wage is the important variable rather than the family's income raises the possibility that past child care constraints have influenced the woman's wage, rather than the reverse. Consistent with this interpretation is the significant, negative relationship between hours currently worked and reporting a general child care constraint on employment (EMPLOYMENT). The presence of child care problems is likely to restrict the hours that a woman can work; over time it may limit her ability to participate in the labor force, with the eventual result that her stock of human capital is degraded in relation to women able to work continuously and full-time. Thus, although it is possible that low-wage women experience child care constraints on employment more often than high-wage women because their lower earnings limit their child care choices, it is also possible that their wage levels are influenced by experience with child care problems.14

The final variable in Table 4 directly related to general child care constraints (EMPLOYMENT) is the woman's ideals about child care — specifically, whether she feels that parents are the only ideal caregivers for children of all preschool ages. ¹⁵ Contrary to what was predicted, women who feel this way are *more* likely than other women to report a child care constraint on employment. This unexpected result, we suspect, reflects the restriction of the current analysis to employed women. Women who are employed outside the home but who feel they ought to be home taking care of their children are likely to have particularly high standards for substitute child care; hence in the past they may have been particularly prone to child care constraints on their employment.

Regardless of the explanation, both this result and the result for the supply of relatives

are important because they suggest that economic resources are not the only factor determining women's problems with child care. The availability of kin and women's ideals about child care determine these problems as well, perhaps as much as economic resources or more so. Thus, at least among employed women, problems with child care that constrain employment are likely to arise not only because of an inability to purchase more expensive forms of child care, but also because of a desire to use care that is not readily available in the marketplace—namely the care provided by parents or by other relatives.

In regard to women who are out of the labor force (Table 5), the two questions asked of these women (WORKIF and EMPLOYMENT) again are different. The first refers to current constraints that prevent women from entering the labor force; the second, to any child care constraint, past or present, on employment. For current constraints on labor force participation (WORKIF), the availability of relatives is related inversely to reporting a constraint. This finding is consistent with our earlier speculation that the availability of relatives is more important for determining women's labor force participation per se than for determining the hours that employed women work. ¹⁶ Family income also is related inversely to reporting a current child care constraint on labor force participation. When affluent women or women with relatives living nearby are out of the labor force, they are out by choice rather than because they cannot find adequate child care at a reasonable cost.

Contrary to the results for employed women reported earlier, Table 5 shows that nonlabor force women's attitudes about work and child care are related to whether their current labor force status is constrained by problems with child care. Those who are committed more strongly to full-time motherhood are less likely to report a child care constraint. (See the negative coefficient for "parental child care is ideal," the positive coefficient for "work versus motherhood," where work is the high category, and the positive coefficient for the gender-role equality scale.) This finding fits with the hypothesis that a strong commitment to the maternal role, rather than a lack of satisfactory nonmaternal child care, leads some women to remain out of the labor force while their children are young.¹⁷ As shown in Table 4, attitudes about work and motherhood were unimportant for employed women's reports of a child care constraint on their hours of work; this finding suggests that a commitment to the traditional maternal role influences whether women are willing to work at all while their children are young, but does not influence the hours they are willing to work once employed.

The results for the general child care constraint measure (EMPLOYMENT) shown in Table 5 are similar to those observed earlier for employed women. Women with relatives living nearby are less likely than other nonlabor force women to report a past or present child care constraint on their employment, as are those from higher-income families. Thus women who are able to purchase market child care or obtain care from relatives are less likely than other women to report that their employment has been influenced by child care problems, presumably because they are less likely to have experienced such problems.

In sum, then, this analysis suggests that whether women perceive child care problems to have affected their employment behavior depends largely on the supply of nonmarket child care available to them, their level of economic resources, and their attitudes about work and motherhood. Women who have relatives available for child care and those who feel strongly that mothers and fathers themselves should provide all care for preschool-aged children are much less likely than other Detroit-area mothers to report that child care problems have affected or currently are affecting their employment. Likewise, women from relatively affluent families are less likely to report that such problems are constraining their employment, presumably because they are less likely to perceive child care in their area as problematic (as shown in the first analysis we presented) and also because they are freer to

remain out of the labor force voluntarily. The next question to be addressed is whether these same women are more or less likely than other women to report a child care constraint on fertility.

Determinants of Child Care Constraints on Fertility

Table 6 shows the factors predicting child care constraints on birth timing (TIMING) and on numbers of children (NUMBERS) estimated for the total sample of women, regardless of current labor force status. Reports that problems with child care led to the

Table 6. Logistic Response Models Relating Personal and Family Characteristics to Perceived Child Care Constraints on Birth Timing (TIMING) and on Numbers of Children (NUMBERS): Total Sample^a

	TIM	IING	NUM	BERS
Personal Characteristics	Gross Effects	Net Effects	Gross Effects	Net Effects
Child Care Supply				
Whether currently married	55*	39	25	.11
Whether relatives are				
available for care	.24	.05	03	18
Whether African-American	03	31	.60**	.25
Economic Resources				
Household income minus				
R's earnings	13	18	08	11
Whether used food stamps or				
AFDC in 1985	.30	.11	.17	11
R's hourly wage	.01	.00	.01	.01
Intellectual Resources				
Education	.03	.09	.06	.13*
Age of respondent	05	03	03	06*
Amount of Care Needed				
Whether currently employed	.63*	.88*	.44*	.76*
Whether unemployed	15	.03	.28	.50
Number of preschool-				
aged children	49	43	02	21
Attitudes				
Work vs motherhood (work)	.25	.01	.19	05
Parental child care ideal at				
all ages	.07	.27	14	.04
Fertility variables				
Whether fecund	1.51*	1.40*	.18	.11
Number of children born	35*	00	.00	.15
Likelihood ratio/df	_	22.6/17	_	23.2/17

^{*} Statistically significant, .05 level.

^{**} Statistically significant, .01 level.

^a N for all models is 1,176.

delay of a birth are rare; so, too, are significant correlates of these reports. Indeed, only two factors are related directly to postponing a birth because of child care problems: being physically capable of bearing a child (fecund) and being employed at the time of the interview. Although the former relationship may reflect the recognition by the subfecund that delays in their births were caused by biological factors rather than by problems with child care, the absence of a relationship between this variable and constraints on numbers of children suggests that the causation may run in the reverse direction. Women who delayed a birth deliberately may be less likely than women who were attempting to become pregnant quickly to attribute any delay in pregnancy to impairments in fecundity.

That currently employed women are more likely than the nonemployed to have delayed a birth because of child care problems fits with our expectations, because only the women with a relatively strong attachment to the labor force will find it problematic to have a child when adequate child care is unavailable. Presumably the same explanation underlies the relationship between employment status and child care constraints on *numbers* of children (NUMBERS). Only women who wanted or needed to work would be deterred from having an additional child by the prospect of being unable to find adequate child care.

In addition to employment status, three other factors have a direct, significant relationship to reporting a child care constraint on numbers of children; these are race, education, and age. African-American women are more likely than other women to have reduced their desired family size because of difficulties in finding child care, a pattern also found among well-educated and younger women. Although thus far we have treated race as an indicator of the supply of relatives for child care, and education and age as indicators of women's intellectual resources, we think the results for these variables in relation to NUMBERS can be interpreted more readily in terms of women's labor force commitment. Past evidence suggests that lifetime employment has been expected and accepted more highly among African-American women than among white majority women (although the difference probably has been reduced in recent cohorts); commitment to an occupational career also tends to be greater among younger, better-educated women. Insofar as this is true, it would suggest that women with a relatively strong attachment to the labor force are more likely to alter their childbearing because of child care problems than are women with weak labor force attachment.

In sum, then, it would appear that personal or financial commitment to working is the single most important influence on whether mothers of young children report that their fertility has been constrained by child care problems. Economic resources and the availability of relatives affect whether problems with child care constrain women's employment, but these factors do not affect whether problems with child care have led them to postpone a birth or avoid it altogether. For postponement or avoidance, the important consideration seems to be simply whether women anticipate being in the labor force. If they are unable or unwilling to drop out of the labor force or to reduce their hours of work when a child is born, then problems in finding adequate child care may lead them to postpone or avoid having an additional child. For these women, then, the availability, quality, and costs of child care are indeed important for the nexus between work and fertility, as Presser and Baldwin (1980) posited more than a decade ago.

SUMMARY AND CONCLUSIONS

In this paper we have explored the extent to which child care problems constrain women's labor supply and fertility by examining women's responses to direct questions about their experience with such constraints. The results suggest that problems with child care frequently influence women's employment behavior: fully one-third of the sample of mothers of preschool-aged children reported having had this experience at some point in their lives. Much less frequent were reports that child care problems had influenced timing or numbers of children. Although the relatively infrequent reports for fertility behavior may reflect in part the nature of the sample analyzed here — women whose fertility has been restricted severely by child care problems would be unlikely to have a preschool-aged child and hence would be ineligible for the sample — they also may reflect the reality that women's childbearing is influenced less strongly by child care problems than is their employment. Insofar as this is true, and insofar as women's perceptions predict their behavior accurately, it suggests that policies designed to increase the supply or lower the costs of child care might increase the labor supply of mothers of young children fairly markedly (by approximately one-tenth), but would affect their fertility relatively little, especially if increased labor supply itself discouraged them from having additional children. Thus the call by Wattenberg and others to improve the supply of child care in the United States, although worthwhile from the viewpoint of ensuring the well-being of children and women, seems questionable as a means to achieving their goal of increasing U.S. fertility.

The analysis presented here also investigated the factors associated with perceiving child care to be problematic and with reporting a child care constraint on employment and fertility. The results confirmed earlier studies, which found that economic resources are important in determining whether women perceive locally available child care as adequate and whether they report in turn that child care problems have constrained their employment behavior. Low-income women have fewer options than the affluent, perhaps because the areas in which they live offer poorer child care facilities; consequently they are more likely to perceive child care as problematic and to have constrained their employment. This point suggests that policies designed to improve the supply or lower the costs of child care to low-income women, would have the benefit of increasing these women's labor supply and hence of reducing the public assistance burden.

The current analysis also makes clear, however, that income is by no means the only determinant of child care problems or of child care constraints on employment. Women's commitment to working versus traditional domestic roles affects their perceptions of available child care and of child care constraints, as does the supply of related caregivers. When women want or need to work — or already are working —they are less likely to find available child care adequate for their needs, and are more likely to report that child care problems have constrained their employment. When they have relatives living at home or nearby, they are less likely to report a child care constraint. Economic considerations lead some women to have strong labor force attachment; in other cases, however, this attachment is produced by gender-role ideology and personal aspirations for a career. Thus attitudes as well as income and wages are important for women's perceptions of child care and for whether their employment decisions are influenced by child care problems. This finding suggests that policies to improve child care in the United States must look beyond the particular needs of low-income women to encompass the broader population of middle-class women. Although poor women are at particular risk of child care problems, many middle-class women also face these problems and consequently cannot hold the jobs they need or want.

NOTES

¹ For example, the Survey of Program Participation (SIPP), one of the most ambitious surveys fielded by the federal government in the 1980s, not only restricted questions about child care to women who were employed or in school, but also assumed that care provided by relatives was free to respondents (Maume 1989); other studies (e.g., Presser 1989) have found this assumption to be untrue.

² Countering this relationship may be a tendency among well-educated women to have higher standards for the quality of child care, which might make them more critical of the available care and hence less likely to perceive it as adequate. This situation may cancel out any increase in satisfaction produced by better information; such a possibility is consistent with the general weakness of relationships between education and reported child care constraints found in our analysis.

³ In the case of one attitudinal measure we use, a gender-role equality attitude scale, we allow for a curvilinearity in the relationship with reported child care constraints in order to test for the possibility that the distinction between a moderate stance and a strongly proequality stance is relatively unimportant for reports of child care constraints; instead the important distinction is that between a

very traditional outlook and a moderately egalitarian attitude.

⁴ The three counties are Wayne, Macomb, and Oakland. The Detroit area is heterogeneous socially and economically; it includes the largely poor and heavily African-American inner-city as well as the upper middle-class suburbs and the rural areas of the surrounding counties. Thus, although the Detroit area does not represent the nation as a whole, it encompasses mothers living in a wide

range of social and economic circumstances.

The fieldwork was conducted by the Survey Research Center, Institute for Social Research, University of Michigan, under the senior author's supervision. The sample design stratified census blocks according to the 1980 age distribution of women, and oversampled those with a concentration of women in the prime reproductive ages. In Table 1, weights adjusting for the disproportionate sampling of certain strata are not used because these weights are uncorrelated with the variables shown therein. In Table 2, however, the data are weighted. In the multivariate analyses, we represent the three sample strata as dummy variables used to predict the dependent variable rather than adjusting the number of cases with the stratum weights. In all parts of the analysis, controlling for the stratum weights makes no difference for the substantive results; consequently we do not show the coefficients associated with the weights.

⁶ Under Michigan's school entry laws, children born on these dates were first eligible to enter

public school first grade in September 1986, well after the completion of the survey.

⁷ This question was included in both the 1977 and the 1982 June Current Population Surveys. In those surveys, however, the question omitted the phrase "or return to work." There is no reason to think that this difference in wording made a substantial difference for women's responses.

⁸ This estimate assumes that women's reports of child care constraints would match their actual behavior in 100% of the cases. Unfortunately, given the cross-sectional design of the study, we have no way to ascertain whether this would occur. Some women who attributed their absence from the labor force to child care problems may in fact be out of the labor force for other reasons and hence would not respond to improved child care by taking a job, but we have no way to estimate the proportion of the sample for which this might be true.

⁹ Lack of experience with child care or lack of opportunity to postpone a birth or to decide to forgo one altogether does not appear to explain the small percentages reporting that child care influenced their fertility. As a later analysis shows, the percentages saying that child care led them to postpone or avoid a birth are the same or lower among older, higher-parity women as among younger

women.

¹⁰ As noted by Lehrer and Kawasaki (1985), more child care at lower cost might affect fertility indirectly through its impact on women's labor force participation. In this case, however, the likely effect of the improved supply of child care would be negative. That is, more child care would mean fewer children, not more, because women's labor force participation normally has a negative relationship to their fertility. Hence any factor that increases labor force participation would be likely to decrease fertility.

¹¹ Because of difficulties in interpreting the results when attitude variables were included as predictors in the model, we omitted these variables from the final model shown here.

Although it is common to compute a potential wage in which one corrects the selectivity bias potentially associated with the absence of lower-earning women from the labor force (Heckman 1979), in this analysis we used instead the respondent's most recent wage, a measure available for the great majority of women in the sample (only 127 women in the sample had never been employed). We also did not adjust wages for inflation on the grounds that women who have withdrawn temporarily from the labor force in order to raise children will make decisions about reentry based on what they were last able to earn.

Number of preschoolers may be unrelated to perceptions of nearby child care facilities because women with more than one preschooler tend to care for their children themselves or to rely on other nonmarket child care (husband or relative care; see Kuhlthau and Mason 1991).

¹⁴ This point is consistent with a recent analysis by Dalto (1989) showing that the availability of maternity leave influenced women's accumulation of human capital. Although Dalto was concerned with maternity leave rather than with availability of child care, his conclusions may apply to child care as well.

¹⁵ We created this variable from a series of questions asking women to name the ideal daytime caregiver for children of different preschool ages. Women who named the mother or father as the ideal

caregiver for children of all preschool ages were scored 1; all others were scored 0.

¹⁶ Inconsistent with our expectations is the result for the race variable: African-American women are more likely than other women to report a child care constraint on their labor force participation. Given the controls for income and the availability of relatives, we find it difficult to interpret this result. One possibility, however, is that it reflects unmeasured variation in the supply of market child care in different neighborhoods of the Detroit metropolitan area. If this speculation is correct, it would suggest that African-American women are disadvantaged not only by their tendency to be poor, out of work, and without a husband or other male partner, but also by living in neighborhoods offering relatively poor child care facilities.

¹⁷ The significant, negative coefficient for the quadratic term of the gender-role equality scale shows that the positive relationship levels off at higher values of the scale. Thus the distinction between holding very traditional attitudes and having less traditional attitudes towards women's roles is more important than the distinction between holding moderate and very nontraditional attitudes for whether a child care constraint on labor force participation is reported.

REFERENCES

Blau, David M. and Philip K. Robins. 1988. "Child-Care Costs and Family Labor Supply." Review of Economics and Statistics 70:374-81.

1989. "Fertility, employment, and child-care costs." Demography 26:287-99.

Bloom, David E. and Todd P. Steen. 1990. "The Labor Force Implications of the Expanding Child Care Industry." *Population Research and Policy Review* 9:25-44.

Connelly, Rachel. 1989. "The Effect of Child Care Costs on Married Women's Labor Force Participation." Unpublished manuscript, Department of Economics, Bowdoin College.

Dalto, Guy. 1989. "A Structural Approach to Women's Home-Time and Experience-Earnings Profiles: Maternity Leave and Public Policy." Population Research and Policy Review 8:247-66.

Gustafsson, Siv and Frank Stafford. 1988. "Daycare Subsidies and Labor Supply in Sweden." Unpublished manuscript, Institute for Social Research, University of Michigan.

Heckman, James. 1979. "Sample Selection Bias as Specification Error." Econometrica 47:153-61.
 Hogan, Denis P., Ling-Xin Hao, and William L. Parrish. 1990. "Race, Kin Networks, and Assistance to Mother-Headed Families." Social Forces 68:797-812.

Kisker, Ellen Eliason, Rebecca Maynard, Anne Gordon, and Margaret Strain. 1989. "The Child Care Challenge: What Parents Need and What Is Available in Three Metropolitan Areas — Executive Summary." Princeton, NJ: Mathematica Policy Research.

Kuhlthau, Karen and Karen Oppenheim Mason. 1991. "Type of Care: Determinants of Use in a Metropolitan Area." Unpublished manuscript, East-West Center, Honolulu.

Lehrer, Evelyn and Seiichi Kawasaki. 1985. "Child Care Arrangements and Fertility: An Analysis of Two-Earner Households." *Demography* 22:499-513.

Mason, Karen Oppenheim and Laura Duberstein. 1992. "Consequences of Child Care for Parents' Well-Being." In Child Care in the 1990s: Trends and Consequences, edited by Allan Booth. Hillsdale, NJ: Erlbaum.

Maume, David J., Jr. 1989. "Child Care Costs and Women's Employment Turnover." Unpublished manuscript, Department of Sociology, University of Cincinnati.

Menken, Jane. 1985. "Age and Fertility: How Late Can You Wait?" Demography 22:469-83.

O'Connell, Martin and David E. Bloom. 1987. "Juggling Jobs and Babies: America's Child Care

Challenge." Population Trends and Public Policy No. 12. Washington, DC: Population Reference Bureau.

Presser, Harriet B. 1989. "Some Economic Complexities of Child Care Provided by Grandmothers." Journal of Marriage and the Family 51:581-91.

Presser, Harriet B. and Wendy Baldwin. 1980. "Child Care as a Constraint on Employment: Prevalence, Correlates, and Bearing on the Work and Fertility Nexus." *American Journal of Sociology* 85:1202-13.

SAS/STAT User's Guide. 1990. Version 6, 4th ed., Vol. 1. Cary, NC: SAS Institute.

Stack, Carol B. 1975. All Our Kin. New York: Harper and Row.

Wattenberg, Ben. 1987. The Birth Dearth. New York: Pharos.