Variation in Transition to the Next Birth by Parity and Marital Status

by

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Abstract

Much attention has been devoted to the consequences of non-marital births in terms of women's future achievements and children's well-being. However, little is known about the subsequent fertility behavior of women with non-marital first births. Surprisingly, there is very little difference in completed fertility by marital status at first birth. However, this overall similarity masks differences in fertility behavior at different parities. In this paper, I analyze parity progression ratios at parities above one, concentrating on differences in parity progression patterns between women married and unmarried at the previous birth. I find that women with non-marital first births are less likely to have a second child than women whose first births take place within marriage. At higher parities, on the other hand, marital status is unrelated to parity progression ratios. I turn to the social meaning of children within the context of a marriage to interpret these results.

Introduction

Historically, most childbearing in the United States has taken place within marriage, and fertility rates continue to be higher for married women than for unmarried women. There are several reasons for this link between fertility and marriage. What demographers coyly call "exposure to risk of conception" is higher among married women: married people have sex more often than unmarried people (Laumann et al. 1994). There are also normative pressures linking childbearing and marriage. Non-marital childbearing is discouraged by social stigma attached to children born outside wedlock, while married couples are nudged toward childbearing as a way of completing the family or solidifying the marriage. Finally, many people prefer to wait until they are married to have children because it is easier to distribute the financial, emotional, and physical strain of childraising between two people.

Over the past thirty years, however, the fraction of births that takes place outside of marriage has increased dramatically, causing renewed empirical interest in the marriage-fertility connection. In part, the increase in non-marital births is due to increased time spent unmarried (Smith, Morgan, and Koropeckyj-Cox 1996). That is, more children are born outside of marriage because women are spending more time unmarried: the average age at marriage has risen and the overall likelihood of getting married has declined. Since 1975, however, fertility rates among unmarried women have increased. This increase has been experienced across all groups, but is strongest among women with low education levels and poor economic prospects. Less privileged women appear to be postponing marriage but not childbearing (or at least to postpone marriage longer than childbearing), while better-off women postpone both marriage and fertility (Ellwood and Jencks 2001).

In a comprehensive review of research on family change, Ellwood and Jencks (2001) summarize the most common explanations for the dissociation of marriage and fertility. (Note that this dissociation works both ways–more women are having children while they are not married, and more married women are postponing or foregoing childbearing. More research, however, has been directed at the "social problem" of non-marital childbearing than at childless marriages.) A series of economic explanations has been proposed, including the decline in real male wages, the decreasing number of marriageable men, and the increase in female wages (Becker 1991; Oppenheimer 1994). These economic arguments, however, focus on the decision to marry, and cannot explain decisions to have children outside of marriage. Welfare policy and government subsidies for single mothers have also been blamed for increased non-marital childbearing, but most empirical evidence shows that the effects of welfare policy on marriage rates are small to nonexistent (Foster and Hoffman 2001; Moffitt 1998). Attitudes toward non-marital childbearing have become more accepting (Pagnini and Rindfuss 1993). It is not clear, however, whether attitudinal change is a cause or an effect of changed behavior. Ellwood and Jencks propose an explanation that combines improved technology enabling women to control the timing of fertility, increased economic opportunity for highly educated women and low prospects for employment for less educated women, and decreased stigma against non-marital childbearing.

One implication of this multi-causal explanation for the growth in non-marital fertility is that women with non-marital first births are very different from women with marital first births. Women with non-marital first births are disproportionately young, poorly educated, and African American (Morgan 1996; Morgan and Rindfuss 1999; Sullivan 2003; Ventura et al. 1995). Aside from these measurable characteristics, women with non-marital first births are likely to be

selected on unobservable characteristics such as fecundity and effective use of contraception. In addition, a far higher proportion of non-marital than marital births are reported as unintended, suggesting that the factors leading to non-marital births are probably different from the factors leading to marital births (Abma et al. 1997; Barber and Axinn forthcoming).

It would therefore be expected that women with non-marital first births have different fertility outcomes from women with marital first births, although it is not clear in which direction differences in total fertility would appear. On the one hand, many of the characteristics associated with non-marital first births are also associated with higher than average fertility rates (Morgan and Rindfuss 1999; Evans 1986). As mentioned above, women with non-marital first births may have higher than average fecundity or use contraception less effectively than other women, which would also lead to higher fertility. We might therefore expect women with non-marital first births to have more children than women with marital first births, largely for compositional reasons. On the other hand, fertility differentials by most socio-demographic characteristics have decreased over the past thirty years, possibly because of the increased availability of effective contraception. The overall effect of these compositional factors might therefore be small, and other factors might offset the positive effects of these characteristics on fertility. For example, women who bear a child outside of marriage are less likely than women without a child to ever marry (Lichter and Roempker Graefe 2001; Upchurch, Lillard, and Panis 2001). If this disadvantage on the marriage market carries over to the dating market, women with non-marital first births might have lower subsequent fertility than women who have first children within marriage, due to the same factors that lead to overall lower levels of fertility among unmarried women, such as lower exposure to risk of conception and the higher costs of raising children without a partner. In this paper, I will assess the effects of the competing factors

outlined above by analyzing differences in fertility outcomes depending on the marital context of women's low-parity births.

Background

Previous research has shown that the relationship between fertility rates and current marital status varies by parity, and that this variation is different across different races and education levels. For the most part, never-married women have lower fertility rates than married women, but the opposite relationship holds among low-parity women with less than a high school degree (Rindfuss and Parnell 1989). The relationship between marital history and fertility trajectories is less well understood. Overall, married and unmarried women have approximately equal chances of having a second child within ten years of the first child (Wu, Bumpass, and Musick 2001). However, variation in this relationship by race and education level is not well known; nor are fertility trajectories after the second child. Upchurch, Lillard, and Panis (2002) find that having previous children reduces the likelihood of non-marital fertility. That is, mothers have lower rates of non-marital fertility than women with no children. Non-marital fertility thus appears to operate differently from marital fertility: among married women, women with one child have higher birth rates than women with no children.

The absence of clear hypotheses on fertility behavior after a first non-marital birth is part of a larger lacuna in the fertility literature. Given the huge economic costs of children, theories of contemporary fertility try to explain the compensating benefits of children that led people to become parents. Hypotheses have been proposed highlighting children's role in increasing social capital (Schoen et al. 1997) and reducing life course uncertainty (Friedman, Hechter, and Kanazawa 1994). Biological predispositions probably encourage childbearing, though it is difficult to tell how these predispositions play out in modern social contexts (Haaga 2003;

Morgan and King 1999). And social norms continue to exert pronatalist pressure, especially through the role of motherhood in defining women's identities (Blake 1972; Hewlett 2002; McMahon 1995; Nock 1987). None of these theories, however, address the motivations for fertility after the first child: do two children provide twice the benefit of one, or do all gains come with the transition to parenthood? Most theories that attempt to make sense of fertility after the first child center on children's place within the family–for instance, the desire to have a second child so the first child will not be an only child (Blake 1981; Bulatao 1981; Ryder 1969, 1973, 1980), wanting children of each gender (Pollard and Morgan 2002; Yamaguchi and Ferguson 1995), or the need to have children to solidify a marriage (Griffith, Koo, and Suchindran 1985; Thomson and Li 2002).

Outline of analysis

In this paper, my primary empirical goal is to determine the relationship between the marital context of a low-parity birth and subsequent fertility behavior. I first consider whether women with non-marital first births, on the whole, eventually have more or fewer children than women with marital first births. Breaking completed fertility down into components, I then analyze parity progression ratios at parities one and two, using both descriptive statistics and multivariate logistic regression models. I begin with the simple question of whether women whose first births take place outside of marriage are more or less likely to have another child. I then analyze the progression to a third birth among women with at least two children, taking into account the possible carry-over effects of marital status at the first birth, the more immediate effects of marital status at the second birth, and finally the effects of marital history taken as a whole.

I do not attempt to sort out either the complicated causal orderings between marriage and fertility or the process of selection into non-marital fertility, but rather focus on what happens after the selection into non-marital birth has been made, and take subsequent marriage as both a consequence of this initial behavior and a mediating factor in subsequent behavior.

Data and methods

I use data from the Fertility and Marital History Supplement to the Current Population Survey of June 1995. This survey collected marital and fertility histories from 47410 women age 15 to 65. Information was gathered on the first three marriages and the last marriage, and on the first four children and the last child. The major benefit of using data from the CPS Fertility Supplement is the large sample size, which allows analysis of relatively rare combinations of characteristics (for example, well-educated women who have non-marital first births). Of course, there are also drawbacks to using this survey. First, the CPS contains very limited data on partnership. There is no information on the father of a woman's children, making it impossible to determine whether women eventually marry the father of children born out of wedlock. The CPS also does not record either current cohabitation status or cohabitation histories. Second, the CPS collects only completed education level, rather than education history. Finally, the CPS does not include date of immigration for respondents born outside of the United States, so that childbearing by foreign-born women cannot be reliably placed in the U.S. or in the country of origin.

I use CPS data to construct reproductive histories for women who have completed childbearing (women age 40 and over). I run separate logistic regressions for the second and third births; for each model, I estimate the probability of having an nth child for women with at least (n-1) births. As independent variables, I concentrate on standard demographic measures–

race, marital status, age at last birth, and education level–as well as a measure for historical period. In this descriptive demographic analysis, I do not include fine-grained controls that might serve as more proximate determinants of fertility. Instead, I look at these key variables to understand the broad outlines of fertility determinants.

All models include white and African American non-Hispanic women born in the United States in 1955 or before; women with multiple births at any parity are excluded. (450 women in the sample had at least one multiple birth.) Final sample sizes were 15426 women for the second birth models and 12845 women for the third birth models.

Dependent variable

After briefly presenting data on completed fertility, I turn to parity progression ratios as a measure of fertility after the first child. A parity progression ratio is defined as the proportion of women at parity (n) who progress to parity (n + 1)—that is, the proportion of women with a given number of children who go on have at least one more child. Parity-specific measures are necessary to understand variations in decision making at different points in the family formation process. Parity progression ratios provide a measure of long-term fertility outcomes in an easily interpretable metric. The main drawback of using this measure is that I can only include women in my analysis who have completed their childbearing years, or at least are close to the end of them, and I thus ignore recent fertility behavior by younger women.

Independent variables

The primary independent variable is marital status at the previous birth. I count any births that took place while the mother was married as marital births, not distinguishing between births conceived inside and outside of marriage. (I included legitimated births as a separate category in exploratory analyses, but they did not differ significantly from marital births.) Thus,

I have two categories for marital status at first birth, married and unmarried. In the model for third births, I separately measure the effects of marital status at first birth and marital status at second birth. I compare results using these variables with models using a more complete set of dummy variables representing marital history over the first two births: women with two non-marital births, women with a non-marital first birth and a marital second birth, women with a marital first birth and a non-marital second birth, women with two marital births in different marriages, and women with two marital births in the same marriage. Figure 1 presents a flow chart illustrating the marital trajectories that define these categories.

Parity progression ratios cumulate behavior across an extended time period. In my selection of independent variables, therefore, I am limited to status measures at a given time (the birth of the last child) rather than changing period measures. I cannot incorporate subsequent changes in marital status that might affect the likelihood of future births. My results for the likelihood of having a third child, for instance, combine the behavior of women who remain in their current marital status with women who change statuses. This limitation is more serious in some cases than in others. For women with marital first births, the likelihood of having another child varies little depending on whether or not the woman stays married (based on simple tabulations of the 1995 CPS). For women with non-marital births, however, the likelihood of having another child is very different for women who later marry versus women who never marry. This limitation should be kept in mind when interpreting results; the results are, in effect, a weighted average of the outcomes of different groups of women.

Including age at first birth controls for the length of time a woman has to have another child and her fecundity during that period. For convenience in interpreting results, I center age around age 25, which shifts the intercept but does not affect the coefficient for age. Thus, the

intercept should be interpreted as the log-odds of having another birth for women who had their first birth at age 25. I include a term for age squared to allow for non-linearity in the relationship between age and the likelihood of having another child. (I divide age by 10 for the age squared term in order to scale the coefficients in a convenient metric.) However, in testing for interactions between age and other covariates, I only interact the linear age term. In third birth models, I also control for the length of the birth interval between the first two births. This variable incorporates the effects of age of the mother as well as effects related to the age of the first child.

Women are divided into three groups by completed education level: women who never received a high school diploma, women with a high school degree (including GED) and women with some college, and women with a bachelor's degree or higher. I tested models with more precise educational categories and models with different divisions of educational groupings, but these groupings proved to best capture variation in completed fertility by education level.

I use two birth cohort groupings. Women born 1929-1939 were in their twenties in the 1950s and 1960s, and spent most of their reproductive years during the Baby Boom, while women born 1940-1955 came of age during the leveling of fertility rates that took place in the 1970s and 1980s. Most childbearing to women in this later cohort took place after the revolution in contraceptive technology sparked by the popularization of the Pill in the mid-1960s; the mid-60s have been shown to be a turning point in fertility behavior, with distinctive patterns before and after this period (Morgan and Rindfuss 1999). These two cohort groups therefore represent fertility experiences in different historical periods.

Results

Surprisingly, there is virtually no difference in completed fertility between women with marital and non-marital first births (table 1). However, examining completed fertility by age at first birth does reveal differences according to marital status. For most ages at first birth, women with non-marital first births have fewer children total than women with marital first births (figure 2; this graph is based on observed data and not smoothed in any way). Total fertility converges as age at first birth increases, and above age 35 women with non-marital first births actually have more children than women with marital first births. (Note, though, that there are very few women with non-marital first births at these ages, so these averages may not be reliable.) The average number of children ever born to women with non-marital first births is similar to that of women with marital first births, despite the consistent differences in the age-specific totals, because women with non-marital first births tend to be younger than women whose first births are within marriage (table 2), and younger women on average have higher completed fertility,

Examination of parity-specific measures uncovers additional variation in fertility behavior for women with marital and non-marital first births. Women with non-marital first births are less likely to have a second child than women with marital first births (77% of unmarried mothers vs. 84% of married mothers go on to have another child; table 1). Among women who have had a second birth, however, women with non-marital first births are more likely to have a third birth. These differences balance each other out, so that women at parity one are equally likely to have a third birth, regardless of marital status at first birth.

Women with marital and non-marital first births have very different characteristics (table 2). A higher proportion of women with non-marital births than women with marital births are African American, and fewer women with non-marital births have a bachelor's degree. On

average, women with non-marital first births are almost three years younger at first birth than women with marital first births. These socio-demographic characteristics are correlated with parity progression ratios as well; descriptive statistics are presented in table 3. Note that the characteristics that are associated with non-marital first births do not all influence parity progression ratios in the same direction. African American women are less likely to have a second child, while younger mothers are more likely to have a second child. The more education a women has, the less likely she is to have a second child. In addition, some of these relationships change direction at parity two (table 4). For instance, African American women with at least two children are more likely than white women with at least two children to have a third child.

To better understand the interaction between compositional and behavioral influences on fertility after the first birth, I carry out multivariate analyses on the likelihood of having another child. Results for second births are shown in table 5. In model 1, marital status at first birth is the only covariate, while in models 2 and 3 I add other covariates and interaction terms, respectively. Looking across all three models, women who were not married when they gave birth to their first child are less likely to have another child than women who were married when they had their first child. This relationship is not only robust to other controls, but is strengthened when socio-demographic characteristics are controlled in models 2 and 3. The negative univariate relationship is muted by the fact that women who have non-marital first births have other characteristics that make them more likely to have a second child.

Most of the interactions between marital status at first birth and other socio-demographic characteristics introduced in model 3 are not significant, indicating that the relationship between marital status at first birth and the likelihood of having a second child is fairly consistent across

different groups of women. The exception here is for the most educated women, for whom the correlation between marital status and second births is stronger that for other women. Interactions with time (the dummy variable indicating membership in the Baby Boom cohorts) are also not significant, again with the exception of the education variables.

Although these models clearly show that women with non-marital first births are less likely to have another child than women with marital first births, it is less clear why this difference appears so consistently. Looking at the relationship between marital status and subsequent fertility at other (higher) parities can shed some light on this question. If the structural features of marriage—such as more frequent sexual activity or better financial support for children—lead married women to have more children than unmarried women, then the same positive relationship between marriage and the likelihood of having another child should hold for women married at the second birth as for women married at the first birth. And if women with non-marital first births differ in systematic ways from women with marital first births, then the correlation between marital status at first birth and subsequent fertility should continue throughout a woman's lifetime, persisting for the decision to have a third child as well as the progression to second birth.

I test these hypotheses by running separate models to assess the role of marital status at second birth and marital status at first birth in explaining decisions to have a third child. I also include a model using a more complex set of dummy variables to account for changes in marital status after the first birth. These results are shown in detail in table 6 and summarized briefly in table 7. In exploratory analyses, I also ran models including interactions between marital status dummy variables and the other covariates. Few of these interaction terms were statistically

significant and the main effects did not change substantially, so interaction terms are not included in the final models.

When no other characteristics are controlled, having a non-marital birth at any point is positively associated with having a third child. Overall, women with non-marital first births are more likely to have a third child than women whose first births take place within marriage (model 1). In addition, women who were unmarried when their second child was born are more likely to have a third child than women with marital second births (model 2). The relationship between marital status and the likelihood of having a third birth is in the opposite direction from the relationship between marital status and the progression to a second birth.

The results of models 3 and 4, where control variables are introduced, suggest that this positive relationship is purely compositional. Once the major socio-demographic correlates of fertility have been added to the model, marital status (at either first or second birth) is not significantly associated with the likelihood of having a third birth. Thus, being married in and of itself does not seem to be related to the progression to third birth. Neither the structural attributes of being married nor selection into marriage on unmeasured characteristics can explain variation in fertility behavior after the second child.

The final model, model 5 (table 6), depicts a fairly complex relationship between marital history and fertility behavior. In this regression, women who have two marital births when married to the same man are the omitted category. They are compared to women with marital first births who experience marital disruption, further divided into women who subsequently divorce and have a non-marital second birth and women who divorce and remarry before having a second marital birth. Women with non-marital first births are likewise divided into those who

go on to have a second non-marital birth and those who marry and have their second child within marriage. (Again, refer to figure 1 for a graphical representation of these categories.)

In this specification, women with non-marital first births do not have significantly different odds of having a third child than women who have two children in an intact marriage. Neither group of women with non-marital first births differ from women in the omitted category, women with two births in the same marriage. On the other hand, both groups of women with marital first births who experience marital disruption have greater odds of having a third child than women with two births in the same marriage. (For clarity, the adjusted odds ratios are included in figure 1 diagramming marital trajectories.) These findings suggest that explanations for the relationship between marital status and fertility should incorporate the family formation process and the relationship between spouses as well as the structural features of marriage.

The coefficients for other socio-demographic variables are largely invariant to the specification of marital history. Comparing model 5 with models 3 and 4, coefficients for control variables are essentially the same when the more detailed description of marital history is used. Additional marital history variables thus add independent information to the model, rather than simply explaining other relationships.

Discussion

Overall, women with non-marital first births are less likely to have a second child than women with marital first births. Although more women with non-marital first births have characteristics associated with high fertility, these characteristics are not enough to offset the depressing effect of a non-marital first birth. These results agree broadly with other studies showing that unmarried women have lower fertility rates than married women (e.g. Rindfuss and Parnell 1989). It is not clear whether this association between marital status at first birth and

subsequent fertility comes from structural factors related to marriage, such as higher coital frequency or better access to resources (financial and other) for raising children, or is linked to some other unobserved characteristics that differ for women with marital and non-marital births.

Results from my analysis of third births shed some light on these questions. Marital status at second birth has little relationship with the likelihood of having a third child, once other characteristics are controlled. Thus, it is unlikely that the lower parity progression ratios of unmarried women stem solely from structural characteristics of marriage. Marital status at first birth is also uncorrelated with progression to a third child, net of other factors. Factors associated with selection into a non-marital first birth appear not to have an effect on fertility after the second birth. Instead, parity progression ratios at parity two vary with marital history over the first two births. Women who experience marital disruption after a marital first birth and then go on to have a second child are significantly more likely to have a third child than either women who have been continuously married or women with non-marital first births.

Unfortunately, information on the father of children is not included in the CPS. This gap makes it difficult to come to firm conclusions about family context based on this data. For instance, many women with a non-marital first birth and a marital second birth may be married to the father of their first child. If so, this fact might explain why these women have similar fertility patterns to women with two births in a stable marriage. Studies of fertility in step-families suggest that the couple's desire to have a child in the current union, even if both have their own children from previous unions, can increase fertility at higher parities relative to the fertility of stably married couples (Griffith, Koo, and Suchindran 1985; Thomson and Li 2002). This hypothesis that an individual's parity count is "reset" in a new partnership fits well with my

finding that women with children in two different marriages have higher subsequent fertility than women with children in a single marriage.

Clearly, more research is needed, with different types of data, to fully understand these findings. The role of men in the family formation process–as providers, as partners, and as parents–is completely obscured in this study. Intentions and attitudes are missing, as are biological factors such as medical sterilization and age-related infecundity. Still, this analysis demonstrates that the process of family formation, rather than marital status alone, influences progression to the next child, and that explanations for differences in fertility by marital status need to take into account family context and the role of children in the family.

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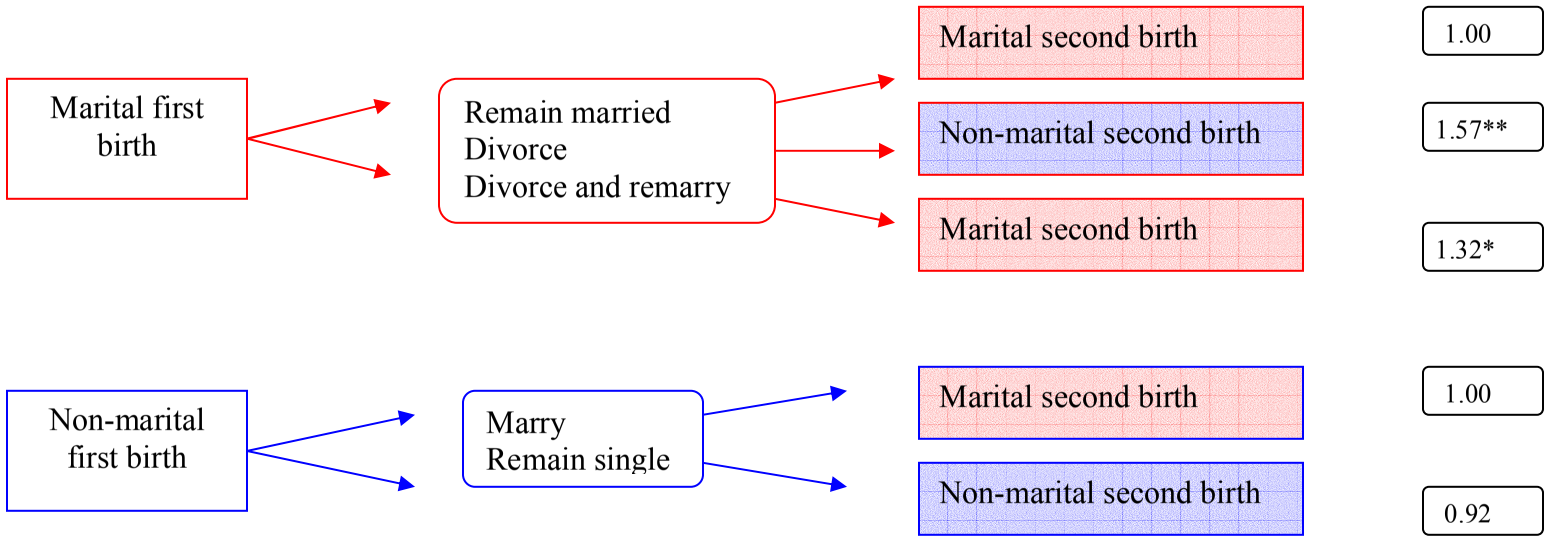
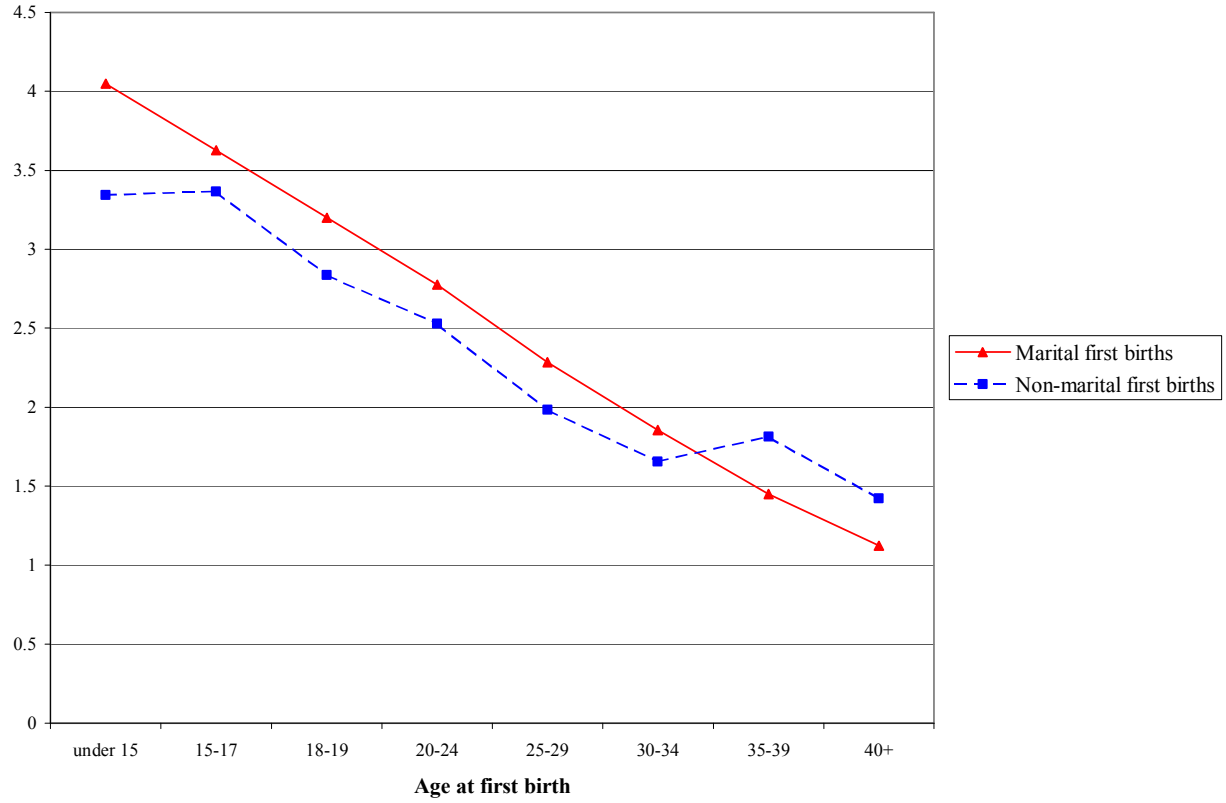
Figure 1: Possible marital/fertility histories



Odds of having a third child, conditional on second birth, relative to continuously married women

Figure 2: Completed fertility by age and marital status at first birth, conditional on having a first birth



Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Figure includes white and African American non-Hispanic women born in the United States between 1939 and 1955. Women with multiple births at any parity are excluded. Totals weighted using CPS survey weights.

Table 1. Subsequent fertility of women with at least one child

	All women	Marital first births	Non-marital first births
Number of women	15426	13094	2332
Completed fertility	2.71	2.70	2.74
Percent having second birth	83.0	84.1	76.9
Percent having third birth	45.2	45.3	45.1
Percent having third birth, conditional on second birth	54.5	53.9	58.6

Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Table includes white and African American non-Hispanic women born in the United States between 1939 and 1955. Women with multiple births at any parity are excluded. Statistics are weighted using CPS survey weights.

Table 2. Characteristics of women with marital and non-marital first births

	Marital first birth	Non-marital first birth
Number of women	13094	2332
Percent African American	7.4	42.8
Average age at first birth	23.0	20.4
Percent with less than high school degree	11.7	24.4
Percent with high school degree or some college	67.4	63.7
Percent with a bachelor's degree or higher	20.9	11.9
Percent born in Baby Boom cohort (1929-1939)	32.2	20.7
Percent born in post-Boom cohort (1940-1955)	67.8	79.3

Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Table includes white and African American non-Hispanic women born in the United States between 1939 and 1955. Women with multiple births at any parity are excluded. Statistics are weighted using CPS survey weights.

Table 3. Percent of women having a second child before age 40 for women with at least one child

	Percent	N
All women	83.0	15426
Marital status at first birth		
Married	84.1	13094
Unmarried	76.9	2332
Race		
White	83.5	13644
African American	79.3	1782
Age at first birth		
Under 15	93.9	135
15-17	90.2	1425
18-19	89.4	2688
20-24	86.9	6727
25-29	77.5	3012
30-34	64.5	1042
35-39	36.7	342
40+	12.0	55
Education level		
Less than high school degree	87.2	1771
High school degree/some college	83.5	8674
Bachelor's degree or higher	78.1	3051
Birth cohort		
Baby Boom (born 1929-1939)	88.5	4701
Post-Boom (born 1940-1955)	80.5	10725

Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Table includes white and African American non-Hispanic women born in the United States between 1939 and 1955. Women with multiple births at any parity are excluded. Percents are weighted using CPS survey weights.

Table 4. Percent of women having a third child before age 40 for women with at least two children

	Percent	N
All women	54.5	12845
Marital status at first birth		
Married	53.9	11053
Unmarried	58.6	1792
Marital history		
Both births non-marital	61.7	919
First birth non-marital, second birth marital	55.3	873
First birth marital, second birth non-marital	53.4	229
Both births marital, different marriages	45.5	443
Both births marital, same marriage	54.2	10381
Race		
White	53.0	11430
African American	65.5	1415
Age at first birth		
Under 15	61.9	125
15-17	72.2	1277
18-19	65.2	2417
20-24	56.6	5862
25-29	39.6	2354
30-34	20.3	678
35-39	20.0	124
40+	38.6	8
Education level		
Less than high school degree	70.9	1771
High school degree/some college	54.3	8674
Bachelor's degree or higher	67.0	2400
Birth cohort		
Baby Boom (born 1929-1939)	68.8	4170
Post-Boom (born 1940-1955)	47.7	8675

Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Table includes white and African American non-Hispanic women born in the United States between 1939 and 1955. Women with multiple births at any parity are excluded. Percents are weighted using CPS survey weights.

Table 5: Regression of the likelihood of having a second child before age 40 for women with at least one child

	MODEL ONE			MODEL TWO			MODEL THREE		
	Coefficient	SE		Coefficient	SE		Coefficient	SE	
Intercept	1.69	0.02	***	1.47	0.04	***	1.45	0.04	***
Marital status at first birth (omitted=married)									
Unmarried	-0.49	0.05	***	-0.70	0.07	***	-0.64	0.09	***
Race (omitted=white)									
African American				-0.25	0.07	***	-0.30	0.11	**
Birth timing									
Age at first birth in years – 25				-0.14	0.00	***	-0.13	0.01	***
(Age at first birth in years – 25)/10, squared				0.27	0.07	***	0.27	0.07	***
Education (omitted=high school/some college)									
No high school diploma				0.02	0.08		0.17	0.12	
Bachelor's degree or higher				0.15	0.06	**	0.18	0.07	**
Birth cohort (omitted=post-Boom)									
Baby Boom (born 1929-1939)				0.49	0.06	***	0.54	0.08	***
Interactions with marital status at first birth									
Unmarried * African American							0.20	0.15	
Unmarried * age at first birth							0.01	0.01	
Unmarried * no high school diploma							0.08	0.17	
Unmarried * bachelor's degree or higher							-0.44	0.16	**
Unmarried * Baby Boom cohort							-0.21	0.17	
Interactions with birth cohort									
Baby Boom cohort * African American							-0.13	0.17	
Baby Boom cohort * age at first birth							-0.06	0.01	***
Baby Boom cohort * no high school diploma							-0.50	0.16	**
Baby Boom cohort * bachelor's degree or higher							0.11	0.16	
-2 Log likelihood	13857			12613			12563		
Degrees of freedom	1			7			16		

* $p<0.05$, ** $p<0.01$, ***$p<0.001$.

Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Sample: White and African American non-Hispanic women born in the United States between 1929 and 1955. Women with multiple births at any parity are excluded. N=15426.

Table 6: Regression of the likelihood of having a third child before age 40 for women with at least two children

	MODEL ONE			MODEL TWO		
	Coefficient	SE		Coefficient	SE	
Intercept	0.17	0.02	***	0.18	0.02	***
Marital status at first birth (omitted=married)						
Unmarried	0.18	0.05	***			
Marital status at second birth (omitted=married)						
Unmarried				0.21	0.06	**
-2 Log Likelihood	17669			17671		
Degrees of freedom	1			1		

* p<0.05, ** p<0.01, ***p<0.001.

Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Sample: White and African American non-Hispanic women born in the United States between 1929 and 1955. Women with multiple births at any parity are excluded. N=12845.

Table 6, continued

	MODEL THREE			MODEL FOUR			MODEL FIVE		
	Coefficient	SE		Coefficient	SE		Coefficient	SE	
Intercept	0.28	0.05	***	0.28	0.05	***	0.29	0.05	***
Marital status at first birth (omitted=married)									
Unmarried	-0.07	0.06							
Marital status at second birth (omitted=married)									
Unmarried				0.03	0.07				
Marital history (omitted=both births marital, same marriage)									
Both births non-marital							-0.08	0.08	
First birth non-marital, second marital							0.00	0.08	
First birth marital, second non-marital							0.45	0.15	**
Both births marital, different marriages							0.28	0.11	*
Race (omitted=white)									
African American	0.42	0.07	***	0.39	0.07	***	0.43	0.07	***
Birth timing									
Age at first birth in years - 25	-0.14	0.01	***	-0.14	0.01	***	-0.14	0.01	***
(Age at first birth in years – 25)/10, squared	-0.14	0.09		-0.16	0.09		-0.15	0.09	
Interval in months between first and second birth	-0.02	0.00	***	-0.02	0.00	***	-0.02	0.00	***
Education (omitted=high school/some college)									
No high school diploma	0.33	0.06	***	0.33	0.06	***	0.33	0.06	***
Bachelor's degree or higher	-0.02	0.05		-0.02	0.05		-0.01	0.05	
Birth cohort (omitted=post-Boom)									
Baby Boom cohort (born 1929-1939)	0.75	0.04	***	0.76	0.04	***	0.76	0.04	***
-2 Log Likelihood	15459			15460			15444		
Degrees of freedom	8			8			11		

* p<0.05, ** p<0.01, ***p<0.001.

Data: 1995 Current Population Survey, Marital and Fertility History Supplement. Sample: White and African American non-Hispanic women born in the United States between 1929 and 1955. Women with multiple births at any parity are excluded. N=12845.

Table 7: Relative odds of having a third child before age 40 for women with at least two children

	Unadjusted Odds Ratio	Adjusted Odds Ratio
Marital status at first birth (omitted=married)		
Unmarried	Positive	No significant effect
Marital status at second birth (omitted=married)		
Unmarried	Positive	No significant effect
Marital history (omitted=both births marital, same marriage)		
Both births non-marital		No significant effect
First birth non-marital, second marital		No significant effect
First birth marital, second non-marital		Positive
Both births marital, different marriages		Positive

Adjusted odds ratios control for race, age at first birth, interval to second birth, education level, and birth cohort. Results taken from table 6.