VARIATION IN CONTRACEPTIVE PLANNING STATUS OF NON-MARITAL BIRTHS BY AGE AND RELATIONSHIP CONTEXT

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Abstract

Although non-marital fertility continues to be associated with teen fertility, an increasing proportion of non-marital births in the United States are higher parity births, births to older women, and births to cohabiting women. In this paper, we examine variations in the planning status of non-marital births according to these characteristics. We use data from the 2002 National Survey of Family Growth to distinguish planned non-marital births from those that resulted from contraceptive failure or from "non-purposive non-contraception," that is, non-use or discontinuation of contraception for reasons other than a desire to get pregnant. Multinomial logit analysis of these three categories shows that non-marital births to older women and women who are cohabiting at the time of conception are more likely to be planned births relative to either of the two other categories. Socio-economic status is not related to non-purposive non-contraception and is only weakly related to the likelihood of reporting a planned birth rather than contraceptive failure. We conclude that although the importance of formal marriage to childbearing is decreasing, partnership continues to be a key factor in deciding to have children.

Over the past 40 years, the proportion of births in the United States that take place to unmarried women has increased steadily and sharply, from 5.3% in 1960 to 18.4% in 1980 and 34.8% in 1999 (Martin et al. 2005). Non-marital fertility is most common among women with low educational and economic prospects (Ellwood and Jencks 2004; Ventura et al. 1995). However, the composition of women who give birth while unmarried is far from uniform. While the stereotypical "unwed mother" is a never-married teenager, in recent years unmarried mothers are more likely to have other children, to be living with the father of their child, and to be age 20 or older. In the 1990s, for instance, less than one-third of non-marital births were to teenagers, compared to more than one-half of these births in 1970 (Ventura and Bachrach 2000).

Given the widespread availability of contraception and continued, although sometimes limited, access to abortion, it would be easy to assume that all non-marital births are a result of conscious decisions to separate parenting from marriage. The growth of non-marital fertility could therefore be interpreted as a demonstration that the institutional framework of marriage is weakening and singlehood or cohabitation are becoming acceptable settings for family formation. However, an extremely high proportion of births in the United States are reported as unplanned. In 1994, an estimated 30% of all births, and close to 60% of non-marital births, were unintended (Henshaw 1998). In addition, studies of American attitudes toward family behavior show that the majority of women would prefer to be married when they have children (Henshaw 1998; Thornton and Young-DeMarco 2001). Understanding whether non-marital births were deliberately conceived or were unplanned is key to understanding the role of non-marital fertility in the changing American family system (Musick 2002).

In this paper, we analyze the correlates of deliberate and non-deliberate non-marital fertility. Using data from the 2002 National Survey of Family Growth, we describe the distribution of non-marital births by age, race, and Hispanic origin of mothers; by parity and relationship status; and by whether such births were deliberately conceived. We then examine non-marital births in a multivariate setting.

Measuring fertility intentions

Measuring fertility intentions poses both empirical and conceptual difficulties. Longitudinal studies have shown widespread differences between women's stated intentions about whether to have children and their subsequent reports of whether children were wanted (Joyce, Kaestner, and Korenman 2002; Westoff and Ryder 1977; Williams and Abma 2000). These differences are partly attributable to women's unwillingness to describe an existing child as unwanted. They also stem from the inherent complexities of feelings about pregnancy, childbearing, and contraception (Thomson and Brandreth 1995; Trussell, Vaughan, and Stanford 1999; Zabin 1999). The first fertility surveys in the United States were designed to help researchers understand relatively high fertility during the Baby Boom and were focused on identifying "excess" fertility at the end of childbearing careers (Luker 1999; Peterson and Mosher 1999). These surveys distinguished between wanted and unwanted births, a categorization scheme that fit the model of unplanned fertility occurring after women had reached desired family size but is less applicable to contemporary fertility patterns where postponement of childbearing is common and unplanned births are frequent at the beginning of childbearing. Women may have strong desires to have a child at some point but may not want a child with a particular partner or at a particular time. Ambivalence

about the use of contraception and a reluctance to completely plan motherhood further complicate the process of determining the wantedness of pregnancies. For instance, qualitative research on non-marital fertility among disadvantaged populations shows that some women never use contraception or discontinue using it even though they say that they do not actively want to become pregnant and understand that unprotected sexual activity puts them at risk of a pregnancy (Edin and Kefalas 2005).

In response to this confusion, researchers have begun to question the best way of measuring women's feelings about pregnancy. The standard approach asks, retrospectively, whether a pregnancy was wanted or unwanted and, if wanted, about the timing – was the pregnancy wanted sooner than it occurred, wanted when it occurred, or wanted later than it occurred. Alternative measures, less widely used, involve questions on contraceptive use which allow pregnancies to be attributed to non-use or to contraceptive failure and asks women about why they stopped using or did not use contraception.

In this analysis we combine women's reports on contraceptive use and reasons for discontinuation or non-use. Using these data, we distinguish three categories of pregnancy. We refer to pregnancies that result from the deliberate choice not to use contraception in order to get pregnant as *planned pregnancies*. Pregnancies that are conceived while a woman was contracepting we label as resulting from *contraceptive failure*. If a woman reports that she did not use contraception or that she stopped using contraception, but that her non-use was not because she wanted to get pregnant, we describe her pregnancy as resulting from *non-purposive non-use*.

Retrospective reporting poses problems for contraceptive use as well as for

wantedness. Women may not remember, or may not report accurately, their reasons for discontinuing contraception, and decisions around contraception and childbearing are often complex. Still, this measure, which refers to a specific decision whether or not to use contraception, is more concrete than attitudinal measures and therefore more informative than more general questions about wantedness or intendedness of births. Because this measure does not require women to label pregnancies as wanted or unwanted, it may also be less likely to be influenced by social desirability bias.

Data and methods

The 2002 cycle of the National Survey of Family Growth (NSFG) interviewed 7643 women and 4928 men about their marital, cohabitation, and fertility history. Respondents were also surveyed about their use of contraception, education and employment status, and attitudes toward family and childbearing. We focus on women because detailed information on wantedness of pregnancies and on contraceptive use is available only for women, and limit our analysis to births that took place in January 1990 or later, a twelve-year period. We study only relatively recent births because births that took place at longer intervals before the survey become increasingly selective of births to younger women due to the age structure of the sample. Moreover, since social mores regarding nonmarital sexual activity and childbearing have changed dramatically in the past few decades, restricting our analyses to births within a relatively limited timeframe helps limit the influence of period effects.

In this study, we use non-marital births that were non-maritally conceived as the unit of analysis. (A small number of non-marital births were conceived to married women who subsequently divorced or were widowed; we exclude these births from

analysis.) Our sample includes 2805 births to 2222 women. Because these observations include multiple births to the same women, they are not independent, and standard errors may be biased downward. To account for this problem, we use Huber-White sandwich estimators to produce corrected standard errors. All standard errors reported here are adjusted for repeated observations.

The analysis describes the characteristics of women who have non-marital births in the United States and examines the family context and planning status of those births. Basing the analysis on non-marital births conflates several steps in a long process, including not getting married, being sexually active, decisions about contraception, not aborting the pregnancy, and not legitimating the birth. Comparing the planning status of non-marital births that take place may obscure differences in earlier steps in the process. For instance, if older women are more effective contraceptors than younger women, they will experience fewer contraceptive failures. A larger proportion of births to older women would therefore be planned, even if older women have lower rates of planned childbearing than younger women. These results therefore speak to the experience of children and the contexts in which children are born, rather than analyzing fertility using women as a unit of analysis.

Dependent variable

We construct the dependent variable based on women's reports of contraceptive use or non-use at the time of pregnancy. The NSFG collects detailed contraceptive histories from all women. Monthly method use histories are collected for the time period between January 1999 and the interview date. For pregnancies that occurred before January 1999, women were asked what (if any) contraception they used in the interval

between their first sexual intercourse and the pregnancy (for the first pregnancy) or between the previous pregnancy and the reference pregnancy (for subsequent pregnancies), and whether they stopped using contraception before they became pregnant. Women who stopped contracepting or who never used contraception were further asked if their non-use was because they themselves wanted to get pregnant at that time. Based on this series of questions, we divided births into pregnancies that were explicitly desired ("planned"), pregnancies that were the result of contraceptive failure ("contraceptive failure"), and pregnancies that were neither sought nor avoided ("non-purposive non-use"). We do not have information on whether contraceptives were used correctly or consistently, only whether the respondents were using contraception when they became pregnant, so the contraceptive failure category could include sporadic contraceptors as well as more diligent users.

The dependent variable in this analysis is a categorical variable with three possible responses. We use multinomial logit analysis to analyze the correlates of contraceptive use or non-use at pregnancy. The reference category in the analysis is planned pregnancies. For each model, two sets of comparisons are produced, one comparing births resulting from contraceptive failure to planned births, the second comparing births resulting from non-purposive non-contraception to planned births. The reported coefficients are the relationship between the variable in question and the log-odds of the birth being in the given category versus the reference category; we also report odds ratios for ease of interpretation.

Independent variables

Our independent variables include age, cohabitation status, and parity as well as a

selection of sociodemographic characteristics. We measure age at birth as a continuous variable. In preliminary analyses, we tested for both quadratic effects of age and discontinuous age effects, but found that a linear specification best captured the relationship between age and intendedness.

As measures of family context, we include cohabiting status at the time of conception and parity. Based on previous research showing that cohabitation is preferred over singlehood as a site for childbearing, we expect births to women who are cohabiting at the time of conception to be more likely to be planned than other births (Manning 2001; Musick 2002). It is not clear how parity might be related to the planning status of non-marital births. On the one hand, high-parity births may be less likely to result from contraceptive failure than low-parity births if women become more knowledgeable about their own reproductive health as they have more children. On the other hand, higher parity is associated with lower desire for children (Schoen et al. 1999). High-parity births may therefore be less likely to be reported as planned births. The parity distribution of non-marital births in our sample is highly skewed: Almost half of all births are first births. We therefore control for parity by including a dummy variable distinguishing first births from all other births. Exploratory analysis (not shown) shows that little information is lost by using this specification rather than a linear variable for birth order or a more complete set of dummy variables.

We control for race and Hispanic origin of mothers. Non-marital births are more common among African American women and Hispanic women than among white non-Hispanic women. If these higher frequencies represent increased acceptance of childbearing outside of marriage, non-marital births to African American and Hispanic

women may be more likely to be planned than births to white women.

In order to account for socioeconomic differences between women, we use information about the respondent's childhood as proxies for adult socioeconomic status. Standard measures of individual SES such as education and income are closely related to age. The youngest mothers in the analysis are not yet old enough to have completed high school or college, and older women who have spent more years in the labor force will on average have higher income than younger workers. Measures of SES at the time of the survey may also be endogenous to fertility before the survey, if women who have unintended births achieve lower levels of education or income than women with planned fertility[1]. Measures of family characteristics and childhood living situations are strongly correlated with adult achievement but are not so closely confounded with the dependent variable. We examine respondent's educational achievement in descriptive statistics, but our multivariate models use the respondent's mother's education, mother's age at first birth, and family status at age 14 to measure socioeconomic status.

Results

Table 1 outlines the characteristics of non-marital births between 1990 and 2002 by key sociodemographic characteristics, dividing births by planning status of the birth (contraceptive failure, planned birth, non-purposive non-contraception). As described above, the family context of non-marital births and the characteristics of women who have children outside of marriage are not uniform. More than half of all non-marital births are higher parity births. Mothers of non-marital births are younger on average than all mothers combined (not shown), but 71.7% of non-marital births occur to women age

20 and over, and about a third of non-marital births occur after age 25. Between 1990 and 2002, 56% of non-marital births were to women living with the father of their child.

Overall, around one-quarter of all non-marital births are planned; the proportion is lower for first births than higher parity births (not shown). Planned births are more likely to be higher-parity births than other non-marital births, and occur to older women on average. In addition, a disproportionate number of planned births occur to Hispanic women. Mothers of planned non-marital births are more likely than other unmarried mothers to be living with a partner at the time of conception, and have lower levels of education than other mothers.

Non-marital births that are not deliberately planned are approximately evenly divided between women who attribute their pregnancies to contraceptive failure and women who were neither seeking nor actively avoiding pregnancy. These two groups of women are similar in terms of age at birth and relationship status. Compared to mothers of births that result from contraceptive failure, women who neither sought nor avoided non-marital births have less education and are more likely to be African American.

Non-marital births are most likely to be described as planned when they occur to older women, women living with a partner, Hispanic women, and women with low levels of education. We turn to multivariate analyses to explore the interactions between these characteristics. Table 2 presents the results from two multinomial logit models; the first includes only main effects of independent variables, while the second adds interactions between age and other characteristics. Two sets of coefficients and odds ratios are displayed for each model, one each for the comparison between contraceptive failure and

[1] Prior waves of the NSFG included a detailed education history, including the timing of enrollment and completion, but the 2002 cycle does not, so we were unable to document the timing of educational

planned births and between non-purposive non-contraception and planned births.

In model 1, the coefficients for age are statistically significant and negative in both comparisons. Older women who have a non-maritally conceived birth are more likely than younger women to have deliberately planned their birth relative to both of the two other categories. The relationship between age and planning status is larger for non-purposive non-contraception than it is for contraceptive failure. This relationship, which was also observed in descriptive statistics, persists even when other socio-demographic factors are accounted for; differences between older and younger mothers are not solely compositional. As expected, births to women who are living with the father of their children at conception are more likely to be planned than to be in either of the two other categories. Cohabitation is becoming an increasingly acceptable locus of both childbearing and childrearing (Smock 2000; Seltzer 2000). The positive association between cohabitation and planned pregnancies may also be due to more effective contraceptive practices among cohabiters. Cohabiting women have higher coital frequency, on average, than women not living with a partner; having more regular sex with the same partner may facilitate consistent contraceptive use, leading to lower incidence of pregnancy due to contraceptive failure or non-use.

Although the descriptive statistics suggested that first births are less likely to be planned than resulting from contraceptive failure or non-purposive non-use, the multivariate results show this is only partially true. First births are more likely than higher parity births to be planned relative to non-purposive non-contraception, but there is no relationship between parity and the likelihood of contraceptive failure vs. planning.

Hispanic women are more likely to report non-marital births as planned than

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experiences in relation to fertility.

resulting from contraceptive failure, consistent with research showing that many Hispanic women form informal relationships that function as a marriage and are considered an appropriate locus for childbearing (Landale 1994; Manning and Landale 1996). There is some suggestion that births to Hispanic women are also more likely to be planned than to result from non-purposive non-contraception, but this difference is not statistically significant. Coming from a family with low socioeconomic status is also associated with planning non-marital fertility. Compared to women whose mothers had post-high school education, women whose mothers did not have a college degree are less likely to attribute non-marital births to contraceptive failure and less likely to have stopped contracepting for ambiguous reasons. Other socio-demographic characteristics are not significantly correlated with the planning status of non-marital births. There are no significant differences in planning status between white and African American mothers of non-marital births, nor does the respondent's mother's age at first birth appear to be related in any systematic way to the planning status of non-marital births to the respondent. Women who grew up in non-intact families are neither more nor less likely than other women to report non-marital births as planned.

In model 2, we further explore the strong relationship between age at birth and the planning status of non-marital fertility by allowing for interactions between age at birth and other characteristics. This model maintains the linear measure of age as a main effect, but models the interaction between age and other variables using a dummy variable that is equal to one for women who are 25 and over at the time of birth. For the most part, including interactions does little to change the main effects of the other variables, but there is one important exception.

When age is interacted with the other sociodemographic characteristics, the main effect of age on planning status is not statistically different from zero for the contrast between planned births and births resulting from contraceptive failure. The interaction between age at birth and parity is statistically significant and negative, indicating that only first births, not higher parity births, to older women are less likely to result from contraceptive failure. The coefficient for the main effect of first birth, representing the effect of parity for women younger than 25, also changes compared to model 1. While model 1 found no relationship between parity and planning status, in model 2 the coefficient for the main effect of first birth is positive and statistically significant. This finding suggests that the planning status of nonmarital childbearing varies over the life course. For young women, first non-marital births appear to be largely accidental. In contrast, first births to women age 25 and over are *less* likely to result from contraceptive failure than intentional contraceptive discontinuation, consistent with the "Murphy Brown" stereotype of older single women planning to have a child outside of marriage. However, the lack of other significant interactions, particularly maternal education, with age cast some doubt that non-marital births to older women represent a shift to more educated single mothers.

Results for the second comparison, between planned births and births resulting from non-purposive non-contraception, also suggest differences by age in the relationship between parity and planning status, though less marked. In model 2, with interactions included, the coefficient for age is smaller than in the main effects model, but is still statistically significant, with births to older women more likely to be planned. The coefficient for the main effect of first birth is not statistically different from zero; among

young women, first births are neither more nor less likely to be planned than higher-parity births. As in the previous comparison, the negative interaction between age at birth and first birth reveals that first births to older women are more likely to be planned than either higher parity births to older women or first births to younger women. Again, this provides some support to arguments that non-marital first births among older women are fundamentally different than either higher parity births or births to younger women. As women age, non-marital births are increasingly likely to result from a planned pregnancy, though the lack of differences by socioeconomic status suggests that these women may not be much better off than their younger counterparts whose nonmarital births were less actively wanted. As such, children born to older unmarried mothers may face many of the same disadvantages as those born to younger women.

Conclusion

The steady rise of non-marital births over the past few decades has been well documented, and increasingly researchers are distinguishing between wanted and unwanted non-marital fertility. This research takes a different approach to studying fertility intentions, one that might provide a useful alternative to the traditional wanted/unwanted/mistimed breakdown. We look at contraceptive use prior to a birth as an indicator for wantedness and intendedness, arguing that because contraceptive use is a behavior rather than an attitude, it might be less subject to social desirability or rationalization over time. Based on this measure of planning status, we explored the characteristics of women who had a non-marital birth since 1990. In particular, we examined whether the shifting age of non-marital births reflects merely a postponing of non-marital births or if non-marital births to older women were part of a trend toward

well-educated, single mothers.

As expected, age was significantly related to the planning status of a non-marital birth. Older women are more likely to report that their birth was planned rather than resulting from contraceptive failure or non-purposive non-use. Interactive models show, though, that this is only the case for first births. Compared to both their younger counterparts and their counterparts with children, childless women age 25 and older were more likely to have reported purposely discontinuing contraception in order to have a child than to have become pregnant after contraceptive failure. It does not appear that women who already have children have more motivation or success in managing their fertility; higher parity is, if anything, associated with lower likelihood of a birth being planned. Higher parity non-marital births may represent additional children to women whose first births were also unplanned and outside of marriage.

The prevalence of intentional first non-marital births among older unmarried women should not be interpreted as a trend toward privileged "Murphy Brown"-type mothers. We found no evidence that women who planned non-marital births came from families that were significantly better off than other women. Although nulliparous older women are more likely to plan their first births than younger women or higher parity women, they appear similar on most measures, and the economic situations in which they are raising children might not be much different.

To avoid issues of endogeneity between socioeconomic status and fertility, we used the respondent's mother's characteristics to measure socioeconomic status. This strategy might mask relationships between socio-economic status and fertility intendedness. For example, the correlation between maternal education and respondent's

own education may be lower among women who have planned non-marital births. If this were true, using maternal characteristics would hide the true relationship between education and planning status of non-marital births. However, descriptive statistics do not support this possibility; only about 5% of planned non-marital births occur among well-educated women.

The absence of a wider relationship between sociodemographic characteristics and planning is surprising given the large variation in the prevalence of non-marital fertility by these characteristics. For example, non-marital births are more common among African American women than white women, but the non-marital births that do occur among white women are no more or less likely to be planned than births to African American women. This finding suggests that differences in the prevalence of non-marital births by race and socioeconomic status cannot be principally explained by differences in either planned childbearing or contraceptive failure. The lack of differences may be due, at least in part, to differences in who carries an unwanted pregnancy to term. Like other fertility surveys, the NSFG does not have good information on abortion, but it seems plausible that women with higher socioeconomic status are both less likely to have an unwanted pregnancy and less likely to carry one to term. Non-marital conceptions that are carried to term might therefore be concentrated among individuals who are similar in terms of socioeconomic status.

Our finding that race and family background have little relationship with the planning status of non-marital births is also consistent with previous research suggesting that marital status is an increasingly important stratifying factor in fertility, with the widest differences occurring across married and unmarried mothers rather than within

these groups. We find differences among women who give birth outside of marriage, but family context, as measured by cohabitation status and parity, appears to be more important than socio-economic factors. Women of all ages are more likely to report a non-marital birth as planned if they are cohabiting at conception. This finding reflects the decreasing centrality of formal marriage as the locus of childbearing, but it also highlights the continued importance of partnership for childbearing and childrearing. Marriage as a legal institution is no longer universally required for childbearing, and a non-marital pregnancy no longer spurs the quick decision to marry, yet it seems that few births are planned outside of a co-residential partnership.

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Table 1. Characteristics of non-marital births

	All births	Births resulting from:		
		contraceptive failure	planned conception	non-purposive non-contraception
Number of births	2808	964	706	1138
Mean age at birth	23.6	23.6	24.5	23.0
Distribution of births by:				
Parity				
First births	47.9	50.9	41.8	48.9
Second births	27.4	27.0	29.6	26.3
Third births	15.0	12.6	18.1	15.4
Fourth or higher births	9.7	9.6	10.5	9.4
Cohabitation status at conception				
Cohabiting	55.6	49.5	74.6	49.4
Not cohabiting	44.4	50.5	25.4	50.6
Race/ethnicity				
Hispanic	23.9	19.1	32.9	22.8
Non-Hispanic white	40.8	46.3	34.9	39.5
Non-Hispanic black	29.8	29.6	26.2	32.3
Other	5.4	5.1	6.0	5.4
Achieved education at time of survey				
Less than high school	32.0	25.9	38.4	33.5
High school diploma/GED	43.7	43.7	39.1	46.5
Some college/associate's degree	19.0	22.4	16.8	17.3
Bachelor's degree or higher	5.4	8.0	5.8	2.8

Notes: Data are from the 2002 National Survey of Family Growth. Sample includes non-maritally conceived births to unmarried women taking place in 1990 or later.

Table 2. Results from multinomial logit modeling wantedness of non-marital births

	Model 1: Main effects				Model 2: Interactions with age			
Observations	2697				2697			
Wald chi squared	176				203			
p	0				0			
Contraceptive failure vs. planned pregnancy								
	Coef.	Odds Ratio	Robust SE		Coef.	Odds Ratio	Robust SE	
Intercept	2.21	9.15	0.36	***	1.78	e	0.47	***
Age at birth	-0.03	0.97	0.01	**	-0.02	0.98	0.02	
Cohabiting at conception	-0.88	0.41	0.12	***	-0.82	0.44	0.14	***
First birth	0.06	1.06	0.12		0.29	1.33	0.14	*
Race/ethnicity (omitted: Non-Hispanic white/other)								
Hispanic	-0.55	0.57	0.16	***	-0.52	0.59	0.19	**
Non-Hispanic Black	-0.17	0.84	0.14		-0.26	0.77	0.18	
Highest degree obtained by mother figure (omitted=any college)								
No high school degree	-0.42	0.66	0.16	**	-0.52	0.60	0.20	*
High school degree	-0.14	0.87	0.16		-0.20	0.82	0.19	
Mother's age at first birth (omitted=20-24)								
Missing	-0.33	0.72	0.46		0.31	1.37	0.45	
Under 18	-0.09	0.91	0.16		-0.12	0.89	0.18	
18-19	-0.15	0.86	0.16		-0.13	0.88	0.16	
25 or older	0.03	1.03	0.21		0.11	1.12	0.28	
Family status at age 14 (omitted=all other living statuses)								
Lived with both biological parents	-0.10	0.91	0.12		-0.05	0.96	0.15	
Interactions between age >= 25 and:								
Cohabiting at conception					-0.12	0.89	0.21	
First birth					-0.64	0.53	0.23	**
Hispanic					-0.08	0.92	0.31	
Non-Hispanic Black					0.20	1.22	0.26	
Mother no high school degree					0.19	1.20	0.30	
Mother high school degree					0.14	1.14	0.29	
Mother <18 at first birth					0.13	1.14	0.27	
Mother 25 + at first birth					-0.06	0.95	0.37	
Lived with both parents at age 14					-0.16	0.86	0.22	

Non-purposive non-contraception vs. planned pregnancy

	Coef.	Odds Ratio	Robust SE		Coef.	Odds Ratio	Robust SE	
Intercept	2.87	17.72	0.37	***	2.44	11.43	0.49	***
Age at birth	-0.06	0.94	0.01	***	-0.05	0.95	0.02	*
Cohabiting at conception	-0.92	0.40	0.12	***	-0.83	0.44	0.14	***
First birth	-0.27	0.77	0.12	*	-0.07	0.93	0.14	
Race/ethnicity (omitted=Non-Hispanic white/other)								
Hispanic	0.14	1.15	0.15		-0.05	0.95	0.18	
Non-Hispanic Black	0.05	1.05	0.14		-0.30	0.74	0.17	
Highest degree obtained by mother figure (omitted=any college)								
No high school degree	-0.21	0.81	0.15		-0.42	0.66	0.19	*
High school degree	-0.08	0.92	0.16		-0.23	0.80	0.19	
Mother's age at first birth (omitted=20-24)								
Missing	-0.40	0.67	0.42		-0.38	0.69	0.42	
Under 18	0.08	1.09	0.15		0.18	1.20	0.17	
18-19	0.08	1.09	0.15		0.11	1.11	0.15	
25 or older	0.07	1.07	0.21		0.35	1.43	0.28	
Family status at age 14 (omitted=all other living statuses)								
Lived with both biological parents	-0.15	0.86	0.12		-0.14	0.87	0.14	
Interactions between age >= 25 and:								
Cohabiting at conception					-0.34	0.72	0.22	
First birth					-0.60	0.55	0.23	*
Hispanic					-0.32	0.72	0.30	
Non-Hispanic Black					0.12	1.13	0.27	
Mother no high school degree					0.59	1.80	0.31	
Mother high school degree					0.52	1.68	0.30	
Mother under 18 at first birth					-0.29	0.75	0.26	
Mother 25 or older at first birth					-0.77	0.46	0.42	
Lived with both parents at age 14					0.01	1.01	0.23	

* p < .05; ** p < .01; *** p < .001 (two tailed tests)

Notes: Data are from the 2002 National Survey of Family Growth. Sample includes non-maritally conceived births to unmarried women taking place in 1990 or later with non-missing values on all independent variables.