

Family Formation among Men with a Nonmarital First Birth

Sweeping demographic changes in recent decades have placed an increased attention on nonmarital childbearing. Now accounting for over 40 percent of all US births (Hamilton, Martin, & Ventura, 2011), a burgeoning literature has begun to examine predictors and consequences of nonmarital childbearing for women, including women's marriageability and mate selection following a nonmarital birth (Qian, Licther, & Mellott, 2005). However, a lack of nationally representative datasets that collect detailed fertility histories for men have made it difficult to examine these same trends in such detail. Several studies, however, suggest how a nonmarital first birth would affect subsequent marriage among men.

Comparisons between unmarried and married fathers using datasets such as the Fragile Families and Child Wellbeing Study have highlighted the limited "capabilities" of unmarried fathers (McLanahan, 2009). In light of strong links between nonmarital childbearing, family instability, and poverty (Edin and Reed, 2005) as well as public policy efforts designed to promote marriage, it is also crucial that we understand how nonmarital childbearing is linked with men's mate selection. To date, we are aware of only one study that has explicitly explored the role of nonmarital childbearing in men's subsequent union formation. Nock (1998) uses the NLSY79 data to examine the impact of nonmarital fatherhood on a broad set of men's life course outcomes, including marriage. He estimates separate Cox regression models and finds that a nonmarital birth lowers the hazard rate for marriage, but when separately examined increases the hazard rate for cohabitation. Our study will add to this existing knowledge in at least three ways. First, the NSFG has more reliable measures of men's fertility. Second, we are able to account for the role of cohabitation as both a time-varying predictor and outcome. Third, we examine marriage and cohabitation as competing risks following a nonmarital first birth for non-

cohabiting men. The results from this study will shed light on the causes and consequences of nonmarital childbearing for men in the U.S., and if these are similar or different from the situation for women.

The most recent cycle of the nationally representative National Survey of Family Growth (NSFG 2006-2010) provides the most comprehensive information to date on men's fertility history in conjunction with union formation. First we describe the samples used for this study. Second, Kaplan-Meier estimates describe variability in the timing of a first birth, and also the timing of a transition to marriage following a nonmarital first birth. Next, using a sub-sample of men ages 15 to 44, we estimated Cox proportional hazard models to examine the effects of a variety of demographic characteristics on the risk of experiencing a nonmarital first birth. Using the sub-sample of men who experienced a nonmarital first birth, we plan to estimate competing risk models to examine the effects of demographic characteristics on entering cohabitation vs. marriage for PAA.

Data and Methods

Our cross-sectional sample of men came from the 2006-2010 NSFG cycle. Men ages 15 to 44 were asked to provide detailed, retrospective information about their past childbearing and romantic unions. For our first analysis examining the predictors of a nonmarital birth, we limited our sample to men who were at least 20 years of age when they experienced their first birth ($n = 3892$ respondents who contribute 1,067,411 months for observation). To examine the predictors of marriage following a nonmarital first birth, we limited further our sample to those men who had a nonmarital first birth ($n = 1895$ respondents who contribute 104,936 months for observation). We used this sample for our second analysis, examining the competing risks of entering cohabitation vs. marriage following a nonmarital birth. To account for the complicated

sampling design of the NSFG and to ensure that our results reflect nationally generalizeable trends, we used the survey set command in Stata12 which accounts for complicated sampling in the NSFG and also weights all analyses. We then estimated our models using the *st* commands in Stata12.

Dependent Variables

For the Kaplan-Meier estimate, we created a series of duration variables to reflect the passage of time (in months) from a specific “start date” until the report of a specific event. We calculated the duration to first birth beginning from age 15 and ending at the century month birth date of the first reported child. We calculated the duration to first marriage/cohabitation in a similar manner using respective century month dates, and we calculated the duration from nonmarital first birth to first marriage using a combination of our three duration variables. The duration for respondents who did not report the event of interest (birth/cohabitation/marriage) was calculated by subtracting the adjusted century month birth date from the century month interview date.

The two main outcomes of interest for the presented Cox regression models are date of first birth (marital or nonmarital) and first marriage (yes/no), both time-varying outcome variables.

Independent Variables

The NSFG dataset provides a number of constructed variables available for use. We utilized these variables for the following demographic characteristics: age at interview, race (*White, Black, Hispanic, other*), marital status (*married, divorced, never married*), education for both the respondent and the respondent’s mother (*less than high school, high school, greater than high school*), total number of children, residence (*rural, metro*), current employment

(*employed, unemployed*), cash assistance, food stamps, WIC receipt, income to poverty ratio below 100%, and an intact, biological family at age 14. We created the respondent's age at first birth by subtracting the respondent's century month birth date from the century month birth date for the respondent's first child and dividing by 12. We constructed age at first marriage in a similar manner, subtracting the respondent's century month birth date from the century month marriage date and dividing by 12. We constructed an indicator of the respondent's multipartnered fertility by examining whether the father's partner for each child birth was the same. Once a father had at least one birth with a different partner, he received a value of one on this dichotomous indicator. In addition, cohabitation status is measured as a monthly time-varying variable. Finally, to explore cohort effects, we created a categorical variable corresponding to the 5-year birth cohort of the respondent beginning in 1960, where 1 = *born between 1960 and 1964* and 5 = *born between 1980 and 1984*.

Preliminary Descriptive Results

Table 1 describes the study sample. As shown, men who have a nonmarital first birth are significantly different from those who have marital first birth on most variables considered, with the exception of metro residence and 'other' racial/ethnic group. Notably, men with a nonmarital first birth are younger at interview, younger at first birth and older at first marriage. In addition, a larger share of men with a nonmarital first birth are Black or Hispanic, have lower educational attainment, and have children with multiple partners. Men with a nonmarital first birth have fewer children, and a smaller share were raised in an intact biological family, compared to men with a marital first birth. In sum, men with a nonmarital first birth are less advantaged and come from lower SES groups compared to those with a marital first birth. Table 1 also describes how a large share of men with a nonmarital first birth—60%-- are cohabiting at first birth.

Kaplan-Meier survival estimates of timing to a first birth and a first marriage are presented in Figures 1 and 2, respectively. As shown in Figure 1, failure rates for men who experience a nonmarital first birth are significantly higher than those who experience a marital first birth during the entire period of observation. Figure 2 shows that there is little variability men's transition to marriage after a nonmarital first birth by cohabitation status. Thus, men with nonmarital first births are younger than men with marital first births, and cohabitation, at least with their partner at first birth, may not play a large role in men's transition to marriage following their nonmarital birth.

Preliminary Multivariate Results

Table 2 presents hazard ratios from Cox regression models predicting a nonmarital first birth (Model 1) and a first marriage, among those who had a nonmarital first birth. Model 1 shows that the male's individual and family background characteristics are associated with the hazard of a nonmarital first birth. Men with higher educational attainment have a higher hazard of experiencing a nonmarital first birth, and compared to whites, Blacks and Hispanics have a higher hazard of experiencing a nonmarital first birth. Compared to men born in 1960-1964, all more recent birth cohorts have higher hazards of experiencing a nonmarital first birth, which is consistent with the growing nonmarital birth rate overall in the U.S. Men raised in a home other than an intact biological or step family have a higher hazard of experiencing a nonmarital first birth. There are no residential differences (metro vs. nonmetro) observed in Model 1. Model 2 finds similar results, although there are some key differences. Men with lower educational attainment and those from minority racial and ethnic groups have a lower hazard of marriage following a nonmarital first birth. However, we observe no birth cohort differences in Model 2. This suggests that although the risk of experiencing a nonmarital first birth has increased for men

born in recent cohorts, no significant birth cohort differences exist in the consequences of a nonmarital first birth, at least when considering subsequent marriage. In addition, we now find residential differences in the hazard of a first marriage following a nonmarital first birth—those living in metro areas have a lower hazard of getting married. This finding is consistent with prior research documenting a preference for marriage among nonmetro women (Snyder, Brown & Condo, 2004; Brown & Snyder, 2006; Snyder, 2011), and this finding suggests that this preference could extend to nonmetro men. Or at least that nonmetro men experience fewer marriage market costs following a nonmarital first birth. Finally, any cohabitation more than doubles the hazard of marriage following a nonmarital first birth, which could suggest that for men with a nonmarital first birth cohabitation is somewhat of a stepping stone on the path toward marriage. For PAA, we plan to explore cohabitation in more detail, including the proposed competing risks models for marriage vs. cohabitation after a nonmarital first birth.

Table 1

Descriptive Statistics

		<u>Full Sample ($n = 3892$)</u>		<u>Nonmarital First Birth ($n = 1895$)</u>		<u>Marital First Birth ($n = 1968$)</u>	
		M	SD	M	SD	M	SD
Age at Interview		34.22	6.27	32.74***	6.60	35.63	5.61
Age at First Birth		25.18	5.17	22.87***	4.34	27.42	4.92
Age at First Marriage		25.40	4.72	27.26***	5.42	24.60	4.12
Cohabiting at First Birth		0.29	-	0.60	-	-	-
Race							
	Black	0.20	-	0.31***	-	0.10	-
	White	0.53	-	0.39***	-	0.66	-
	Hispanic	0.19	-	0.23***	-	0.16	-
	Other	0.07	-	0.07 ⁺	-	0.08	-
Current Marital Status							
	Married	0.57	-	0.32***	-	0.80	-
	Divorced	0.17	-	0.14***	-	0.20	-
	Never Married	0.26	-	0.54***	-	-	-
Less than High School Education		0.30	-	0.39***	-	0.21	-
Education							
	HS Education	0.29	-	0.34***	-	0.24	-
	Greater than HS Education	0.42	-	0.28***	-	0.55	-
Total Children		1.45	1.25	1.24***	1.30	1.65	1.15
Metro Residence		0.84	-	0.85 ⁺	-	0.83	-
Currently Employment							
	Employed	0.85	-	0.79***	-	0.91	-
	Unemployed	0.08	-	0.11***	-	0.05	-
Multipartnered Fertility		0.09	-	0.12***	-	0.06	-
Cash Assistance		0.08	-	0.10***	-	0.05	-
Food Stamps		0.18	-	0.25***	-	0.11	-
WIC		0.18	-	0.22***	-	0.15	-
Income to Poverty Ratio Below 100%		0.19	-	0.26***	-	0.13	-
Intact Biological Family at Age 14		0.65	-	0.56***	-	0.73	-

Note . ⁺ $p < 0.10$; *** $p < 0.001$. Indicates significant differences between Nonmarital and Marital samples.

Figure 1

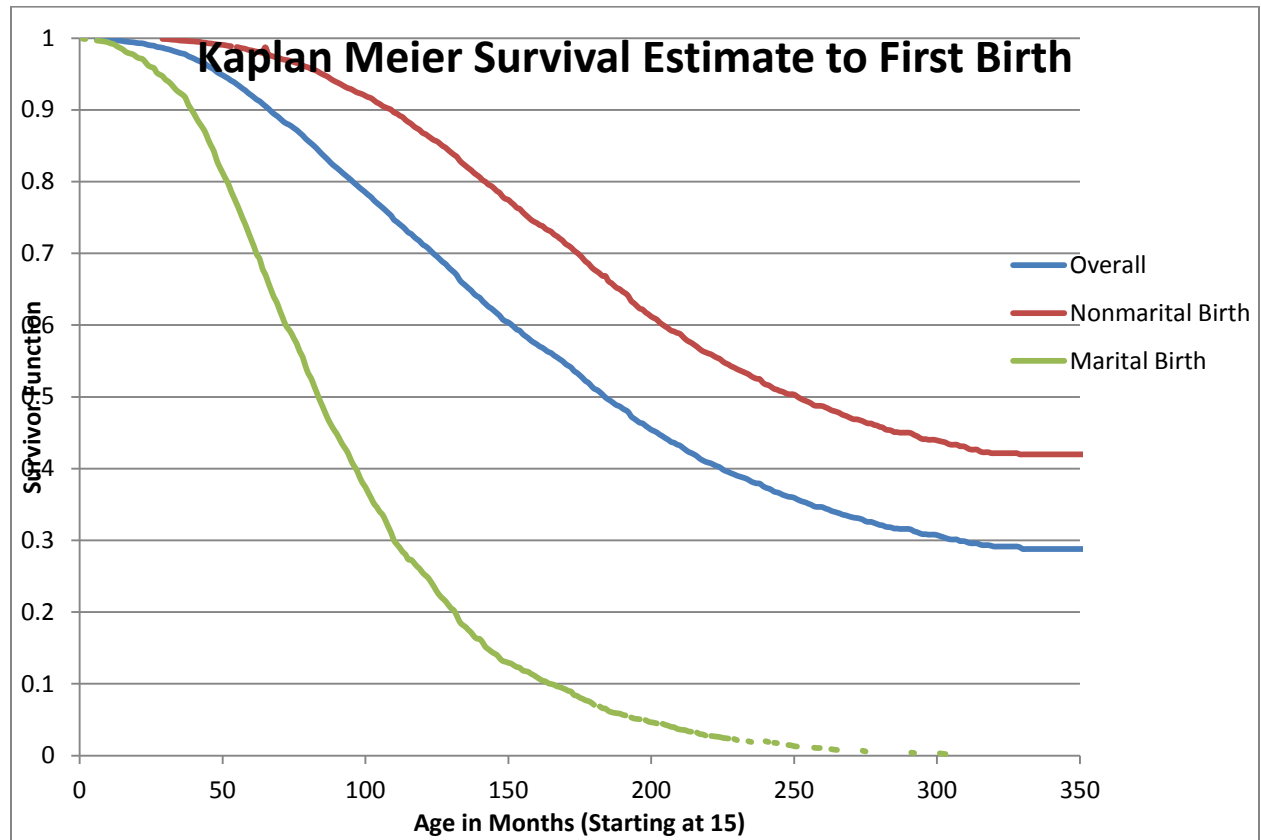
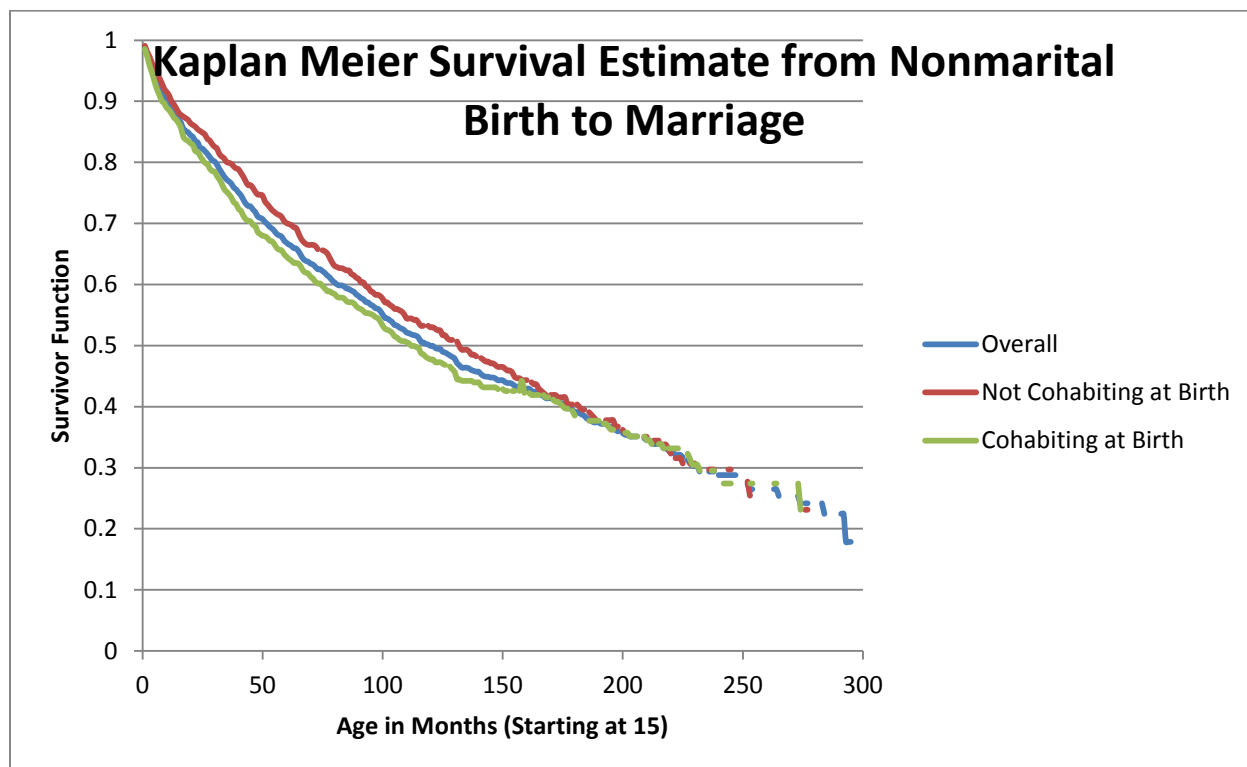


Figure 2



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