

Variations in the Link between Relationship Status and Fertility by Period, Race, and Class

An increasing proportion of births occur to mothers who are cohabiting and this increase is responsible for much of the rise in nonmarital fertility over the past 30 years. As marriage was once the only acceptable context for fertility, this rise in fertility to cohabitators has led some to wonder whether cohabitation is replacing marriage. This might be especially true among lower SES young adults who do not believe they have the resources to support a stable marriage. An alternative interpretation is as fertility outside of marriage has become increasingly acceptable, relationship status is increasingly irrelevant for fertility. That is, fertility is increasingly independent of relationship status, aside from the obvious connection between sex and fertility. Both of these perspectives anticipate that fertility rates of cohabitators would increasingly resemble those of married women. The key difference between them is that the first perspective anticipates increasing differences in the fertility behaviors of sexually active single and cohabiting women, whereas the second anticipates that fertility behaviors of cohabiting and sexually active single women are becoming more similar to married women.

Fertility among cohabitators has continued to climb since the 1990s. A recent report from the 2006-2010 NSFG indicates that 23% of recent births were to cohabiting women, up from the 14% estimated in the 2002 NSFG. The goal of this paper is to use the 2006-2010 to investigate trends in differences in fertile pregnancy rates for single, cohabiting, and married women to see if the fertility rates of cohabiting women are increasingly similar to married women and dissimilar to single women. In addition, our analysis will consider variation by race and class.

Data and Method

The analysis is based on data from the 2006-2010 National Survey of Family Growth (NSFG), which interviewed 12,279 women and 10,403 men aged 15-44 years in the United States. The 2006-2010 NSFG is a nationally representative, multistage, probability sample drawn from 110 primary sampling units across the country. It contains detailed information on factors affecting women's fertility.

We first constructed variables describing women's marital-cohabitation status (married, single or cohabiting) and women's birth history each month from age 15 to age 44. Women who were divorced or widowed and had not entered another coresidential union are coded as single. Given that there is substantial class and race-ethnic variation in the duration between separation and divorce, we used the century-month (CM) coding of separation instead of the CM coding of divorce as the end of each marriage. Women who cohabited and broke up in the same month were coded as cohabitating for that month. Likewise, women who married and divorced at the same month were coded as married. We exclude women who did not report information on any of the following variables: age of the start of each marriage, age of the end of each marriage, age of the start of each cohabitation, and age of the end of each cohabiting union. Women whose age of at the end of each union is younger than the age of entering that relationship are also excluded. Thus, we excluded a total of 120 women from our sample.

We then converted the individual-level data into person-months. For instance, the NSFG provides data on 358,399 person-months for women aged 15-29 in 1995-1999. 52,549 months were spent in cohabiting unions; 229,010 months were spent single. Other variables included for analysis are age, period, race, and mother's education. Women's age is classified into three categories: age 15-19, age 20-24 and age 25-29. We limit the analysis to women less than age 30 because we cannot represent fertility patterns among women over age 30 in 1995. Women age 15-45 in 2010, were age 0-30 in 1995. In addition, the large majority of births to cohabitators occur before age 30. The variable period has three

categories: 1995-1999, 2000-2004, 2005-2009. The race variable is reported in screener. It is dummy-coded with white as the referent category. Mother's education is also dummy-coded with high school as the reference group. We use mother's education instead of respondents' because many women in their early 20s are still pursuing their college degree.

To investigate whether fertility differentials by relationship status are changing, or if they vary by race or class, we estimate logistic regression models predicting a birth. The key independent variables are period, race, and mother's education and relationship status and interactions among these variables. Unfortunately, the sample is not large enough to support three-way interactions. We use the SVY command in STATA for all the analyses to take account of the systematic sampling design.

Findings

Figure 1 shows that fertility rates¹ of cohabitators are lower than for married women but much higher than for single women. Clearly, relationship status continues to be linked to fertility. The difference in fertility rates between cohabiting and single women is partly due to the fact that some single women are not sexually active, but it might also be because cohabitation is a more acceptable status for childbearing for some. Likewise, the lower fertility rates of cohabiting compared to married women is likely due to the fact that marriage is still the preferred context for fertility. The goal of this analysis is to see whether fertility differentials by relationship status are changing over time or if they vary across race and class.

This table also clearly shows that differences in fertility rates by relationship status are larger for teens than for women in their twenties. Teens who are married have higher fertility rates than married women in their twenties and teens who are single have much lower fertility rates than single women in their twenties. The fertility rates of single women in their teens are depressed by the fact that many are not sexually active. This is also true in the twenties, but less so (Kim and Raley). The fertility of married teens are elevated because married teens are selected for characteristics that are strongly associated with early fertility. Altogether, the distinctions between marriage and singlehood are exaggerated in the teenage years and not a good representation of the context of childbearing in the United States. Consequently, our multivariate analysis focus on women age 20-29, although the results when we include teenaged women are similar.

Table 1 presents results for a logistic regression model predicting a birth. Model 1 shows that fertility differences by relationship status are large. Single women have significantly lower fertility rates than cohabiting women, while married women have significantly higher fertility rates. This model also includes an interaction between period and relationship status to allow us to test whether differences in fertility rates by relationship status are changing. None of the interaction terms is significant, indicating that fertility differences by relationship status are stable.

Models 2 and 3 investigate whether differences between marrieds, cohabitators, and singles vary by race or class. The results from this model indicate that the distinction between marriage and cohabitation is greater for NonHispanic Whites and for all other race-ethnic groups. In addition, the significant Black X Single interaction suggests that fertility rates of cohabitators and single women are

¹ A birth rates is the number of live births divided by the number of person-months in each age group (15-19, 20-24, and 25-29), and multiplied by 12.

more similar for Blacks than for NonHispanic Whites. Altogether, this suggests that cohabitation is more marriage-like for Hispanic and “Other” women compared to NonHispanic White women, but that relationship status is less linked to fertility for black women.

Model 3 shows that there are significant interactions between maternal education and marital status. The difference between marriage and cohabitation is smaller for women with mothers with less than a high school degree compared to women with a high school degree. For women with College-educated mothers the distinctions between marriage and cohabitation are greater. The interactions allowing the distinction between cohabitation and being single to vary by maternal education are not significant.

Discussion

The fertility rates of cohabitators more closely resemble those of married couples than singles. Yet, the gaps in fertility by relationship status are not increasing over time, suggesting that cohabitation is not becoming more marriage-like.

Yet there is important variation in the relevance of relationship status for fertility across race and class. For Hispanics, women of “Other” races, and women with low levels of maternal education, cohabitation is more of a substitute for marriage than for NonHispanic White women and those with more advantaged family backgrounds. This is consistent with recent research showing that among less educated women contraceptive use patterns among never married cohabitators increasingly resemble those of women in their first marriages (Sweeney 2002). For black women, however, we do not find evidence that cohabitation is more marriage-like. Instead the evidence is more consistent with the perspective that relationship status is generally less relevant for fertility than for white women. Importantly, this is only a matter of degree as relationship status is still relevant for black women, just less so compared to whites.

There are important limitations to this analysis. First, the sample is not large enough to support an analysis examining three-way interactions to test whether race or class differences in the distinctions between marriage, cohabitation, and singlehood are increasing over time. More importantly, the analyses do not distinguish among single women whether they are sexually active. The lower fertility rates among single women are at least partly due to the fact that some proportion (probably around a third) have not had sex in the last year and because sexual frequency among singles is lower than among married and cohabiting women. Other analysis suggests that among women in their twenties the proportions who are not sexually active are similar across race-ethnic and education groups (Kim and Raley). Thus, the racial and ethnic differences in the distinction between cohabitation and being single are probably not due to racial or ethnic differences in sexual activity among single women.

In sum, relationship status and fertility continue to be strongly linked in the United States, despite the fact that many single women are sexually active (Kim and Raley). Yet, for some groups of women cohabitation is closer to a substitute to marriage, perhaps because these women do not believe that they can obtain the resources necessary for stable marriage.

Figure 1. Fertility Rates by Relationship Status by Age

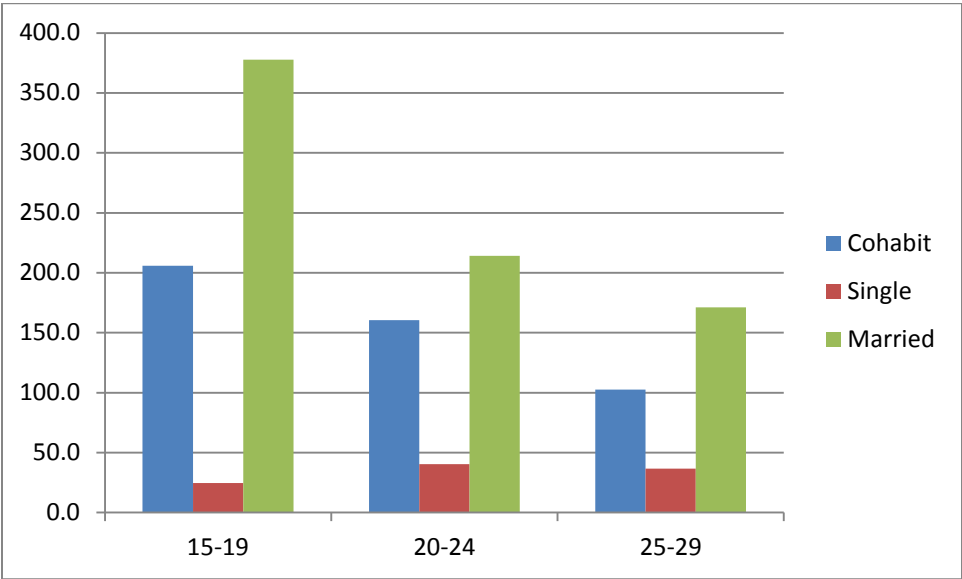


Table 1. Logistic Regression of Fertility on Relationship Status

	Model 1		Model 2		Model 3	
	OR	t-score	OR	t-score	OR	t-score
Age (20-24)						
25-29	0.77	-7.79	0.76	-8.10	0.76	-8.21
Period (1995-99)						
2000-04	1.10	1.27	1.10	2.26	1.10	2.14
2005-09	1.09	1.09	1.00	0.06	1.01	0.13
Relationship Status (Cohabiting)						
Married	1.58	5.98	1.87	10.79	1.55	5.69
Single	0.30	-11.26	0.22	-13.63	0.31	-12.08
Race (Non-Hispanic White)						
Black	1.65	10.49	1.73	7.92	1.64	10.37
Hispanic	1.30	5.60	1.86	5.94	1.33	6.06
Other	1.06	0.53	1.60	3.65	1.08	0.75
Mothers' Education (High School Graduate)						
Less than High School	1.05	0.97	1.08	1.56	1.28	2.58
Some College	0.96	-0.86	0.97	-0.68	0.91	-0.98
College Grad+	0.79	-4.18	0.81	-3.82	0.60	-3.66
No Mother Figure	0.81	-0.92	0.84	-0.74	0.75	-0.84
Period X Relationship Status						
Married X 00-04	1.01	0.06				
Married X 05-09	0.89	-1.34				
Single X 00-04	0.95	-0.41				
Single X 05-09	0.94	-0.49				
RaceXRelationship Status						
Black X Married			0.60	-4.87		
Hispanic X Married			0.55	-5.19		
Other X Married			0.57	-4.05		
Black X Single			2.15	5.62		
Hispanic X Single			1.09	0.46		
Other X Single			0.70	-1.67		
Mothers'Ed X Relationship Status						
LessthanHS X Married					0.72	-3.01
SomeCollege X Married					1.15	1.24
CollegeGrad+Xmarried					1.61	3.12
NoMom X Married					0.96	-0.11
LessthanHS X Single					1.02	0.13
SomeCollege X Single					0.83	-1.30
CollegeGrad+ X Single					0.84	-0.90
NoMom X Single					1.69	1.19
Constant	0.01	-56.17	0.01	-62.14	0.01	-55.19

