

Historical Change in Legitimation of First Births: 1920-2002

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The past 75 years have witnessed marked shifts in family and fertility patterns, which have been widely studied by social scientists and policy researchers from a broad range of disciplines. These include changes in union formation and dissolution, childbearing, and attitudes about a range of family issues. After a brief period characterized by early marriage, low levels of divorce, and higher levels of fertility following World War II (i.e., the Baby Boom), recent decades have been marked by lower levels of childbearing, higher divorce rates, increases in the average age at marriage, rising nonmarital child-bearing, and an upsurge in unmarried cohabitation (Casper & Bianchi 2002; Seltzer 2000; Smock 2000; Thornton, Fricke, Axinn, & Alwin 2001; Thornton & Young-Demarco 2001).

While scientists have produced a large body of research on these trends and patterns, we are able to add to this knowledge substantially through the use of a unique combination of datasets to directly address a central demographic question, that of the legitimation of first births. This project makes use of data from the Low Fertility Cohorts Study (women born between 1901-1910); the 1955 and 1960 Growth of American Families Surveys; the 1965 and 1970 National Fertility Surveys; and the 1973, 1976, 1982, 1988, 1995, and 2002 National Surveys of Family Growth to examine trends in women's behaviors surrounding their births, with a focus on educational differences in the rates of legitimating births over time. The proposed analyses will greatly enhance our understanding of the relationship between education and women's family and fertility decisions across a time period where educational opportunities and the availability of effective contraception for women has changed significantly.

Significance

Recent data from the 2002 National Survey of Family Growth suggest that social class, as measured by education/parental education, is a significant factor in marital status at first birth. Among women age 30-34 whose mothers have at least a Bachelor's degree, the proportions marrying by ages 20, 25, and 30 invariably exceed the proportions who have become mothers. The opposite is true for women whose mothers have less than a high school degree, who are more likely to have become mothers than to have ever married at the same ages. Additionally, women whose mothers had a college degree were much more likely to have become pregnant or given birth in the context of marriage than are women with mothers who did not complete high school (married at conception 64% vs 45%, respectively; married at birth 82% vs. 46%, respectively) (Bachrach, Smock, Hoelter 2007).

Rindfuss and colleagues examined patterns of fertility and education across a 26-year span and found that education does not necessarily reduce fertility as much as it simply delays childbearing (Rindfuss, Morgan, and Offutt 1996). They further find that marital status has some bearing on the relationship between education and childbearing (increased education is related to delays in marriage which lead to delays in childbearing), but that the relationship exists even when marital status is not controlled. In another example, using data for the time period 1965-1977, Rindfuss and Parnell (1989) suggest that there are striking differences in fertility by education and marital status, such that those women who are highly educated, unmarried, and without children are at least ten times less likely than their married counterparts to have a child. Work specifically examining legitimation of a first birth, using the first four cycles of the National Survey of Family Growth, showed some significant effects of education on the odds of marrying after a non-marital conception in the directions to be expected – those with a less than a high school education had a significantly lower likelihood of marrying while those with more than high school were more likely to marry, though this effect was not significant (Parnell, Swicegood, and Stevens 1994).

Our analyses expand upon this previous work by taking legitimization of premarital conceptions as the focus, therefore, addressing the issue of what factors, including education, are significant predictors of whether a birth is conceived before marriage. The data available here also span a much longer time frame than previous studies, giving a better sense of the long-term trends. In the absence of effective contraception, women's education may play a very small role in determining premarital conception. Finally, previous studies of legitimization tend to concentrate on first births whereas we have the ability to examine all births for each respondent, allowing us to compare the effects of education on the incidence of premarital conception compared to the timing of fertility within marriage.

Data and Methods

Data for this analysis will come from 11 studies, 10 of which are part of the new Integrated Fertility Survey Series. The Integrated Fertility Survey Series (IFSS) includes the 1955 and 1960 Growth of American Families (GAF); the 1965 and 1970 National Fertility Survey (NFS); and the 1973, 1976, 1982, 1988, 1995, and 2002 National Survey of Family Growth (Cycles 1-6 of the NSFG).

Each of these surveys has offered invaluable information on issues critical to understanding fertility and related topics at the national level (Thornton & Axinn 2004); they also contain sociodemographic and background information indispensable to understanding and modeling sources of population variation in fertility and family behaviors and attitudes. For example, they have been the leading source of knowledge on contraceptive use and failure rates; pregnancy and pregnancy outcomes; unintended pregnancy; childbearing; fecundity; fertility intentions and expectations; adoption; the use of family planning services; reproductive health; and the linkage between marriage and, more recently, cohabitation and fertility (e.g., Bachrach 1984; Bumpass, Rindfuss, & Janosik 1978; Bumpass & Westoff 1970; Cooksey, Rindfuss, & Guilkey 1996; Forrest 1987; Manning 2001; Morgan & Rindfuss 1999; Musick 2002; Raley 2001; Rindfuss, St. John, & Bumpass 1984; Westoff & Ryder 1977). They have also been used to understand union formation and dissolution (e.g., Bumpass & Lu 2000; Manning & Smock 2002; Teachman 2002). Additionally, each of these studies employs a sample of women that is nationally representative of some subpopulation – samples initially included only white, currently married women ages 18-39 and have expanded over time so that the most recent surveys include samples of all women ages 15-44. These surveys are described well elsewhere and for the purposes of this paper, we focus on the fertility and marital histories of white women from post-World War I to the end of the century. (Also, see Swicegood, Morgan, and Rindfuss (1984) for an example combining data from the first eight of these surveys.)

In addition to the 10 cross-sectional studies described above, we add the newly re-released study of women from the low fertility cohort conducted in 1978 by Jeanne Ridley. This study is comprised of personal interviews of white, ever-married women born between July 1, 1900, and June 30, 1910. In 1978, a national survey of 1,049 married women between the ages of 68 and 78 were interviewed between the months of March and July in order to investigate low fertility during the 1920s and 1930s and the lives of women of childbearing age during those decades. The interview collected information on each respondent's family planning, contraception usage, pregnancy history, fecundity, infertility, fertility, and maternal and infant health. This data source will allow us to extend the historical reach of this current study for nearly three quarters of a century.

Each of these surveys includes a marital and fertility history with date accuracy in months, making it possible for us to determine a respondent's marital status at the time of each birth, not just the first. The focus of this paper will be to examine changes in the incidence and correlates of legitimization of premarital conceptions for all birth orders. We are particularly interested in the changing role

education plays in nonmarital conceptions through the more than eighty-year birth history covered by this study.

The fertility and marital histories include information about the partners/relationship at each event as well. This will allow us to examine whether legitimation was different based on characteristics such as the father's age. Finally, all of the surveys in this group also have data on both respondents' and parents' education. The inclusion of parents' education allows for a proxy of social class, given the endogeneity of schooling and family formation decisions, as well as the ability to test for intergenerational effects of education on the likelihood of legitimating a birth (Brien, Lillard, and Waite 1999; Upchurch, Lillard, and Panis 2002).

Proposed Analyses

Ever married white women will be the focus of this analysis as the sampling strategies of these 11 surveys precludes an analysis of any other demographic group throughout the entire period. We will be examining both the incidence of premarital conception and its correlates over historical time. Thus, the focus on married women presents less of an analytic problem than might appear to be the case. The sampling design of the Low Fertility Study also presents some problems of selection bias as women must survive to age 68 in order to be eligible for the study. Differential mortality in the early- to mid-20th century suggests that the analysis will miss women of lower socioeconomic status. The exclusion of non-white women presents another challenge to study design. Because the focus of the study is the process of legitimization (resolving through marriage), this will present less of a challenge as non-white women historically have been less likely to resolve non-marital conceptions through marriage. Logistic regression models will be used to test the effects of education on the likelihood of conceiving a child nonmaritally. Respondents' age at the birth and birth cohort (year of first birth, grouped into cohorts), along with partner's age at the birth, will also be included as controls to determine whether educational effects have changed over time and/or vary by age.

Expected Results

The analyses proposed here will help fill a gap in knowledge about women's behaviors surrounding a birth. Current research suggests that women with higher levels of education are more likely to give birth when they are in a marital relationship than are their peers with less education. It is unclear, however, whether this is a fairly recent or long-term trend. The use of this unique data source will allow us to take an historical look at the context of women's childbearing over a span of more than eighty years. This work is another step in overcoming some of the difficulties in understanding family change and variation across time (e.g., Seltzer et al., 2005).

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