Extended abstract: The Decoupling of Marriage and Parenthood? Trends in the Timing of Marital First Births, 1945-1995

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Introduction

Dramatic changes in family formation behavior occurred over the second half of twentieth century. These shifts, and their implications for child and adult well-being, are well documented (e.g., Cherlin 2010; Ellwood and Jencks 2004; McLanahan 2004; Smock and Greenland 2010). Americans are marrying later, and more are remaining unmarried; divorce rates have increased; nonmarital cohabitation has become more common; and the proportion of births taking place to unmarried women continues to rise. Some of these trends appear to have run their course – for example, divorce rates have plateaued since the 1980s (Raley and Bumpass 2003) – but the upward climb in cohabitation and nonmarital childbearing continues. These trends have been particularly pronounced among women with lower levels of education (Ellwood and Jencks 2004; Martin 2004).

As a result of these changes, marriage and parenthood have been increasingly decoupled, both behaviorally and normatively. This decoupling has primarily been studied in terms of childbearing outside of marriage, but the separation between marriage and childbearing may also have implications for fertility behavior *within* marriage. However, changes in marital childbearing have less frequently been the subject of empirical research.

In this paper, we use data from six decades of fertility surveys to describe changes in the timing of marital childbearing over the second half of the twentieth century. We analyze harmonized data from a newly available resource, the Integrated Fertility Survey Series (IFSS), to explore trends in (1) the proportion of marriages begun after a conception and before a birth; (2) the average time to first birth in marriage; and (3) variation in timing of first marital birth. We assess the role of changes in education and age at first marriage in explaining changes over the time period studied and present trends separately by race-ethnicity. Below we outline the motivation for our questions, describe the data, and provide some preliminary results for white and African American women.

Background

Changes in marriage over the late twentieth century have been described by family demographer Andrew Cherlin (2004) as representing what he terms the "deinstitutionalization of marriage." That is, marriage is increasingly understood as a relationship defined by and for individual needs, rather than a social contract entered by a couple for economic or normative reasons; moreover, it is increasingly seen as optional. Rather than serving as a key marker of adulthood, marriage is now a "capstone" relationship to be entered into only after financial and residential independence have been securely established (Gibson-Davis, Edin, and McLanahan 2003; Smock, Manning, and Porter 2005). The decoupling of marriage and childbearing is a key component of the deinstitutionalization of marriage and of family change more broadly. The growing proportion of births that take place outside of marriage, and the declining likelihood that a nonmarital conception will be "legitimated" by marriage before the birth (Hoelter, LeClere, and Smock

2008), demonstrate that fewer couples believe it is necessary to be married in order to become parents. Although most American still agree that marriage is the *most* appropriate setting for raising children, nonmarital parenthood is widely considered an acceptable alternative (Kefalas et al. 2011; Thornton and Young-DeMarco 2001).

These changes have been experienced differentially across population subgroups; as a result, current family formation patterns show substantial disparities by race-ethnicity and education. Nonmarital birth rates are higher for African American women than for non-Hispanic white women, and Hispanic women are more likely than non-Hispanic women to form and have children in long-term cohabiting relationships (Wildsmith and Raley 2006). White women are more likely to move from cohabitation into marriage than other race-ethnic groups, and especially are more likely to marry in response to a nonmarital pregnancy (Lichter, Qian, and Mellott 2006; Manning 1993, 2001). Women with higher education levels are more likely to marry than less advantaged women and less likely to have children outside of marriage (Goldstein and Kenney 2001; Upchurch, Lillard, and Panis 2002).

Studies of change over time in family formation are often framed as explanations for the spread of new family forms: There has been little empirical attention to possible changes over time in "traditional" (married) parenthood. However, changes in the associations between marriage and fertility may have implications for behavior within marriage. Providing a social and legal context for childbearing is a primary purpose of institutionalized marriage. In contrast, "individualized marriage" centers on the emotional fulfillment of the couple (Cherlin 2004). While childbearing continues to be an important goal for most Americans (McQuillan et al. 2008), attitudinal studies suggest that this belief has become less universal over the past few decades (Thornton and Young-DeMarco 2001). Thus, we might expect to see changes in marital fertility. On the one hand, it is possible that more married couples will remain childless. Similarly, among couples who want to have children, there may be a longer duration between marriage and first birth. On the other hand, since marriage is increasingly optional rather than a required step toward adulthood, there may be more couples who do not marry unless and until they decide to become parents. This phenomenon would lead to a decrease in the interval between first birth and marriage. Either or both of these changes may be taking place; given the stratification in U.S. family behavior according to race-ethnicity and education, they are likely differentially distributed in the population. In this paper, we assess the extent to which the decoupling of marriage and parenthood has been translated into these two patterns of fertility behavior within marriage.

Data and methods

Data, measures, and sample

Data come from the Integrated Fertility Survey Series, a dataset of harmonized data from ten surveys of fertility and family behavior conducted in the United States between 1955 and 2002: the Growth of American Families (GAF) surveys of 1955 and 1960; the National Fertility Surveys (NFS) of 1965 and 1970; and the National Surveys of Family Growth (NSFG) of 1973, 1976, 1982, 1988, 1995, and 2002. All surveys are nationally representative, but the populations represented vary; the sampling frames and sample sizes of each survey are listed in Table 1.The IFSS compiles data from all surveys and harmonizes the original data, including weights and survey design variables, into comparable formats. Harmonized IFSS data are available online at http://www.icpsr.umich.edu/icpsrweb/IFSS/ .

The primary measures used in this analysis, timing of first marriage and first birth, are highly comparable across surveys. The main limitation of the harmonized data is the limited sampling frames of the early surveys. The 1955 and 1960 GAF, the 1965 and 1970 NFS, and the 1973 NSFG interview only married women, and the 1976 NSFG is restricted to ever-married women and women with children in the household. The 1955 GAF includes only white women. Data on cohabitation are collected only starting in the 1982 NSFG, and complete cohabitation histories are not collected until the 1995 NSFG. These restrictions limit analytic possibilities. For example, because unmarried women are not interviewed in the early surveys, it is not possible to consider change over time in selection into marriage or the proportion of nonmarital conceptions that are not legitimated. In addition, the time period analyzed is shorter for African American women than for white women. Still, given the scarcity of data describing marriage and family in the 1950s and 1960s, the benefits of using the IFSS data outweigh the limitations.

Analyses focus on fertility timing in a woman's first marriage. Although the completeness of marital histories collected in the IFSS surveys varies, all surveys collect start and end dates of the first marriage. In all, the pooled surveys include 56,492 ever married women; 737 first marriages with missing start or end dates were dropped. To minimize bias related to retrospective reporting and age truncation, we limit analyses to marriages that took place within the ten years prior to the survey they were reported in to women ages 18 to 30. After this restriction, the analytic sample consists of 19,830 marriages to 15,178 white women and 4,652 African American women. (Because of changing race-ethnic categorizations over the different surveys, we exclude 616 marriages to women of other racial and ethnic groups.) We divide these marriages into 11 marriage cohorts spanning the twentieth century from the Baby Boom until the 1990s: 1945-49; 1950-54; 1955-59; 1960-64; 1965-69; 1970-74; 1975-79; 1980-84; 1985-89; 1990-95; and 1995-2002.

We describe trends in the time between marriage and the first birth within the marriage (regardless of the parity of the birth with respect to the woman's reproductive career). All of the IFSS surveys collect complete fertility histories, and less than one percent of births reported have missing dates. We identify births that took place within seven months of the marriage start date as premaritally conceived.

The primary stratifying variables are race-ethnicity, age at marriage, and education. Analyses will be presented separately for white and African American women. Because of the sampling frames and measurement of race-ethnicity in the GAF surveys, analyses for African American women will include data from the 1965 NFS and later surveys only. Data on Hispanic ethnicity was not collected until the 1973 NSFG. The preliminary results presented here combine Hispanic and non-Hispanic respondents; the completed paper will assess the feasibility of separating Hispanic and non-Hispanic respondents in the later surveys only. Age at marriage will be categorized as 20 or under, 20-24, 25-29, and 30 or over. The paper will measure education both as an absolute measure (no high school degree; high school degree/some college; bachelor's degree and higher) and a relative measure (education terciles calculated based on years of education).

Analytic approach

Analyses are primarily descriptive. We start by calculating the proportion of marriages that begin with a premarital conception, the proportion of marriages childless after two years, and the proportion of marriages childless after five years in each marriage cohort. These statistics show

change over time in the distribution of first births early and (relatively) late in marriage. Preliminary results for white and African American women are presented in this extended abstract.

In the second stage of the analysis, we estimate discrete time event history models predicting the timing of the first birth within marriage. The unit of analysis will be the person-month, and analyses will be conducted separately for white and African American women. These models account for censoring of marriages (i.e., the fact that some married couples will experience a first birth after the survey that is not observed) and allow for formal significance tests of differences across cohorts. Independent variables will include dummy variables for marriage cohort, age at marriage, and education, as well as time since marriage (specified as a piecewise linear spline, with dummy variables 0-7 months, 8-24 months, 25-60 months, and 61 or more months). We will test cohort-duration interactions to assess whether time trends in the proportion of couples with a short transition to parenthood and a long transition to parenthood are different. Initial models will include only duration, marriage cohort, and duration-marriage cohort interactions. Explanatory variables (age at marriage, education) will be added in subsequent models to see whether compositional changes explain time trends. We will also explore interactions between time trends and the explanatory variables.

Preliminary descriptive results

Table 2 shows change over time in the proportion of first marriages that begin with a premarital conception, the proportion of first marriages childless after two years, and the proportion of first marriages childless after five years in each marriage cohort, separately for white and African American women married 1945-2002. (Recall that because of the sample frames of the surveys, African American women are not observed in the earliest surveys.) As described in the previous section, the table is limited to marriages begun in the 10 years prior to the survey in which they were reported and women age 18-30 at the time of marriage. The same information is presented graphically in Figure 1.

<Table 2 about here>

<Figure 1 about here>

For white women, trends in the proportion of marriages beginning with a premarital conception are nonlinear but depict an overall increase over the marriage cohorts of the mid to late twentieth century. Of marriages that began between 1945 and 1949, only 6.4% of women had a birth within the first seven months of marriage; the comparable figure for the late 1990s was 21.3% of marriages, or more than one in five women. Previous research has found that the likelihood of legitimating a nonmarital conception declined in the twentieth century (Hoelter, LeClere, and Smock 2008). It appears that, despite this decline, legitimations account for an increasing proportion of marriages, perhaps because other reasons for marrying have become less pressing.

At the same time, the interval between first birth and marriage appears to have increased for white women. Again, trends are non-linear and suggest a possible plateau in the marriage cohorts of the early 1970s. In the 1940s and 1950s, between 30 and 40% of couples were childless after two years of marriage – that is, 60 to 70% of couples had a child within the first two years of marriage. In the 1970s and 1980s, around 60% of couples were childless after two years, implying that only 40% had a child within the first two years of marriage. A similar increase is apparent when looking at the proportion of couples childless after five years.

Trends for African American women are similar to those for white women. A larger proportion of marriages of African American women have always been preceded by a premarital conception, but the magnitude of the difference has declined over time (e.g., 26.2% of African American women vs. 13.8% of white women in the early 1970s marriage cohorts compared to 31.9% vs. 21.3%, respectively, by the late 1990s cohort). This convergence is largely driven by the increasing proportion of marriages begun after a premarital conception among whites across cohorts; the trend among African American marriages in premarital conception does not seem to suggest an overall increase beyond year-to-year fluctuations. Fewer African American women than white women are childless after two years of marriage (e.g., 46.6% of African American women vs. 63.0% of white women in the early 1970s marriage cohorts), but the timing and direction of changes over time are the same across racial groups. Levels of childlessness after five years of marriage are similar for white and African American women.

Discussion and next steps

Taken together, the increasing proportion of marriages begun with a premarital conception and the lengthening interval to first births show a bifurcation in fertility timing. It appears that more couples are waiting to marry until a pregnancy occurs, and more couples are postponing fertility within marriage. In the complete paper, we will assess the extent to which these opposing trends can be explained by changes in the age and educational composition of married couples.

The completed paper will expand the background and motivation, refine the analysis, and add event history analyses of time to first birth as described in the methods section.

References

Cherlin, A. J. 2004. "The deinstitutionalization of American marriage." *Journal of Marriage and Family* 66 (4): 848-861.

Cherlin, A. J. 2010. "Demographic trends in the United States: A review of research in the 2000s." *Journal of Marriage and Family* 72 (3): 403-419.

Coontz, S. 2005. *Marriage, a history: How love conquered marriage*. New York: Penguin Books.

Ellwood, D., and C. Jencks. 2004. "The uneven spread of single-parent families: What do we know? Where do we look for answers?" Chapter 1 in K. Neckerman, ed., *Social Inequality*. New York: Russell Sage.

Integrated Fertility Survey Series. http://www.icpsr.umich.edu/icpsrweb/IFSS/ .

Gibson-Davis, C.M., K. Edin, and S. McLanahan, S. 2005. "High hopes but even higher expectations: The retreat from marriage among low-income couples." *Journal of Marriage and Family* 67 (4): 1301-1312.

Goldstein, J. R. and C. T. Kenney. 2001. "Marriage delayed or marriage forgone? New cohort forecasts of first marriage for U.S. women." *American Sociological Review* 66(4): 506-519.

Hoelter, L. F., F. B. LeClere, and P. J. Smock. 2008. "Historical change in legitimation of first births: 1920-2002." Paper presented at the Population Association of America Annual Meetings.

Kefalas, M. J., F. F. Furstenberg, Jr., P. J. Carr, and L. Napolitano. 2011. "'Marriage is more than being together: The meaning of marriage for young adults." *Journal of Family Issues* 32 (7): 848-875.

Lichter, D. T., Z. Qian, and L. M. Mellott. 2006. "Marriage or dissolution? Union transitions among poor cohabiting women." *Demography* 43 (2): 223-240.

Manning, W. D. 1993. "Cohabitation, marriage, and entry into motherhood." *Journal of Marriage and Family* 57 (1): 191-200.

Manning, W. D. 2001. "Childbearing in cohabiting unions: Racial and ethnic differences." *Family Planning Perspectives* 35 (2): 217-223.

Martin, S. P. 2004. "Women's education and family timing: Outcomes and trends associated with age at marriage and first birth." Chapter 2 in K. Neckerman, ed., *Social Inequality*. New York: Russell Sage.

McLanahan, Sara. 2004. "Diverging destinies: How children fare under the Second Demographic Transition." *Demography* 41(4): 607-627.

McQuillan, J., A. L. Greil, K. M. Shreffler, and V. Tichenor. 2008. "The importance of motherhood among women in the contemporary United States." *Gender & Society* 22: 477-496.

Raley, R. K. and L. L. Bumpass. 2003. "The topography of the divorce plateau: Levels and trends in union stability in the United States After 1980." *Demographic Research* 8:245-60.

Smock, P. J. and F. R. Greenland. 2010. “Diversity in pathways to parenthood in the U.S.: Patterns, implications, and emerging research directions.” *Journal of Marriage and Family* 72 (3):576-593.

Smock, P. J., W. D. Manning, and M. Porter. 2005. “‘Everything’s there except money’: How money shapes decisions to marry among cohabitors.” *Journal of Marriage and Family* 67 (3): 680-696.

Thornton, A. and L. Young-DeMarco. 2001. “Four decades of trends in attitudes toward family issues in the United States: The 1960s through the 1990s.” *Journal of Marriage and Family* 63(4): 1009-1037.

Upchurch, D. M., L. A. Lillard, and C. W. A. Panis. 2002. “Nonmarital childbearing: Influences of education, marriage, and fertility.” *Demography* 39 (2): 311-329.

Wildsmith, E., and R. K. Raley. 2006. “Race-ethnic differences in nonmarital fertility: A focus on Mexican American women.” *Journal of Marriage and Family* 68 (2): 491-508.

Table 1. IFSS surveys, sampling frames, and sample sizes

Survey	Sample frame	N (women)
GAF: 1955	Married white women, age 18-39	2713
GAF: 1960	Married white women, age 18-39; previously married white women (married in 1955), age 23-44; married non-white women, age 18-39	3256
NFS: 1965	Currently married women, age 55 and under; black women oversampled	5617
NFS: 1970	Ever-married women, age 45 and under; black women oversampled	6752
NSFG: 1973	Ever-married women and single women with children in household, age 15-44; black women oversampled	9797
NSFG: 1976	Ever-married women and single women with children in household, age 15-44; black women oversampled	8611
NSFG: 1982	Women, age 15-44; black and teenage women oversampled	7969
NSFG: 1988	Women, age 15-44; black women oversampled	8450
NSFG: 1995	Women, age 15-44; black and Hispanic women oversampled	10847
NSFG: 2002	Women, age 15-44; black, Hispanic, and teenage women oversampled	7643

Table 2. Timing of first marital birth, white and African American women, married 1945-2002

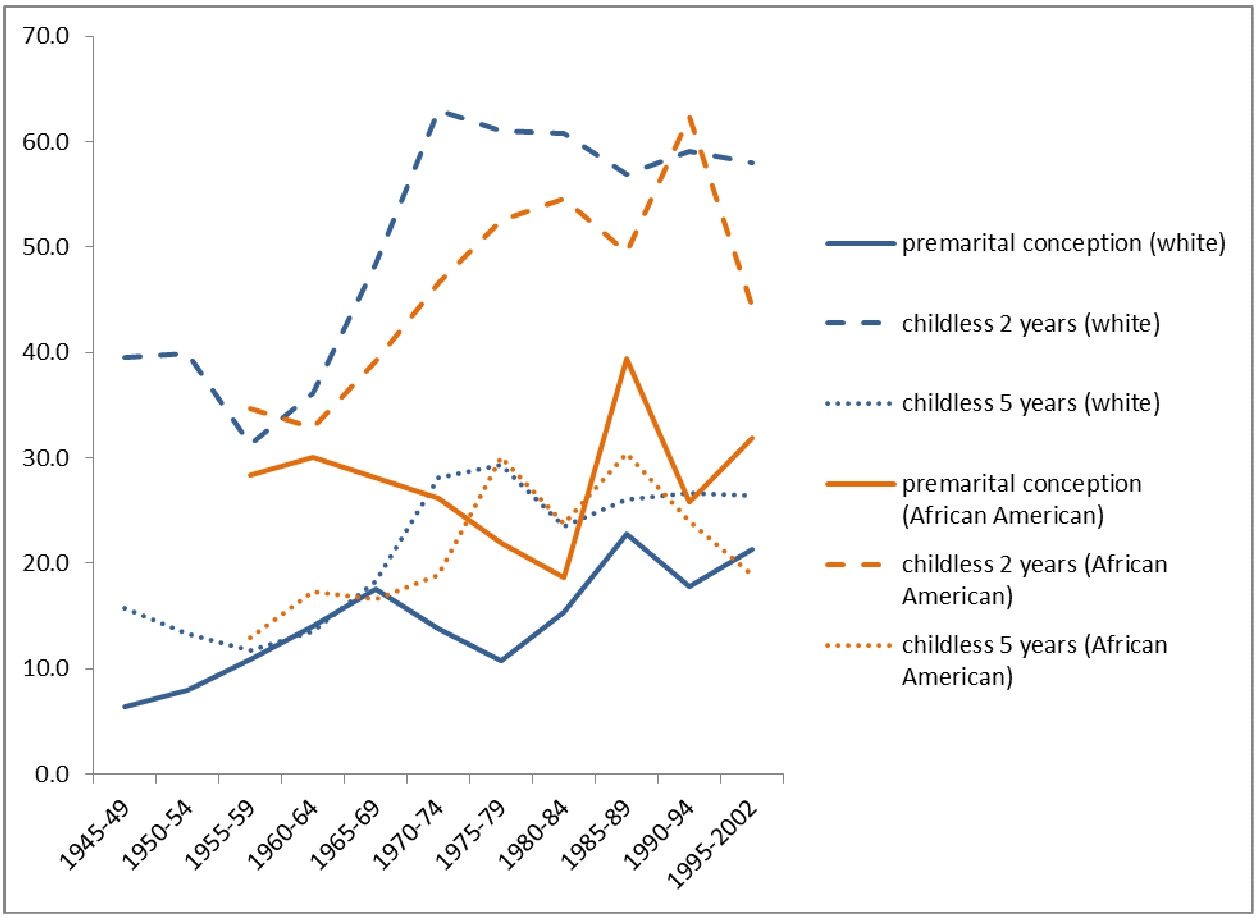
Year of first marriage	% of marriages beginning with premarital conception	% of marriages childless after 2 years[a]	5 years[b]	N (marriages)
white women				
1945-49	6.4	39.5	15.7	716
1950-54	7.9	39.9	13.3	1002
1955-59	10.8	31.2	11.7	939
1960-64	14.1	36.2	13.6	1569
1965-69	17.5	48.4	18.2	3165
1970-74	13.8	63.0	28.1	2424
1975-79	10.7	61.0	29.3	1090
1980-84	15.4	60.8	23.5	1001
1985-89	22.8	56.9	26.1	1246
1990-94	17.8	59.1	26.7	1077
1995-2002	21.3	58.0	26.4	949
African American women				
1955-59	28.4	34.7	12.9	163
1960-64	30.0	32.9	17.3	413
1965-69	28.1	39.1	16.6	1168
1970-74	26.2	46.6	18.8	1107
1975-79	21.9	52.6	30.1	524
1980-84	18.7	54.6	23.8	456
1985-89	39.4	49.5	30.5	339
1990-94	25.8	62.4	23.9	233
1995-2002	31.9	44.3	18.8	198

Data: IFSS harmonized data from 10 U.S. fertility surveys; see text for details. Percents weighted. Marriages with non-missing start and end dates within 10 years prior to each survey, to women age 18-30. First births with non-missing dates.

[a] Calculated for marriages lasting at least two years.

[b] Calculated for of marriages lasting at least five years.

Figure 1. Timing of first marital birth, white and African American women, married 1945-2002



Data: IFSS harmonized data from 10 U.S. fertility surveys; see text for details. Percents weighted. Marriages with non-missing start and end dates within 10 years prior to each survey, to women age 18-30. First births with non-missing dates.