CHANGES IN THE RELATIONSHIP BETWEEN THE OUTCOMES OF COHABITING PARTNERSHIPS AND FERTILITY IN BRITAIN: EVIDENCE FROM THE 1958 AND 1970 BIRTH COHORT STUDIES

Fiona Steele, Constantinos Kallis, Heather Joshi and Harvey Goldstein

Bedford Group for Lifecourse and Statistical Studies
Institute of Education
University of London
20 Bedford Way
London WC1H 0AL

The research question

The trend towards greater instability and informality of partnerships is associated with later and less childbearing at the national level in many developed countries. To some extent, childbearing is postponed until a stable partnership is formed, but also an increasing number of children experience the break-up of their parent's union such that the majority of lone parent families are the outcome of partnership dissolution rather than unpartnered motherhood, and a growing number of step-parent families are also being formed. The nature and dynamics of partnership stability and childbearing are of interest in understanding the changing demographic and social structure, and in helping to inform the expectations of policy makers and the public at large.

In this paper, we set out to investigate the relationship between the outcome of cohabiting partnerships and childbearing for women born in 1958 and 1970, and to compare this relationship across cohorts. We explore the circumstances under which the presence of children stabilise such partnerships, and which children are particularly at risk of parental break-up, and assess the extent to which these circumstances have changed over time. In particular, we consider the effect of the number, age and parentage of children on the risk that a nonmarital union is dissolved and on the probability that the union is converted to marriage.

Methodology

We use a multilevel competing risks event history model (Steele, Goldstein and Browne 2004) to study predictors of the dissolution of cohabiting unions and movements from cohabitation to marriage. A multilevel model allows for correlation between the durations of multiple partnerships contributed by the same woman. Competing risks arise since a period of cohabitation may end in separation or marriage to the same partner.

Another methodological issue that must be considered is the potential endogeneity of the presence of children with respect to partnership outcomes. The decision to end a union, or to move from cohabitation to marriage, is likely to be jointly determined with the decision to have a child with that partner. In other words there may be factors, both observed and unobserved, which drive both processes. Failure to account for this source of endogeneity will lead to biased estimates of the effects of the presence and characteristics of children on partnership outcomes. We therefore model jointly the processes of partnership stability and fertility using a multiprocess model, which allows for unobserved factors that influence both

partnership and fertility outcomes. Multiprocess modelling of event history data was first proposed by Lillard and Waite (1993), with an application to an analysis of marital dissolution and marital fertility. In our study, we adopt the approach proposed by Steele et al. (2004) which applies and extends Lillard and Waite's framework to the outcomes of cohabiting unions and fertility during cohabitation. The multiprocess model consists of a system of three equations, one for each cohabitation outcome and a further equation for childbearing within cohabitation. Each equation contains a woman-specific random effect or residual which represents unobserved characteristics of the woman. These random effects are permitted to correlate across equations to allow for correlation between the unobserved woman-level characteristics that affect each process.

The model described above can be framed as a multilevel model for categorical response data, which can be estimated using existing software such as *MLwiN*.

Data

The analysis uses data from the 1958 and 1970 British birth cohort studies, prospective longitudinal studies of all those living in Great Britain who were born in a particular week of either year. Retrospective partnership and birth histories were collected in each study. In our analysis of partnership transitions, the explanatory variables of major interest are outcomes of the fertility process, measured by time-varying counts of the number of children living with a woman. We distinguish between preschool and older children, and between children fathered by a woman's current partner at time *t* and those fathered by a previous partner or a non-coresident partner. In addition, we estimate the effect of being currently pregnant, and pregnancy duration, on the odds of dissolution and marriage.

Characteristics of the current partnership, including the woman's age at the start of the cohabitation, are considered together with covariates relating to the woman's previous marital and nonmarital partnerships. Specifically, women who had been previously married or who had cohabited before the current partnership episode will be identified.

We also consider a range of background characteristics found to be important in earlier studies of partnership transitions and childbearing. These include the number of years of post-compulsory education (treated as time-varying) and measures of the respondent's family background: the father's social class at the respondent's birth, region of residence, the experience of family disruption during childhood, and housing tenure at age 16.

Previous research and expected findings

This paper builds on the work of Steele et al. (2004) who considered the effects of the presence and characteristics of children on the outcomes of marital and nonmarital partnerships between the ages of 16-42 for the 1958 birth cohort. The findings of that study are broadly consistent with those from other studies based on British and North American data. They found that women who have children with a marital partner are less likely to separate than those who do not, while the presence of children from a previous relationship increases the risk of dissolution. In contrast, the risk of separation among cohabitors was not found to be significantly associated with having children, regardless of their age or whether they were fathered by the current or a previous partner. However, the presence of children conceived during cohabitation was found to reduce the odds of marriage.

In this paper, we contrast the experiences of the 1958 and 1970 birth cohorts between the ages of 16 and 30. A previous comparative study (Berrington 2001) found that, relative to the 1958 cohort, the 1970 cohort marry later, are more likely to cohabit, to cohabit for longer, and to have children outside marriage. The same study also found evidence of greater variation in the timing and sequencing of partnership formation, dissolution and childbearing among the more recent cohort. Questions for further research include whether the effects of the presence of children on partnership dissolution and the movement from cohabitation to marriage have changed. For example, one would expect the rise in single parenthood and nonmarital births to have weakened the positive effect of being pregnant on the conversion of a cohabitating relationship into marriage.

References

Berrington, A. 2001. "Change and Continuity in Family Formation Among Young Adults in Britain." Paper presented at workshop on "Union Formation in Interdependent Life Courses", Rostock, Germany.

Lillard, L. and L. Waite, 1993. "A Joint Model of Marital Childbearing and Marital Disruption." *Demography*, 30: 653-681.

Steele, F., H. Goldstein and W. Browne. 2004. "A General Multistate Competing Risks Model for Event History Data, with an Application to the Study of Contraceptive Use Dynamics." *Journal of Statistical Modelling*, 4: 145-159.

Steele, F., C. Kallis, H. Goldstein and H. Joshi. 2004. "The Relationship between Childbearing and Transitions from Marriage and Cohabitation in Britain." (Submitted).