Intergenerational Transmission of Childbearing across Partnerships

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Over the last decades there is increasing union instability, especially among parents, and increasing experience having children with more than one partner. Estimates from the U.S. indicate that 8 per cent of American men aged 15-44 have children with more than one partner (Guzzo and Furstenberg 2007), while estimates from Norway show an increase in the proportion of men who had children with more than one partner from less than 4 per cent in cohorts before the Second World War II to about 11 per cent in cohorts born in the early 1960s (Lappegård et al. 2011).

It is well known that parental separation is associated with a higher risk of one's own divorce and several studies have found variation in intergenerational transmission both across time (Wolfinger 1999) and between countries (Dronkerss and Härkönen 2008; Engelhardt et al. 2002; Diekmann and Schmidheiny 2004; Wagner and Weiß 2006). There is also a wide range of literature that shows intergenerational transmission of childbearing both in number of children (Anderton et al 1987; Murphy and Wang 2001; Murphy and Knudsen 2002) and timing of entering parenthood (Furstenberg et al. 1990; Horwitz et al. 1991; Kahn and Anderson 1992; Barber 2000; Steenhof and Liefbroer 2008). It has also been found that the strength of the transmission changes across cohorts, but only from mothers to children (Steenhof and Liefbroer 2008).

Whether there also is an intergenerational transmission of childbearing across partnership is less noticed and documented. In this paper we extend the research and focus on whether men and women with halfsiblings are more inclined to have children with more than one partner. We will use unique data allowing for detailed information from administrative registers of men and women in Norway and Sweden over a 40-year period. First, we take an explicitly life-course and fertility-centered approach (Lappegård and Rønsen 2009), estimating the risk of having a second- or higher-order birth with the same partner or with a new partner as competing risks. Such analyses allow us to estimate the likelihood of experiencing births with a different partner even for those who have not (yet) had them. Second, we consider whether there is cross-cohort and cross-national variation in intergenerational transmission of childbearing across partnerships. Comparing two countries with similar welfare state regimes we can better understand contextual influences on childbearing patterns that influence the intergenerational transmission of childbearing across partnerships. Using data from 1970-2010 we can get insight in whether intergenerational transmission has changed over time.

Background

Intergenerational transmission of childbearing across partnerships

The link between parents' divorce and children's divorce has been found to be partly a product of traits transmitted genetically or otherwise from parents to their children and partly a result of the experience of the parents' divorce itself (Dronkers and Härkönen 2008). One argument for the latter inference is that pre-divorce conflict between parents lowers marital stability, but the opposite has been found where conflict between parents may even stabilize marriages by enabling the offspring to learn to endure marital hardship (Amato and DeBoer 2001). Another argument for which there is weak evidence is the absence of role models for intimate relationships after divorce (MacLanahan and Bumpass 1988; Amato 1993; Diekmann and Engelhardt 1999; Wolfinger 2005). It is however found that intergenerational transmission of divorce is mediated in part by life-course decisions and outcomes that also affect the risk of divorce, such as education, age at marriage, cohabitation and fertility behavior (Dronkers and Härkönen 2008).

If the intergenerational transmission of childbearing across partnerships is mediated by parents' divorce, differences can be expected in effects of having an older or a younger half-sibling. If you have only older half-siblings you are less likely to have experienced parents' divorce, while if you have younger half-siblings you have most likely experienced a divorce. We therefore present the hypothesis that *the intergenerational transmission of childbearing across partnership is stronger when women and men have half-siblings that are younger than themselves* (Hypothesis 1).

One explanation for the phenomenon of intergenerational transmission of age at the first child is socialization theory (Barber 2000). The argument is that conformity of children's behavior with that of their parents is a result of conscious or unconscious learning (Steenhof and Liefbroer 2008). If the age at which parents had their first child is a reflection of their attitudes about ideal age to have a first child, and the parents transmit these attitudes to their children, this will lead to intergeneration transmission of the age at which the first child is born (Steenhof and Liefbroer 2008). There might be other attitudes than ideal age to have a first child being transferred between the generations such as norms towards having children with more than one partner. As most children live with their mother after divorce men and women having half-siblings are more likely to live with these half-siblings on your mothers' side you are more likely to be exposed to positive attitudes towards childbearing across partnerships. These arguments lead us to the hypothesis that *intergenerational transmission of childbearing across partnership is stronger when women and men have half-siblings on their mother's side* (Hypothesis 2).

Changes in the strength of intergenerational transmission across cohorts

Over the years childbearing across partnerships has increased in the same way as divorce. It has been found that transmission of divorce has weakened over time (Wolfinger 1999; 2011). It is not only the attitudes and behavior of parents that influence the child's behavior, but also behavior of other persons (Dronkers and Härkönen 2008). In high-divorce populations the signal of the fragility of marriage sent by parents' divorce should be lower than in low-divorce populations (Glenn and Kramer 1987), i.e., people can learn of the possibility and acceptability of divorce by observing the behavior of couples other than their own parents and the relative importance of parents' behavior is reduced (Dronkers and Härkönen 2008). Using these lines of arguments we develop the hypothesis that *intergenerational transmission of childbearing across partnership is weaker in populations with higher levels of childbearing across partnerships* (Hypothesis 3).

Social context and the intergenerational transmission of childbearing across partnerships

How states support and regulate family life varies (e.g. Gauthier 1996) and some countries are more generous with income transfers to families, which offer an economic buffer against the consequences of divorce (e.g. Aassve et al 2007). It has also been argued that rather than acting as a buffer, such transfers might increase the attractiveness of single parenthood and hasten the divorce process (Gonzalez 2007). However, comparative analyses have not found evidence that such factors influence children's divorce risk (Dronkers and Härkönen 2008).

Both Norway and Sweden are social democratic countries with long histories of state support for parenthood (parental leave, public child care, leave for care of sick children and child allowances), although Norway has had more generous income transfer to single parents. The two countries have relatively similar contexts and make it interesting to investigate whether similar family processes are operating in the two contexts. However, there are some differences between the countries that might influence the intergenerational transmission of childbearing. Sweden has been ahead of Norway in terms of cohabitation and union stability, which means that differences between subpopulations (cohorts, classes) might not be so great in Sweden as in Norway because the behaviors would be more common in Sweden throughout the period we observe. From this we form the hypothesis *that intergenerational transmission of childbearing across partnership is weaker in Sweden than in Norway* (Hypothesis 4).

Data and methods

We use data from the national population registers. We use the multi-generation registers to match every woman and man with her/his children and obtain the year and month of the child's birth. These registers also uniquely identify the father/mother of each child; in a very small number of cases, fathers are not identified, but an unknown father can be presumed not to be the same person as the father of an earlier-or later-born child, whether identified or not. Thus, without reference to marriage or union histories we are able to determine whether a second or higher-order birth is with the same man/women as the first birth. Through the parent-child connections, we are able to identify siblings and provide information about whether each person has half-siblings, and whether half-siblings are older or younger, on the mother's side or the father's side.

We estimate the risk of having an $n+1^{st}$ birth with different man/women than the father/mother of the first *n* children, for women/men who have one, two, three or four children with the first father/mother. Our models include the competing risk of having an $n+1^{st}$ birth with the same man/women who fathered/mothered the first *n* children. Three outcomes are therefore possible: no subsequent birth, a birth with the same father/mother, or a birth with a different father/mother.

Observations are censored after the first birth with a different father/mother than earlier births. For example, women/men who had two children with different fathers/mother do not contribute to the risk of having a third child with the same or different father/mother. Multiple births are treated as a single event, either born to the same or a different father/mother than previous children. We censor after a multiple birth with the same father/mother because of the likely unique consequences of multiple births for further childbearing. Thus, if a woman's/father's first birth is a multiple birth, she/he does not contribute any exposure time to the estimation. Finally, we censor at the last observation or when a woman/man reaches age 45, whichever occurs first.

The duration at risk is measured in calendar years since the previous birth. We estimate multinomial logistic regression models with the three outcomes and duration dependence specified as a linear and squared function of years since the previous birth.

Preliminary results

Preliminary results from the Norwegian data indicate that having a half-sibling increases the likelihood of having children with more than one partner and thereby indicates that there seems to be an intergenerational transmission of childbearing across partnership. The same pattern is present both among men and women. The preliminary results show further that either having only younger half-siblings or having both older and younger half-siblings increases the odds ratios of having children with more than one partner, both among men and women. This indicates that if you have experienced the divorce of your parents and have seen them become parents with another partner you are more likely to experience this yourself. Finally, preliminary results show that having half-siblings only on the mother's side increases the odds ratios of having children with more than one partner, but only among women. However, having half-siblings on both the mother's and the father's side has a positive effect on having children across partnerships for both women and men. This indicate that that women seems to be more influenced by their mother's experience.

Our analyses will provide new information about the prevalence, antecedents and processes of intergenerational transmission of childbearing across partnerships and whether men and women with half-siblings are more inclined to have children with more than one partner in two fairly similar Western countries and over time. This comparative research will shed light on the nature of contemporary family demography, particularly the complexity that results from ongoing fertility in the context of high union instability. The results have implications for the role of families in rearing and socializing children and for the role of government policy in supporting families in diverse circumstances.

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