Age-heterogeneous couples and their children – Testing the transmission of demographic behaviors

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Short abstract

A moderate relationship between demographic behaviors of parents and children has long been documented in the literature (e.g (Kolk, 2013a; Murphy, 1999; Murphy & Knudsen, 2002; Steenhof & Liefbroer, 2008)). To explain these associations, researchers have identified the transmission of values, norms, and attitudes from the parent generation to their children one of the most important explanations (Kolk, 2013b). We test how norms and values regarding first birth and first marriage timing are transmitted to children of age-heterogeneous parents. In age-heterogeneous couples, each partner experienced marriage and first birth at different stages in their life course. Thus, each parent represents a different role model for their children - with unique characteristics and specific norms and values regarding the timing of demographic events. In this paper we study the effect of age-heterogamy on the transmission of demographic events, explore how the effects are altered by parental characteristics, and investigate differences in the strength of the association by the gender of the child.

Introduction and Background

A moderate relationship between demographic behaviors of parents and children has long been documented in the literature (e.g (Kolk, 2013a; Murphy, 1999; Murphy & Knudsen, 2002; Steenhof & Liefbroer, 2008)). Over time the strength of this association has increased (Murphy, 1999). To explain the relationship, researchers have identified the transmission of values, norms, and attitudes from the parent generation to their children one of the most important explanations (Kolk, 2013b). In this study we test how norms and values regarding first birth and first marriage timing are transmitted to children of age-heterogeneous parents.

The occurrence of age-heterogamy is rather stable. In Sweden mean age at first marriage has increased by about 7 years through the course of the 20th century until 2010, especially since the middle of the 1960s (Statistics Sweden, 2010). The age difference between the spouses, however, has remained relatively stable during that period. In the first half of the 20th century men were about 2 years older at first marriage than their wives. Then, the age difference started to increase slowly and reached its highest level in the 1930s and 40s, when men were on average about 4 years older. Since the 1950s it started to decrease again and since then it

has remained almost stable – as in many other countries men are about 3 years older at first marriage. The age disparity between spouses has been associated with a number of outcomes, including higher union instability (e.g. Berardo, Appel, & Berardo, 1993) and differential mortality (e.g. Drefahl, 2010).

In age-heterogeneous couples, each partner experienced marriage and first birth at different stages in their life course. Thus, each parent represents a different role model for their children - with unique characteristics and specific norms and values regarding the timing of demographic events. In this paper we study the effect of age-heterogamy on the transmission of demographic events, explore how the effects are altered by parental characteristics, and investigate differences in the strength of the association by the gender of the child. In this study we test the transmission of first birth and first marriage behavior through these values, norms, and attitudes. We answer several questions: 1) Are the mother's or the father's characteristics more important in explaining child behavior? 2) How does the association change for different types of age-heterogamous couples 3) Does the association differ by the gender of the child?

Data and Methods

We apply a longitudinal approach using Swedish population registers and hazard regression methods to examine the age, duration-specific and time-varying influences of the parental age difference on the child's first birth and first marriage timing. Swedish population registers are considered a source of detailed and very exact information with a very low percentage of missing data. The information collected for every individual are vital events such as birth, death, and migration, as well as a variety of detailed background information such as marital status, occupation, education, and taxable incomes. The base population of our analysis consists of all individuals born in Sweden between 1970 and 1980 for which we can identify both parents. Those individuals are followed from age 16 until December 31st 2007 or until they experience the event of interest. We conduct gender separated models for the transition to first birth and first marriage. The total considered population amounts to 1.04 million Swedish born individuals, 0.528 million of them are men and 0.512 million women.

Modeling parental age and parental age differences requires careful consideration of the dependencies between variables because these variables present a comparable problem to the classic age, period, cohort problem in regression analysis. When mother's and father's age at birth are included simultaneously, the age difference between the father and mother is implicitly modeled as well. In this case including the age difference as an additional covariate is not possible because of collinearity. Therefore we decided to include the age of the mother and father as difference from the gender and parity specific average age at birth for each birth year

of our cohorts of interest. This allows us to include age of the father, age of the mother, and parental age difference, calculated as age of father at marriage minus age at mother at marriage, as variables in the models. Appropriate categorizations of the three most important independent variables as well as additional control variables will be considered for the final version of the paper.

First results

First results support previous findings that both father's and mother's age are negatively associated with first birth intensity of the index person. The older the parents were at the birth of the index person, the older the index person when having their own first birth. The associations were found for both men and women. Our results also confirm an independent effect of the age difference of the parents. In our models the reference group consists of index persons whose parents conform to the social norm, of the father being slightly older than his wife. Index persons whose parents have deviated from that norm have lower first birth intensities. This is true for individuals whose fathers are much older than their mothers but also for persons whose mother is older than their father.

Future models will also control for a variety of additional characteristics, time constant and time varying, of the parents and the index person. Most importantly we have to account for the transmission of characteristics through socioeconomic variables such as education, occupation, and wealth. In addition models need to distinguish for different parities. Models that adjust for these characteristics as well as additional results for the transmission of first marriage will be available in time for the PAA meeting.

Discussion

First results suggest that the age difference between the parents has a rather strong effect on their offspring's fertility timing, however, further work needs to address whether the reduction in the hazard reflects a postponement of first birth to later ages or a reduction of the overall fertility. Further work is also required to shed light on the transmission of norms, values, and attitudes by the age difference of the parents.

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