Relating migration and commuting histories to fertility histories using multi-channel sequence analysis

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Background

In the age of globalisation and increasing mobility demands within the labour market (e.g. Callaghan 1997), work-related spatial mobility, like daily and weekly commuting, frequent business travel or long-distance relocation, has become a widespread phenomenon in today's European societies. Among the working population, about 15 to 20% of Europeans are currently highly mobile for work-related reasons. Moreover, about half have had past experiences with high mobility over their career (Schneider/Meil 2008; Schneider/Collet 2010). Work-related spatial mobility is very time consuming (Rüger/Ruppenthal 2010), and circular forms of mobility (i.e. commuting, etc.) are associated with adverse effects on quality of life and subjective well-being (e.g. Costa et al. 1988; Koslowsky et al. 1995; Limmer/Rüger 2010). In addition, frequent moves (Boyle et al. 2008) as well as long-distance commuting in the case of women (Kley 2012) are associated with a higher risk of union dissolution. Moreover, cross-sectional studies have shown that work-related mobility behaviours and family life events are strongly related to each other, particularly in the case of mobile women (Rüger et al. 2011). For instance, highly mobile women in a stable partnership entered less into marriage and motherhood compared to non-mobile working women. Expanding on this literature, this paper examines high mobility behaviours over men's and women's careers and their interrelations with family life events, based on a sequence analysis. This research can be situated in the broader life course approach (e.g. Elder 1985; Levy et al. 2005) which becomes increasingly important in terms of research on the links between family and geographical mobility (e.g. Huinink/Feldhaus 2009; Cooke 2008; Kulu/Milewski 2007).

Methods

A unique data set was used that includes retrospective information about work-related spatial mobility experiences and family history of 1735 individuals aged 25 to 57. The sample derives from the second wave of the "Job Mobilities and Family Lives in Europe" study (Schneider et al. 2011; Skora et al. 2012; 2013) and was randomly selected from the residential population in Germany, France, Switzerland and Spain in 2007 and 2010/12. Employment/work-related mobility episodes were categorised as follows: Jobs lasting at minimum 1 year that involved (i) long distance commuting (> 2 hrs daily), (ii) spending frequently nights away from home (> 60 overnights per annum) and/or (iii) a long-distance

move (> 50 km). In a life course approach, life trajectories of work-related spatial mobility and fertility were built using the innovative statistical method of sequence analysis techniques (Gabadinho et al. 2009; Gauthier et al. 2008; 2009). Sequences allow us to deal with four relevant dimensions of life trajectories simultaneously: the duration, frequency, timing and type of mobility/family events. We used optimal matching analysis (OMA) to group together similar sequences and multi-channel sequence analysis (MCSA) to analyse how mobility sequences relate to fertility sequences. Based on distances between both types of sequences, we used a cluster analysis to build combined types of mobility and fertility histories. The analyses were restricted to individuals with (predominantly) completed fertility and stratified by gender.

Results

In preliminary results for the German subsample (limited to individuals aged 35 years or older), we extracted a four-cluster solution for women and a three-cluster solution for men. Patterns for the male sample can be described as (1) "High mobility, high fertility" (33.9% of the male sample), (2) "Insecure employment and short-term mobility, low and late fertility" (42.9%), and (3) "Stable employment and long-term mobility, average fertility" (23.3%). For the female sample: (1) "High mobility, low and late fertility" (26.3%), (2) "Stable career and early relocation, one child" (23.1%), (3) "Interrupted career and early relocation, two or three children" (44.2%), and (4) "Abandoned career or late circular mobility, early and very high fertility" (6.4%). These results reveal clear gender differences as to the association between spatial mobility and fertility histories. In the case of men, employment histories characterised by high work-related spatial mobility are associated with high fertility. Histories of insecure work and changing mobility are connected with very low and late fertility. Overall, it seems to be more the timing and length of mobility episodes that matter here, rather than the degree of mobility. In contrast, in the case of women, employment histories characterised by high work-related spatial mobility are associated with very low and late fertility. Interrupted careers with early relocation mobility are connected with high fertility (having two or three children). All in all, spatial mobility and fertility histories are more strongly related in the case of women than in the case of men.

Discussion

The study is the first to present the interrelation between complete histories of work-related spatial mobility and fertility, using multi-channel sequence analysis. While employment histories with high mobility are associated with high fertility in the case of men, we observe the reverse relationship in the case of women; what may reflect the still strongly gendered division of work in Germany. The design of the study using retrospective data and an

explorative approach does however not allow causal interpretations. It may be, on the one hand, that high mobility behaviours prevent women from realising their fertility intentions. On the other hand, it is also possible that being a mother prevents women from being mobile for work. With regard to this, a current study using panel data (Huinink/Feldhaus 2012) comes to the conclusion that female long-distance commuters in Germany do not differ from non-mobile women as to their fertility intentions but to the likelihood of actually realising those intentions. However, as highly mobile women are seldom mothers and mothers are seldom highly mobile growing mobility requirements in contemporary societies may aggravate the compatibility of work and family life especially for women and may reinforce gender inequalities on the labour market. The results thus point to a societal goal conflict where the growing mobility and flexibility of workers challenges work-family life balance and gender equity. The paper will present and discuss the findings across the four countries studied in light of their family policies.

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