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His Education, Her Education, and Fertility: Exploring How Educational Pairings Affect Couples' Childbearing Behavior¹

ABSTRACT

A growing body of literature seeks to understand childbearing behavior from a couple's perspective. Accumulating evidence suggests that the fertility-education relationship for women depends on the partner's education, and vice versa. Specifically, couples with two highly educated partners may today have higher second or third birth hazards than couples with only one highly educated partner or two lower educated partners. Yet, this evidence is largely descriptive; not much is known about the underlying mechanisms of why and how the educational pairings of the partners may be meaningful for their childbearing behavior. Using panel data from Germany (Pairfam) and Australia (Hilda), we address this question and test several possible mechanisms such as differences in the division of housework, his and her gender ideology and how well the partners are matched on them, perceived conflict, and whether there are differences in how well the partners are matched on fertility preferences across educational pairings.

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INTRODUCTION & BACKGROUND

A growing body of literature is seeking to understand childbearing behavior from a couple's perspective. These studies address the interactive process by which two partners are making decisions over whether to have a first or subsequent baby, or investigate whether there is an interactive effect between both partners' resources such as education or employment in relation to their childbearing behavior (Thomson et al 1990; Thomson 1997; Thomson and Hoem 1998, McDonald 2000, Jansen and Liefbroer 2006; Bauer and Kneip 2013 & 2014, Testa et al 2014). Evidence is accumulating which suggests that specifically the relationship between education and fertility may sometimes be mediated by the partner's educational trajectory. Several studies suggest that this applies specifically to the highly educated, and that couples with two highly educated partners may have larger second or third birth hazards, at least in some European countries, compared to couples with only one highly educated partner or lower levels of education (Corijn et al. 1996, Bauer and Jacob 2010, Kreyenfeld 2002, Dribe and Stanfors 2010, Nitsche et al 2015). Yet, this evidence is largely descriptive, and not much is known about the underlying mechanisms that explain why the educational pairings of the partners may be meaningful for their childbearing behavior.

It is one possibility that this significant relationship between educational pairings and couples' childbearing behavior is only spurious. This could apply in case both the educational pairings of partners and their childbearing behavior are driven by other underlying factors, for instance by significant timing differences in when relationship formation occurs in the life course. But it is also possible that educational attainment and its pairings between partners indeed affect childbearing behavior more directly. One such possible pathway has been examined previously. It looks at whether the gendered division of domestic work among couples affects their childbearing outcomes. This is based on the hypothesis that specifically women with high education or labor market attachment can combine work and family more easily when he

shares the chores and childcare. If highly educated men should be more inclined to engage in housework, this could then explain higher second and third birth rates of highly educated homogamous couples in some contexts. Empirical findings have been mixed, though, showing positive effects of a more egalitarian division on second birth hazards in some countries but not others (Torr and Short 2004, Henz 2008, Cooke 2004 & 2009, Brodmann et al. 2007, Craig and Siminski 2011). In addition, no study has yet explicitly tested whether the division of housework-mechanisms could explain the educational pairings-childbearing relationship. Other possible mechanisms of how educational pairings in the couples may relate to their childbearing behavior also still await to be explored. They include systematic differences between couples of different educational pairings on things such as relationship satisfaction, conflict resolution strategies, matching of the partners on gender and other values or on fertility desires, and perceived future economic and career stability.

This paper aims at investigating the underlying mechanisms by which the relationship between educational pairings and couples' childbearing behavior could be explained. To this end, it uses data from the Pairfam (Panel Analysis of Intimate Relationships and Family Dynamics), an innovative new panel study from Germany, and data from the Australian HILDA survey (The Household, Income, and Labour Dynamics in Australia Survey). Both panels feature extensive information on fertility-, educational-, and relationship histories of both the focal individuals and their romantic partners. They further include a wealth of questions on relationship dynamics (such as relationship satisfaction, the occurrence of conflict and its resolution strategies, and division of housework) as well as on family- and gender values and fertility desires and intentions.

In a first step, we will estimate the effect of educational pairings in couples on their childbearing behavior. Second, we will then test whether the hypothesized mechanism may be helpful in explaining this relationship.

EDUCATIONAL PAIRINGS AND CHILDBEARING – POSSIBLE MECHANISMS

We can think of several mechanisms via which educational pairings may significantly predict childbearing behavior:

First, as mentioned, highly educated homogamous couples may indeed split *housework and childcare* more equally than other couples. This may then lead to an easier compatibility between career and family, specifically for highly educated women (Dribe and Stanfors 2010). We will test whether the actual division of housework and childcare may explain any relationship between educational pairings and childbearing behavior. Additionally, the data also allows for examining a possible effect of the perceived fairness of the division of labor by both partners.

Second, it is possible that the *emotional and psychological support* of highly educated men (and women) for their partners' ambitions to have both a career and children may rather be an equally or even more decisive factor than practical support with chores and children. If highly educated men have more gender egalitarian values, it may mean that they are more supportive of their partner to take on both a career and (multiple) motherhood, irrespective of their actual contribution to household and care work. Hence, gender and family values of him, or how well both partners are matched on these values, may differ across couples with varying educational pairings. We will test whether his values/attitudes or how well partners match on these values may explain any relationship between educational pairings and childbearing behavior.

Third, highly educated couples may have more pooled *economic resources*, have therefore more possibilities to outsource household chores and child care (to pay for babysitters, maids etc.) (Raz-Yurovich 2014). They also may have higher anticipated economic and career stability and therefore more inclined to realize intentions for another child. In the Pairfam, there are unfortunately no questions asking for perceived future career or economic stability.

But the data include information on occupational satisfaction, on income, and on whether the majority of the housework is done by a different person (not by the couple).

Fourth, couples with two highly educated partners may possess more evolved *coping strategies regarding conflict and stress*. These in extensions could increase relationship satisfaction, relationship stability, and also impact how well the couple is able to cope with the changes implied in the transition to parenthood. If couples are better able to deal with the stress of a first child, they may be more inclined to have another child. The pairfam includes rich measurements on all of those dimensions, and we will be able to test whether differences in coping strategies, conflict frequency, relationship satisfaction, and perceived stresses related to the birth of the first (or previous) child may explain any relationship between educational pairings and childbearing behavior.

Fifth, we will also test for whether couples may be selected based on their *fertility preferences*. If homogamous highly educated couples may be better matched on fertility preferences, this could also explain differences in childbearing behavior. The pairfam includes measurements on fertility preferences for both partners in each wave, collected in separate interviews for the anchor person and the partner. A variable on when the relationship was originally formed will also allow us to assess whether couples of varying educational pairings display systematic differences of when in the life course they formed their union.

Finally, it is possible that the relationship between educational pairings and couples' childbearing behavior hinges primarily on differences in the timing of union formation or union stability. We will test for this as well.

DATA, PRELIMINARY FINDINGS AND NEXT STEPS

The data for our study come from two data sources. The first is the Panel Analysis of Intimate Relationships and Family Dynamics (Pairfam). The pairfam is an ongoing German panel study launched in 2008, with yearly waves. The focus of the pairfam is on partnership and family processes. It offers rich measures of current and retrospective partnership-, fertility-, educational-, and labor market histories. It also includes many variables on dynamics between partners such as the division of domestic work, partnership conflict, and gender ideology. To date, seven waves of data are available (2008/09-2015), all of which are included in our analyses. The pairfam has a multi-cohort and multi-actor design: Main respondents (anchor persons) were exclusively drawn from three specific birth cohorts: 1971-73, 1981-83, or 1991-93. In addition, the (residential) partners, parents, and children of anchor persons are included in the survey; they have been interviewed via separate questionnaires². The panel included 12,402 main respondents in wave one, and yearly follow-up interviews have been conducted. The sample shrunk over time due to attrition; in wave five 53% of anchors were still present.

Originally, we planned to use the Pairfam data for this study only. However, in the first baseline analyses, we were not able to replicate the educational pairings results from previous studies in the baseline models. We did find differences in parity progressions to second and third birth between couples of varying educational pairings. Yet, the differences were statistically insignificant, especially those between couples of two highly educated partners versus couples with hypergamous or hypogamous couples with one highly educated partner

² Partner interviews were voluntary and not all partners have opted into being surveyed. Only ca. 50% of partners have participated in the survey, more detailed information on response rates can be found here: http://www.pairfam.de/fileadmin/user_upload/redakteur/publis/Dokumentation/TechnicalPapers/TP01_Field-Report_pairfam5.0.pdf.

only. Results from the baseline model using pairfam data for all birth transitions and the full analyses with the HILDA data will be added to the next version of the manuscript.

Since we were not able to replicate the finding of homogamous highly educated couples having the highest parity progressions to second or third births, it was not feasible to test the suggested mechanisms in order to understand what underlies a possible higher birth rates these couples may have with the Pairfam data. We will therefore, in the next version of the paper, use HILDA data to conduct the same analysis and understand whether these results differ in Australia. This panels offers more waves, and fewer missing values on the partner variables.

LITERATURE

- Bauer, G., & Jacob, M. (2010). Fertilitätsentscheidungen im Partnerschaftskontext. *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, 62(1), 31-60.
- Bauer, G. and Kneip, T., 2013. Fertility from a couple perspective: A test of competing decision rules on prospective behavior. *European Sociological Review*, 29(3), pp.535-548.
- Bauer, G. and Kneip, T., 2014. Dyadic fertility decisions in a life course perspective. *Advances in Life Course Research*, 21, pp.87-100.
- Cooke, Lynne Prince (2004): The Gendered Division of Labor and Family Outcomes in Germany. *Journal of Marriage and Family* 66 (Dec): 1246-1259.
- Cooke, Lynn Prince (2009): Gender Equity and Fertility in Italy and Spain. *Journal of Social Policy* 38 (1): 123-140.
- Corijn, M., Liefbroer, A.C. and de Jong Gierveld, J., 1996. It takes two to tango, doesn't it? The influence of couple characteristics on the timing of the birth of the first child. *Journal of Marriage and the Family*, pp.117-126.
- Craig, L., & Siminski, P. (2011). If men do more housework, do their wives have more babies?. *Social Indicators Research*, 101(2), 255-258.
- Dribe, M. and Stanfors, M., 2010. Family life in power couples: Continued childbearing and union stability among the educational elite in Sweden, 1991–2005. *Demographic Research*, 23(30), pp.847-878.
- Henz, Ursula (2008): Gender Roles and Values of Children: Childless Couples in East and West Germany. *Demographic Research* 19 (39): 1451-1500.
- Jansen, M. and Liefbroer, A.C., 2006. Couples' attitudes, childbirth, and the division of labor. *Journal of Family Issues*, 27(11), pp.1487-1511.
- Kreyenfeld, M., 2002. Time-squeeze, partner effect or self-selection? An investigation into the positive effect of women's education on second birth risks in West Germany. *Demographic research*, 7(2), pp.15-48.
- McDonald, P., 2000. Gender equity in theories of fertility transition. *Population and Development Review*, 26(3), pp.427-439.
- Natalie Nitsche: "Educational Homogamy and Childbearing: A Cohort Study on the Changing Relationship between Relative Resources in Couples and Their First and Second Birth Transitions" Poster presented at the Annual Meeting of the Population Association of America (PAA) in Boston, MA, May 2014.
- Nitsche, Natalie, Anna Matysiak, Jan Van Bavel and Daniele Vignoli. 2015. Partners Educational Pairings and Fertility Across Europe. FamiliesAndSocieties Working Paper 38 (2015). Available at: <http://www.familiesandsocieties.eu/wp-content/uploads/2015/06/WP38NitscheEtAl2015.pdf>
- Raz-Yurovich, L. (2014). A Transaction Cost Approach to Outsourcing by Households. *Population and Development Review*, 40(2), 293–309. <http://doi.org/10.1111/j.1728-4457.2014.00674.x>
- Torr, Berna Miller and Susan Short (2004): Second Births and the Second Shift: A Research Note on Gender Equity and Fertility. *Population and Development Review* 30 (1): 109-130.
- Thomson, E. (1990), McDonald, E. and Bumpass, L.L., 1990. Fertility desires and fertility: Hers, his, and theirs. *Demography*, 27(4), pp.579-588.
- Thomson, E. (1997). Couple childbearing desires, intentions, and births. *Demography*, 34(3), 343-354.
- Thomson, E., & Hoem, J. M. (1998). Couple childbearing plans and births in Sweden. *Demography*, 35(3), 315-322.