Have it all? Couples' Gender Ideological Pairings and Their Fertility

Daniele Florean, Daniela Grunow, Natalie Nitsche

Introduction and Background

Linkages between gender equality or gender norms and fertility levels have been much discussed in demography (for a recent review see Raybould and Sear 2021). When the 'gender revolution' stalls, so that women's participation in the public sphere advances, while responsibilities in the private sphere remain highly gendered and domestic work is mainly done by women, fertility is hypothesized to fall (Goldscheider et al. 2015). In extension, it's been argued that fertility in this 'double burden scenario' will continue to decline until gender norms flexibilize, too. Such a normative shift would allow men to permeate into the private sphere, share domestic workloads, and would enable women to share their double burdens, making childrearing more feasible again (ibid.).

Extended to the couple-level, this argument implies that women with egalitarian gender attitudes, meaning they believe in and strive for women's and men's equal work-sharing both in the public and private sphere, will make faster transitions into motherhood when they are coupled with a partner who shares these gender egalitarian attitudes. An egalitarian partner can be assumed to not only share domestic workloads more evenly after a child is born, but also to encourage his female partner to stay engaged in the labor market and other public life pursuits (including leisurely and social activities) after the birth of a joint child. It is well known that the division of housework is relatively equal among couples as long as they are childless (Nitsche and Grunow 2016, Baxter et al. 2023), but becomes highly gendered after the birth of a first child. While various studies have tested the gender revolution argument on the couple-level, they investigated the link between actual gendered housework division and subsequent fertility among couples. This research design, however, likely yields biased results for investigations into first birth transitions, because it fails to account for this dynamic of change in work divisions over the course of a couple's joint life and family formation process. Indeed, the studies that have investigated the link between domestic work divisions and first birth transitions have offered mixed results (Schober 2013, Aassve et al. 2015, Dommermuth et al. 2017). Gender attitudes or ideology is known to be a strong predictor of both the gendered division of housework as well as changes in work divisions after the first birth (Schober 2013b, Nitsche and Grunow 2016). Examining couples gender attitudinal or ideological pairings may therefore be advantageous examining how gendered domestic dynamics may predict first birth transitions among couples. Few studies to date investigated gender ideology and first birth transitions, and those that did used either cross sectional data (Holton et al 2009), or attitudes / ideology of one partner or partner's individual (not combined) ideology only (Bernhardt and Goldscheider 2006, Bernhardt et al. 2016). Hudde and Engelhard (2020) investigated whether partners' matched versus discordant attitudes predicted first birth transitions in a German sample. While they show that attitudinal homogamous/concordant couples have faster first birth transitions, they have just measured the degree of matching but not the direction, i.e. not differentiated between egalitarian and traditional gender attitudes (Hudd e and Engelhard 2020). Out study closes this research gap.

Hypotheses

Against this background, we test the following hypotheses:

H1: Homogamous gender egalitarian couples will have higher rates of transition to first births than other couples.

H2: Couples with egalitarian gender attitudes will have the latest transition to first birth, due to a variety of factors (prioritization of careers, work-family reconciliation struggles...).

Data and methods

We draw on data from the Pairfam study, release 12 (Brüderl et al. 2019), a panel data set from Germany, containing representative of men and women of birth cohorts 1991-93, 1981-83, 1971-73, and living in Germany from 2008 to 2018. This dataset offers the opportunity of having longitudinal panel information on couples, given that partners were also interviewed, including their fertility history and information on the gender attitudes of both partners. Our final analysis sample consists of 3.655 couples with 2.084 childbirths, with 1964 couples childless at the first interview, and 393 births observed in the survey time.

Our main independent variable is our index of gender egalitarianism. A couple is considered to be egalitarian if both partners declare egalitarian attitudes on the question items we selected among the ones offered in the pairfam dataset. Those are "Women should prioritize family over career (egalitarian answer: disagree, strongly disagree)", "Children under 6 years suffer with a working mother (egalitarian answer: disagree or strongly disagree)" and "Men should share housework the same extent as women (egalitarian answer: agree or strongly agree)".

	Restricted sample			Large sample		
	Everyone else	Egalitarian couples	Total	Everyone else	Egalitarian couples	Total
Female labor force participation						
Both egalitarian	297	183	480	441	352	793
Other combinations	1,484	0	1,484	2,862	0	2,862
Sharing housework						
Both egalitarian	1,236	183	1,419	2,074	352	2,426
Other combinations	545	0	545	1,229	0	1,229
Mother's childcare role						
Both egalitarian	277	183	460	646	352	998
Other combinations	1,504	0	1,504	2,657	0	2,657
Total	1,781	183	1,964	3,303	352	3,655

We use split population models, otherwise known as cure models, a class of survival models that allows for a subset of the population to never experience the event of interest (Amico & Van Keilegom, 2018). In our case this allows us to account for the lack of complete life histories, a common drawback of event history analysis, while aiming to disentangle possible tempo and quantum effects.

Our unit of analysis is a relationship. The main dependent variable is the time between the beginning of

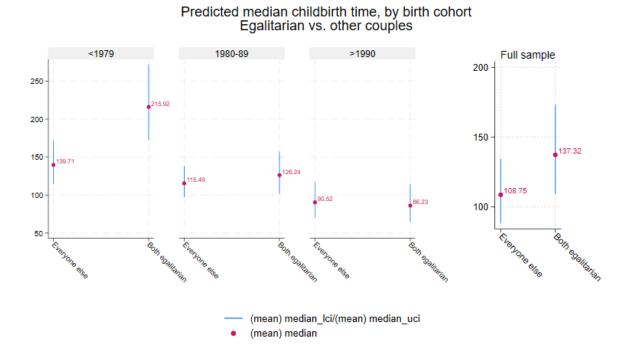
Our unit of analysis is a relationship. The main dependent variable is the time between the beginning of the relationship and the birth of the first child, and if childless, relationship dissolution or the last interview for the couple, whichever happens (first).

As controls we include in the model education, labor force participation and place of origin of both partners, plus the birth cohort of the female partner and her age at the beginning of the relationship. Control variables are included as time constant and measured at the first interview for the couple. We run a total of four models, a controlled and uncontrolled regression for each sample (restricted and full sample)

Preliminary Results and Conclusion

For ease of interpretation, we present our results through plots showing the average estimated time to childbirth at 50% of the survival distribution – that is the time at which 50% of the couples had their first child – and the estimated proportion of childless couples, that is the estimated "cured" proportion.

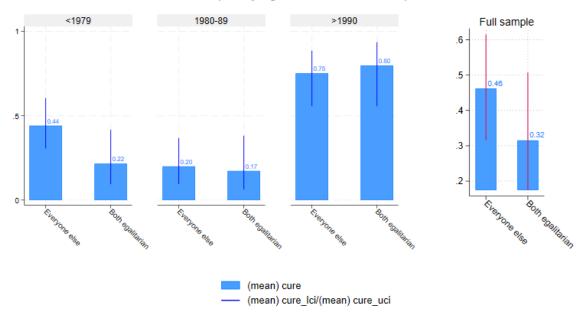
As described in the previous section, we ran two different models (controlled and uncontrolled) over two different samples, one including respondents whose first childbirth was before the first interview and one excluding them. Our first set of results is the results from the more restrictive sample. Figure 1 shows the predicted average median time to childbirth for our three birth cohorts and the full model.



On average, the predicted time from the beginning of the relationship to the first birth at which 50% of the sample experience childbirth is 108 months for non-egalitarian couples opposed to 137 months for egalitarian couples (a difference of almost 30 months between the two groups, statistically significant at 99% confidence). However, there are major differences between birth cohorts. The older are the most affected, with a difference between couples of 86 months (p-value of 0.0001 for the t-test). Our 1980s cohort presents a sizeable difference of 11 months (126-115), still significant although with weaker power (p = 0.0396). The youngest cohort presents the smallest predicted timing difference, only four months (p = 0.2291) with the egalitarian couples predicted to be faster than non-egalitarian.

Figure 2 shows the predicted proportion of the sample that is predicted to remain childless, conditional on being childless at the time of first interview.

Predicted childless proportion, by birth cohort 'Completely egalitarian vs other couples'



On the full sample, the predicted childless proportion is 46% on the non-egalitarian group, which decreases to 32% for the egalitarians, a difference of 14 percentage point (p = 0.000). We can observe striking cohort dynamics at play: the difference is greater for the oldest cohort, with a predicted childless proportion of 44% for non-egalitarians versus 21.6% for egalitarians (a difference of 22 percentage point, p = 0.0002). The difference decreases to only 2 percentage points for couples in the 1980s cohort (p = 0.1472) and reverses again for the youngest, with a difference of 4 percentage points (p = 0.1095), egalitarians slightly more likely to be childless.

As some of the results might depend on the selection of childless couples at the first interview, we repeated the analysis including also couples where the child was already born at the moment of the first interview, taking care to exclude repartnering and remarriages. Inference on the relationship between attitudes and fertility choices might be complicated by attitudes change over time, especially across the transition to parenthood. However, as research shows that most of the change happens in the direction of (re)traditionalization, we assume that couples expressing egalitarian attitudes after childbirth might be in all likelihood couples who were egalitarian already before childbirth. Results are not shown for lack of space, but they are broadly consistent with the results for the restricted sample, supporting evidence for a postponement with cohort gradient.

In conclusion, we find support for H1, especially among older respondents, with lower predicted childlessness, and evidence for postponement among egalitarian couples (H2). Non-egalitarian couples (with respect to work family models for women) make the transition to first birth the fastest, but have higher predicted childlessness. Across the models, the cohort gradient is however quite striking, hinting at possible age or cohort effects. Future research is needed investigate the nature of this gradient, also calling for extensions of the gender revolution argument to consider variation in the timing of parenthood between couples of different types of gender ideology.

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