Article

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Is Intending to Have Children Rightist? A Research Note on Political Ideology and Fertility Intentions

https://doi.org/10.1515/spp-2023-0038
Received September 27, 2023; accepted March 27, 2024; published online May 17, 2024

Abstract: Social scientists have long been interested in how attitudes and values influence fertility intentions and behaviors. The role of political ideology has, on the contrary, been overlooked. Right-wing people tend to be more religious, to hold more traditional views on gender roles and on the importance of the family. Therefore, right-wing people may be more likely to hold positive fertility intentions that individuals with other political orientations. In addition, political ideology may have an effect on fertility intention independent of other attitudes. Using two rounds of the European Social Survey, we show that people that position at the extreme right of the political ideology scale are more likely to intend to have a child during the three years following the interview. This association holds even after accounting for several socio-demographic and economic factors, values and attitudes. Heterogeneity tests show that the association is restricted to younger individuals (aged 20–34), with higher levels of education (at least upper secondary), and individuals in Eastern Europe. In Southern Europe right-wing individuals show significantly higher predicted probabilities of a positive fertility intention compared people that locate themselves in the political center. The statistically significant associations are also sizeable (differences in terms of predicted probabilities vary between 4 and 9 percentage points). These results point to the importance of considering a neglected factor in fertility research and contribute to the growing field of Political Demography.

Keywords: political ideology; fertility intentions; political demography; European social survey

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1 Introduction

Although commenters and researchers have since long pointed to the links between politics and demography, the field of Political Demography is still in its infancy (Goldstone et al. 2012). Demography impacts on politics in several ways. For instance, demographic changes influence democratization processes (Sommer 2018; Wilson and Dyson 2017). Population size, density and age structure influence domestic conflict (Wagschal and Metz 2016). At the micro-level, several relationships have been identified, including between being or becoming a parent and vote turnout (Mogi and Arpino 2022) and political attitudes (Banducci et al. 2016).

The relationship between politics and demography works also in the opposite direction; e.g. political attitudes influence the risk of couples' separation (Arpino and Di Nallo 2022). A specific strand of the literature in demographic research analyzes the influence of (usually country-level) policies on demographic behaviors or intentions, especially related to fertility (e.g. Baizán, Arpino, and Delclós 2016; Choi, Yellow Horse, and Yang 2018). These studies are certainly linking factors related to the domains of politics and demography: policies are clearly the resultant of politics, prevailing political ideologies and attitudes in a society in a given historical moment. However, this strand of the literature typically does not engage explicitly with the political dimension of existing policies; rather, they treat them as contextual factors that may influence individual choices, just like other contextual dimensions, such as GDP or labor market conditions. We contribute to the field of Political Demography by explicitly linking a political dimension, political ideology, to fertility intentions, which measure whether or not individuals intend to have a(nother) child within a certain time frame or in general in their life.

Fertility intentions have gained a prominent role in fertility research. Based on the theory of planned behavior (TPB; Ajzen 1991), fertility intentions can be considered as the most proximate determinant of reproductive behavior. Empirically, it has been found that fertility intentions are a good predictor of future real fertility behaviors, despite the fact that survey respondents generally tend to overestimate their probability of having children (Beaujouan and Berghammer 2019; Toulemon and Testa 2005). Therefore, demographers have found useful to analyze the determinants of fertility intentions because variations in actual and intended fertility over time tend to be consistent (Goldstein, Lutz, and Testa 2003; Hin et al. 2011). Parity-progression intentions (i.e. the intention to have another child) are particularly considered as stable and reliable, especially when a time frame (e.g. 2 or 3 years) is specified (Billari, Philipov, and Testa 2009; Philipov 2009).

The literature on fertility intentions and behaviours have extensively analysed several types of determinants (see Balbo, Billari, and Mills 2013 for a review). Values, preferences and personality traits, socio-economic conditions, demographic characteristics, health, social networks are among the micro-level factors that have been studied. Political attitudes, on the contrary, have been largely overlooked as possible determinants of fertility intentions and behaviours. We contribute filling this gap in the literature focussing on the role of political ideology. Erikson and Tedin (2015; p. 70) defined political ideology as a "set of beliefs about the proper order of society and how it can be achieved". Political ideology is understood by social and political psychologists as an attitude formed early in life (e.g. Block and Block 2006) and influenced by the family context and social networks. Political ideology is commonly theorized and measured with reference to the left-right scale (Jost, Federico, and Napier 2009), which is considered to be the most powerful and parsimonious way of classifying political attitudes (Feldman 2003).

There is very limited evidence on the link between political ideology and fertility. Examining the influence of political ideology on fertility assumes significance for several reasons. In many European countries and globally, fertility rates are declining (Roser 2017). While factors such as the costs associated with raising children can be influenced by political decisions, others, such as political attitudes, may not be as easily manipulated. Consequently, comprehending the extent to which various factors impact fertility choices is essential for researchers and policymakers aiming to evaluate the potential role left to politics in shaping couples' decisions regarding family planning. Moreover, if particular political ideologies exhibit higher fertility, it may indicate a bias of existing policies or contextual factors (e.g. cultural norms or labor market conditions) in favoring specific groups over others in making fertility decisions. A sustained link between political ideology and fertility could also contribute to shaping population structures and political landscapes, potentially favoring the reproduction of specific subgroups and particular political ideologies.

Using cross-national and cross-sectional data from the European Social Survey, our exploratory study, contributes to the literature on the link between political ideology and fertility by: (i) testing whether the association between political ideology and fertility intentions hold once several other factors, including religiosity and values known to be associated with political ideology and fertility, are controlled for; (ii) testing whether the association is similar across socio-demographic groups and clusters of countries. For the latter point, given the variation in political ideology within and between countries, we ask whether also the importance of political ideology for fertility intentions vary; thus, we shall test interactions between political ideology and gender, age, education, country clusters.

1.1 Related Studies

Demographers have long been interested in how cultural factors and values influence fertility. The well-known second demographic transition theory (SDT; Lesthaeghe and van de Kaa 1986) argues that demographic changes experienced by developed countries since the 1960s, such as fertility reduction and postponement, are driven by ideational changes, such as the rejection of institutional control, accentuation of individual autonomy and the rise of self-realization needs (Surkyn and Lesthaeghe 2004). Within the SDT, the role of political attitudes has been marginally touched upon. Besides secularisation and egalitarianism, political ideology was listed among the important factors influencing the changes in union and family formation (Surkyn and Lesthaeghe 2004). Studies on the SDT have provided macro-level evidence on the association between political orientation and fertility (Lesthaeghe and Neidert 2006, 2009). More specifically, using state-level data, they show that in the US the share of votes for Republicans is positively associated with the Total Fertility Rate (TFR). The authors recognize that this evidence is not definitive as macro-level associations cannot be transferred at the micro-level. In addition, this evidence is limited to the US.

To the best of our knowledge, a study by Fieder and Huber (2018) is the only one that empirically examined the association between political ideology and fertility at the individual level. Using data from more than 100 countries, the authors estimate the association between political ideology (self-positioning on the left-right scale) and completed fertility (total number of children among individuals aged 40 and more). In most of the countries there was no statistically significant association between political ideology and number of children. In Europe and the US, the authors found that, on average, the number of children was highest among conservatives.

Some studies argued that becoming a parent may influence political attitudes (Banducci et al. 2016). Therefore, the association between political ideology and completed fertility could work in both directions. Differently from Fieder and Huber (2018), instead of considering fertility behaviours (number of children a person already had), we focus on fertility intentions. This has the advantage of making the direction of the association more clearly interpretable; i.e. political ideology can theoretically influence fertility through fertility intentions, but fertility intentions per se should not have a direct effect on political ideology.

Because different countries have diverse economic, social, cultural, and religious backgrounds, the attitude “left” and “right” may have different meanings. Thus, Fieder and Huber (2018) considered heterogeneities across countries or regions in the world. We also investigate differences in the association between political ideology and fertility intentions across four regions: “Continental Europe” (Belgium, Germany, France, Iceland, Ireland, Luxembourg, the Netherlands, Switzerland, the UK), “Eastern

Europe" (Bulgaria, Croatia, Cyprus, Czechia, Hungary, Poland, Slovenia, Slovakia, Ukraine), "Northern Europe" (Denmark, Estonia, Finland, Lithuania, Norway, Sweden), and "Southern Europe" (Greece, Portugal, Spain). Fieder and Huber (2018) did not systematically examine within-country heterogeneities. Instead, we explore heterogeneities according to age, gender and education, three key dimensions in fertility studies (Balbo, Billari, and Mills 2013).

1.2 Reasons for Why Political Ideology May be Associated with Fertility Intentions

Political ideology may be associated with fertility decisions for different reasons. People that position at different points on the left-right scale have different views on several aspects of life. Building on the concept of "higher order needs" (Maslow 1954), it has been argued (see e.g. Lesthaeghe and Surkyn 1988) that concerns with personal freedom and individual autonomy lead to a general disenchantment with established institutions, including the family because traditional behaviors may require the subordination of individual needs to those of a spouse and children. Higher order needs and post-materialism have been found to be associated with a broad range of beliefs and behaviors, including anti-establishment attitudes, less nationalism, and less religiosity and less leftism (Lesthaeghe and Surkyn 1988). Along these lines, Lesthaeghe and Moors (1995) report that the materialist items of the Inglehart scale also correlate strongly with left-right scale: right-wing individuals tend to be more materialist (e.g. they tend to agree with "maintain order") while leftists more post-materialist (e.g. they particularly value "freedom of speech"). Also, individuals with more conservative political ideology tend to have more traditional attitudes toward sex, marriage, and gender roles (Galland and Lemel 2008; Wilcox 1991). Summing-up the abovementioned studies, right-wing people tend to show more traditional values, are more religious, attach a higher importance to the family than left-wing people. Thus, in line with the studies that considered political attitudes within the SDT, we may argue that political ideology can capture the role of values and characteristics of individuals associated with fertility (see e.g. Arpino and Tavares 2013 on individualism; Arpino, Esping-Andersen, and Pessin (2015) on gender roles attitudes; Dantis, Rizzi, and Baudin 2023 on religiosity). Specifically, more traditional attitudes, a higher value attached to family and parenthood, preference for order and uncertainty avoidance that are prevalent among right-wing individuals (Lesthaeghe and Moors 1995) may suggest a positive association between rightism and positive fertility intentions.

Thus, political ideology may be associated with fertility intentions because both are also associated with various values and attitudes. The links among these factors

are complex and it is probably hopeless trying to theoretically specify the causal paths linking all of them. For example, it would be difficult to argue whether religious or gender attitudes are formed before or after political attitudes, and whether they should be considered as confounders, mediators or concomitants determinants of fertility intentions. Our main goals, in this exploratory research note, are thus to test whether: (1) there is an association between political ideology and fertility intentions; (2) this association holds *independent* of the abovementioned factors (i.e. after controlling for them). It has been shown that, despite clear associations, political ideology overlaps only partially with human values, gender egalitarian attitudes, religiosity, etc. (Thorisdottir et al. 2007). Thus, there is space for political attitudes to have their own role in influencing fertility intentions.

Despite the exploratory nature of this research note, we can put forward an argument about a direct association between political orientation and fertility intentions (i.e. an association that is not due to other factors correlated with political orientation). Tomkins (1965; pp. 23–24) argues that the left-right difference primarily juxtaposes "*the conservative emphasis on tradition and conformity and the progressive's emphasis on change*". According to political psychologists, people embrace right-wing ideology in part because it serves to reduce fear, anxiety, and uncertainty, and to avoid change, disruption, and ambiguity (e.g. Jost and Amodio 2012). In the fertility literature, the value of children has been linked to the capacity of a child to "reduce uncertainty" in a potential parent's life (Friedman, Hechter, and Kanazawa 1994). Recently, Bellani and Arpino (2022) found that the most risk averse individuals are those who are more likely to have children. Thus, bridging the two strands of the literature, we can argue that rightism may influence positively fertility intentions because having children is a way to put order and certainty in one's life, while complying with traditional norms of order and stability in a society.

2 Data and Method

We used rounds 2 and 5 of the European Social Survey (ESS) conducted in 2004/2005 and 2010/2011, respectively, in several European countries. Apart from the core questionnaire that remains largely unchanged, ESS includes rotating modules that change at each round of the survey. A question about fertility intentions was included only in rounds 2 and 5. Our analyses are based on the dataset obtained pooling these two rounds.

We selected the analytical sample as follows. We excluded Turkey, Russia, and Israel from the analyses because these countries are characterized by very specific political contexts, that make them very different from the rest of the considered countries. For example, among the ESS countries, Turkey and Russia show considerably

lower levels of democracy (Arpino and Obydenkova 2020). As for Israel, the discourse around left and right is strongly influenced by the Israeli-Palestinian conflict (Domínguez 1984). A study based on ESS data (Piurko, Schwartz, and Davidov 2011) found summary statistics on the left-right scale for Israel to be rather different than those of all the other countries (the standard deviation was the highest and only in Israel the mean was not within one point of the scale midpoint (5.0)). The authors also noticed that Jews and Arabs groups differ greatly in the political domain but the small size of the Israeli Arab sample in the ESS data precludes treating it separately.

We also restricted the sample to individuals aged 15 to 45 and those who are in a legally recognized union and/or who live with their partner in the same household. These selections are motivated by the need of considering only individuals who are at a reasonable risk of intending to have a child. After deleting missing values in the variables used in the analyses, our working sample includes 11,533 individuals from 27 countries.

The question about fertility intentions in the ESS asks: "Do you plan to have a child within the next three years?" ("Definitely yes"; "Probably yes"; "Probably not"; "Definitely not"). We define our outcome of interest ("positive fertility intention") as a dummy variable equal to 1 for respondents who reply "Definitely yes" to the fertility intentions questions and 0 otherwise. Preliminary experimentations using a different definition (i.e. including the "Probably yes" category among the "positive intentions") gave similar results. The frequency distribution of the original fertility intentions question in our working sample is reported in Table 1.

The explanatory variable of interest is the self-position of respondents on the left-right political spectrum, asked as: "In politics, people sometimes talk of 'left' and 'right'. Where would you place yourself on this scale?" Possible answers ranged from 0 (left) to 10 (right). To allow for non-linear associations between political ideology and fertility intentions, we use the left-right scale as a categorical variable in our

Table 1: Frequency distribution of the outcome (fertility intentions); 11,533 individuals from 27 countries.

Fertility intentions	***N***	**%**
Positive intention		
Definitely yes	1886	16.35
Not positive intention		
Probably yes	2083	18.06
Probably not	2317	20.09
Definitely not	5247	45.50
Total of not positive intention	9647	83.65
Total	11,533	100

analyses. In particular, we consider the following groups: “extreme left” [0–1], “left” [2–3], “center” [4–6] (reference category in the regression models), “right” [7–8], “extreme right” [9–10]. As robustness check, we also considered different ways of treating the left-right scale (i.e. using alternative categorizations) obtaining similar results.

In the multivariate analyses, we control for several factors that have been shown to be associated with political ideology (see e.g. Jost, Federico, and Napier 2009; Thorisdottir et al. 2007) and that have been related to fertility intentions (see e.g. Dantis, Rizzi, and Baudin 2023; Luppi, Arpino, and Rosina 2022, Testa and Stephany 2017). We also add variables that might be considered as mediators or concomitant variables to assess the extent the association between political ideology and fertility intentions holds even netting out the effects of those variables.

Control variables include demographic characteristics (age, gender, marital status, type of area of residence, country, number of children in the household), socio-economic status (educational level, employment status, subjective economic situation), religiosity, general trust, life satisfaction, political interest, human values, and attitudes towards gender equality. As for the number of children, we control for the total number of children in the household at the time of the survey and not the total number of children the respondent has because this information is not available in all ESS rounds (and in the few rounds when this is available, we miss the question on fertility intentions). This operationalization may underestimate the number of children the respondents already have. However, using round 2 data, which has the question about the number of children outside of the household, we find that only 0.4 % of respondents (22 cases) do not have any child in the household but have children outside of the household and 6.8 % of the respondents (360 cases) have at least one child outside of the household. The construction of all variables is explained in details in the Supplementary Materials. The distribution of the explanatory variables and control variables is shown in Table 2.

Our multivariate analyses are based on logistic regression models. Six models gradually including all control variables are examined and additionally, heterogeneities in the relationship between political orientation and fertility intentions by age, gender, education and country of residence are tested including appropriate interaction terms.

3 Results

Table 3 summarize the results from several logistic regression models aimed at estimating the association between political ideology and the probability of expressing a “positive fertility intention” (i.e. $Y = 1$ if the respondent declares he/she

Table 2: Descriptive statistics on all the independent variables; 11,533 individuals from 27 countries.

	N (m)	% (sd)		*N* (m)	% (sd)
Political orientation scale			Educational level		
Extreme left	434	3.76	Low	1563	13.55
Left	1705	14.78	Secondary	6551	56.80
Center	6428	55.74	Tertiary	3419	29.65
Right	2343	20.32	Employment status		
Extreme right	623	5.40	Employed	8736	75.75
Age groups			Unemployed	744	6.45
20–24	721	6.25	Others	2053	17.80
25–29	1919	16.64	Subjective income level		
30–34	3007	26.07	Low	2648	22.96
35–39	3436	29.79	Not-low	8885	77.04
40–45	2450	21.24	Trust to people (m/sd)	5.20	2.30
Country groups			Life satisfaction (m/sd)	7.25	2.05
Northern	2674	23.19	Political interest		
Continental	4411	38.25	No	6279	54.44
Eastern	3297	28.59	Yes	5254	45.56
Southern	1151	9.98	Religious level		
Sex			Very high	830	7.20
Female	5506	47.74	High	2190	18.99
Male	6838	59.29	Medium	3703	32.11
ESS rounds			Low	2083	18.06
2	4695	40.71	Very low	2727	23.65
5	6838	59.29	Benevolence (m/sd)	4.92	0.76
Marital status and living arrangement			Universalism (m/sd)	4.75	0.75
In a legally recognized union and living with partner	8581	74.40	Selfdirection (m/sd)	4.64	0.88
Cohabiting	2821	24.46	Stimulation (m/sd)	3.71	1.08
In a legally recognized union, not living with partner	131	1.14	Hedonism (m/sd)	4.16	1.04
City size			Achievement (m/sd)	3.99	1.09
Big city	3564	30.90	Power (m/sd)	3.47	1.02
Others	7969	69.10	Security (m/sd)	4.55	1.02
Number of children (m/sd)	1.39	1.09	Conformity (m/sd)	4.02	1.03
			Tradition (m/sd)	4.11	0.98
			Gender values (m/sd)	3.03	1.16

Note: The column "*N* (m)" shows the number of cases in each category for categorical variables and the mean values for numerical variables, respectively. The column "% (sd)" corresponds to the proportion of each level of categorical variables and the standard deviation for numerical variables, respectively. Details on the construction of the variables are in the Supplementary Materials.

"definitely" intends to have a (n additional) child within three years from the interview; $Y = 0$, otherwise). We estimated six models in which we include control variables following a step-wise approach. We start by controlling only for basic demographic variables (age, gender, country, ESS round; Model 1); then, we add: additional socio-demographic factors (marital status, number of children, area of residence; Model 2); socio-economic variables (education, employment status, subjective economic conditions; Model 3); generalized trust and life satisfaction (Model 4); interest in politics and religiosity (Model 5); human values and gender egalitarian attitudes (Model 6). Given the well-known issues with comparing coefficients from logistic regressions (Mood 2010), we present average marginal effects (AMEs). In our case, AMEs can be interpreted as the difference in terms of percentage points in the predicted probability (pp) of definitely intending to have a (n additional) child between each political ideology category and the reference group ("center").

Only the AMEs for "right" and "extreme right" are statistically significant and positive meaning that compared to centrist individuals, right-wing individuals are more likely to report a positive fertility intention. More specifically, right-wing individuals are between 2 ("right") and 5 ("extreme right") pp more likely than centrist to intend to have a child. The estimated AMEs are barely affected by the step-wise inclusion of control variables.

Table 3: Average Marginal Effects (AMEs) of political ideology on the probability of a definitely positive fertility intention among all parities estimated by logistic regression models.

Political orientation	Models					
	(M1)	(M2)	(M3)	(M4)	(M5)	(M6)
Extreme left	−0.00	−0.00	−0.00	−0.00	−0.00	−0.00
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Left	0.02	0.02	0.00	0.00	0.00	0.00
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Center (ref.)						
Right	0.02***	0.02***	0.02**	0.02**	0.02**	0.02**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Extreme right	0.05***	0.05***	0.05***	0.05***	0.05***	0.04***
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
N	11,533	11,533	11,533	11,533	11,533	11,533

Notes: $Y = 1$ if the respondent answered "definitely yes" to the fertility intentions question; = 0 otherwise; Standard errors in parentheses. *$p < 0.1$; **$p < 0.05$; ***$p < 0.01$. The models differ for the set of controls included: We start by controlling only for basic demographic variables (age, gender, country, ESS round; M1); then, we add: additional socio-demographic factors (marital status, number of children, area of residence; M2); socio-economic variables (education, employment status, subjective economic conditions; M3); generalized trust and life satisfaction (M4); interest in politics and religiosity (M5); human values and gender egalitarian attitudes (M6).

To appreciate the substantive importance of the key findings even better, Figure 1 shows how the predicted probabilities of a positive fertility intention ("yes" to the fertility intention question; *y*-axis) vary with political ideology (*x*-axis) based on the logistic regression with all controls (M6). Confidence intervals are calculated to allow for multiple comparisons of predicted probabilities, i.e. to allow testing their statistical equality at an approximate 5 % significance level. Overlap between a pair of intervals indicate that the corresponding predicted probabilities are not statistically different at the 5 % level, while non-overlap suggests the opposite. We do not fix the values of control variables; instead, predicted probabilities are calculated at observed values of the control variables for each individuals and then averaged.

Consistent with the AMEs reported in Table 3, Figure 1 shows that the predicted probability of a positive fertility intention is highest for individuals in the "right" (17.5 %) and in the "extreme-right" groups (20 %). The predicted probability for extreme-right individuals is also statistically significantly ($p < 0.05$) higher than those observed for all the other groups. Instead, fertility intentions do not vary appreciably between leftist and centrist individuals.

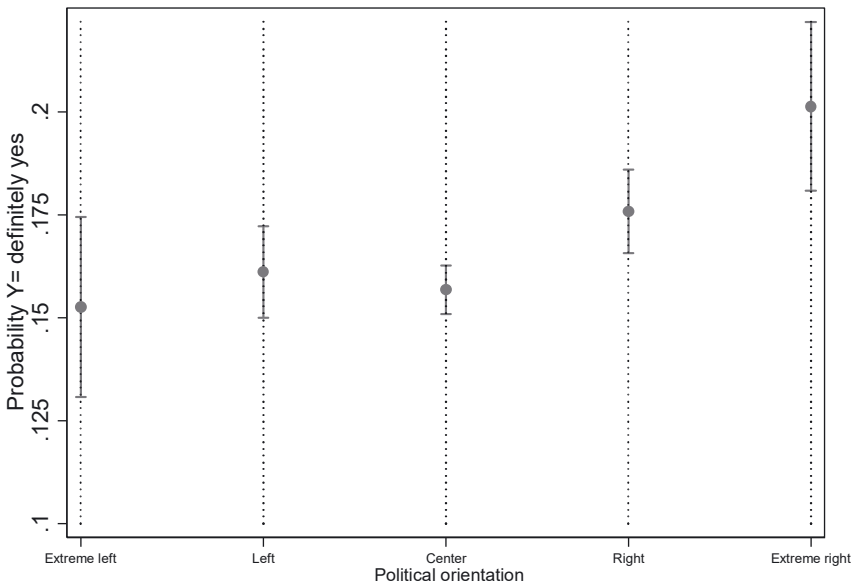

Figure 1: Predicted probabilities (with confidence intervals for 5 % pairwise comparisons) of a definitely positive fertility intention by political ideology estimated by a logistic regression model as per model M6 in Table 3. Note: Confidence intervals are calculated to allow for multiple comparisons of predicted probabilities, i.e. to allow testing their statistical equality at an approximate 5 % significance level.

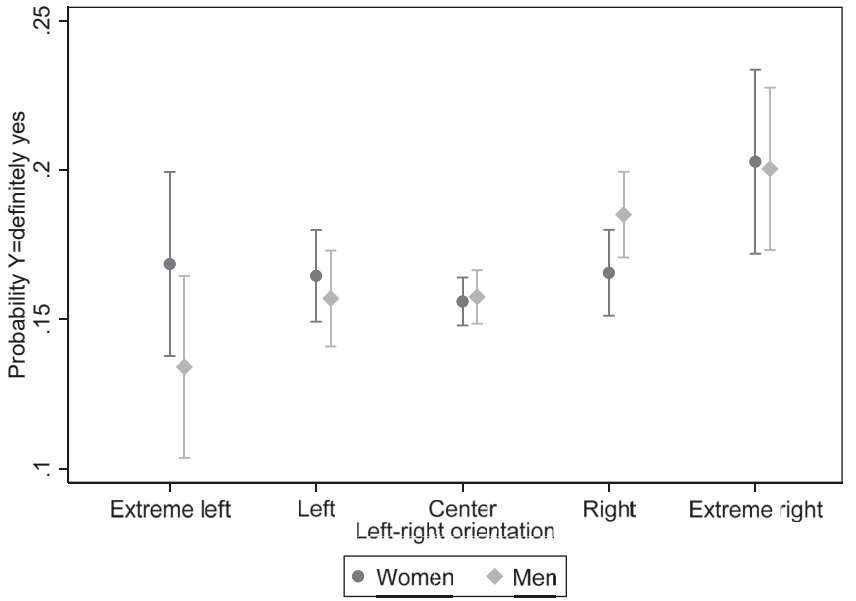

Figure 2: Predicted probabilities (with confidence intervals for 5 % pairwise comparisons) of a definitely positive fertility intention by political ideology and sex estimated by a logistic regression model as per model M6 in Table 3 plus interactions between political orientation and sex. Note: Confidence intervals are calculated to allow for multiple comparisons of predicted probabilities, i.e. to allow testing their statistical equality at an approximate 5 % significance level.

Figures 2, 3, 4, and 5 show the results of the test on the interactions of political ideology with sex, age, education, and country groups. We only show the graphs with predicted probabilities to ease interpretations, however, the complete estimates are available upon request. The association between political ideology and fertility intentions do not vary meaningfully by sex (Figure 2): within each political ideology group, the predicted probabilities of a positive fertility intention for women and men are very similar. The only worth noting result is that the predicted probability is the lowest for men within the "extreme left" group (statistically significantly lower than that of "extreme right" men).

From Figure 3 we see that the association between political ideology and fertility intentions exists only for the two youngest age groups, for which the predicted probability of a positive fertility intentions is the highest for the extreme-right-wing group. Specifically, considering only statistically significant

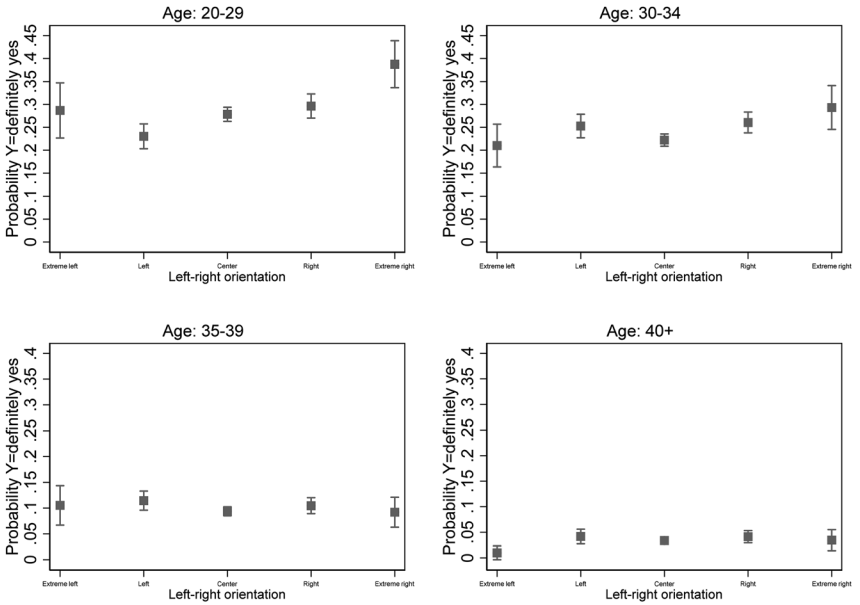

Figure 3: Predicted probabilities (with confidence intervals for 5 % pairwise comparisons) of a definitely positive fertility intention by political ideology and age estimated by a logistic regression model as per model M6 in Table 3 plus interactions between political orientation and age categories. Note: Confidence intervals are calculated to allow for multiple comparisons of predicted probabilities, i.e. to allow testing their statistical equality at an approximate 5 % significance level.

differences, among individuals aged 20–29, extreme-right-wing individuals are about 10 pp more likely to hold a positive fertility intention compared to the "left", "center" and "right" groups. Among individuals aged 30–34, the extreme-right group displays a predicted probability of a positive fertility intention of about 7 pp higher than centrists.

As for education (Figure 4), an association between political ideology and fertility intentions emerges only for individuals with medium (upper secondary) and high (tertiary) education. In this case, the predicted probability of a positive fertility intention for individuals in the "extreme-right" group is statistically significantly higher than that for the "center" group for individuals with medium (5 pp) and high education (6 pp).

Finally, Figure 5 shows a statistically significant variability of fertility intentions across political ideology only in Eastern and Southern Europe. In both cases, the

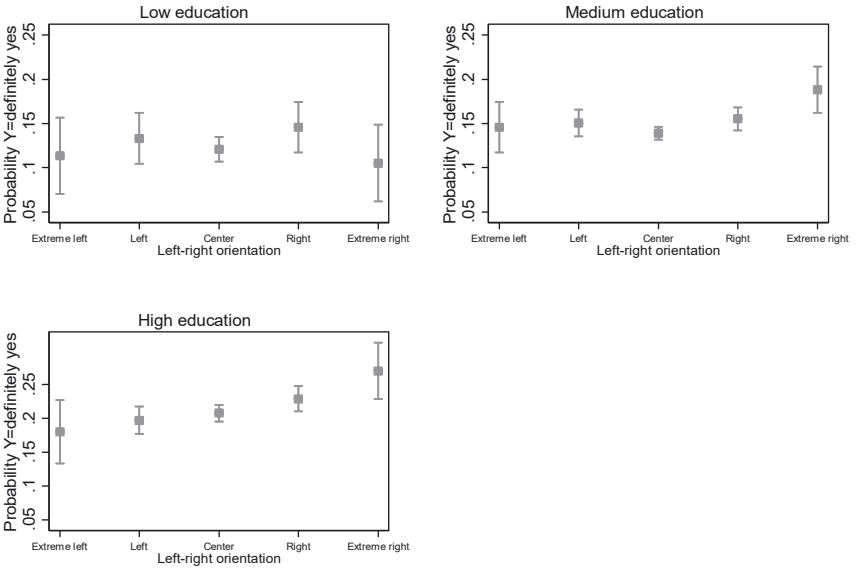

Figure 4: Predicted probabilities (with confidence intervals for 5 % pairwise comparisons) of a definitely positive fertility intention by political ideology and education estimated by a logistic regression model as per model M6 in Table 3 plus interactions between political orientation and education. Note: Confidence intervals are calculated to allow for multiple comparisons of predicted probabilities, i.e. to allow testing their statistical equality at an approximate 5 % significance level.

predicted probability of intending to have a (*n* additional) child is about 5 pp higher among right-wing individuals than centrists. However, this difference is statistically significant only for the "extreme right" group in Eastern Europe and for the "right" group in Southern Europe. In Eastern Europe, we also find a statistically significant difference in the predicted probability of a positive fertility intention between "left" and "center" of about 4 pp.

4 Conclusions

Political dimensions have been largely ignored in fertility research. In particular, only few studies have examined the link between political ideology and fertility. Our study adds to the only other study on the link between political ideology and fertility at the micro level by Fieder and Huber (2018). Differently from Fieder and Huber

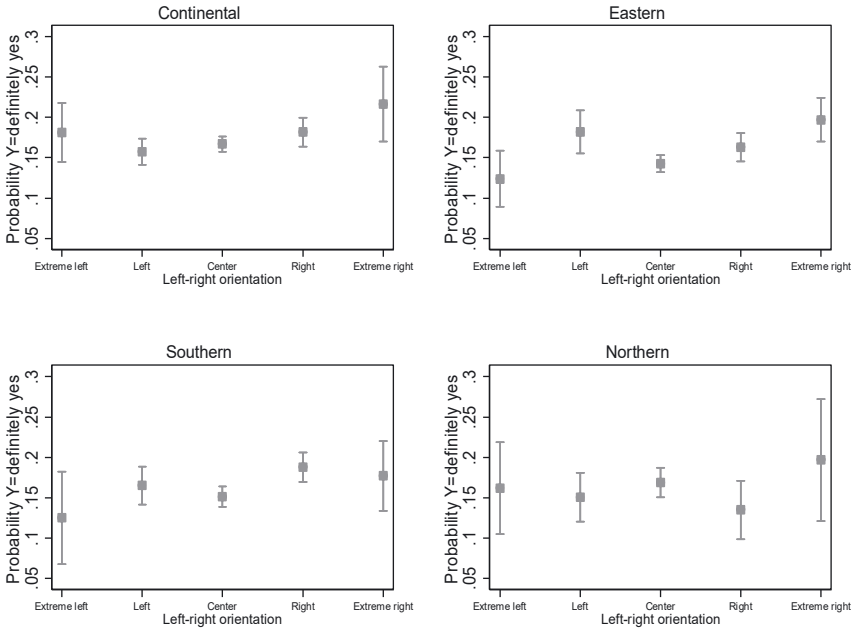

Figure 5: Predicted probabilities (with confidence intervals for 5 % pairwise comparisons) of a definitely positive fertility intention by political ideology and country groups estimated by a logistic regression model as per model M6 in Table 3 plus interactions between political orientation and country groups. Note: Confidence intervals are calculated to allow for multiple comparisons of predicted probabilities, i.e. to allow testing their statistical equality at an approximate 5 % significance level.

(2018), we assessed the association between self-placement on the left-right scale and fertility intentions, i.e. a plan to have a child within a short time frame (3 years). Fertility intentions are of great interest because they can be considered as the most proximate determinant of individuals' fertility behaviors. In addition, by considering fertility intentions instead of behaviors, our analyses are less affected by issues of reverse causality.

Overall, a distinct group emerges consistently across most of our exploratory analyses: individuals identifying themselves on the extreme right of the political ideology scale (scoring 9–10 on the 0–10 left-right scale) tend to exhibit the highest probability of expressing definite intentions to have a child ("definitely yes"). This observed pattern is not solely a result of disparities in socio-demographic or economic variables among political ideology groups. Even after accounting for religiosity, gender attitudes, and human values, the association between extreme right-leaning views and fertility intentions remains robust. More research is needed to understand theoretically and empirically the mechanisms behind this association.

Beyond the effect of extreme rightism, when comparing individuals from other political ideology sub-groups, we observe neither substantial nor statistically significant variations in fertility intentions. Our results are in line with those of Fieder and Huber (2018) for Europe. In fact, the author found that on average, the number of children was highest for conservatives.

The association between extreme rightism and fertility intentions that we find is not only statistically significant, but also substantial. The predicted probability of a positive fertility intention is about 20 % for extreme-right-wing individuals, against an average value for the other groups of about 16 %. This amounts to affirm that extreme-right-wing individuals are 25 % more likely to intend to have a child than individuals with other political orientations. To what extent this would translate in more children for extreme-right-wing individuals is difficult to say because fertility intentions may not translate into fertility behaviors due to the several factors (see the role of behavioral control in the TPB; Ajzen 1991). In addition, the "extreme-right-group" in our data amounts to only 5.4 % of the total sample. Thus, the effect on number of children at the population level may not be substantial.

We also explored the heterogeneity in the association between political ideology and fertility intentions. While Fieder and Huber (2018) considered differences across (groups of) countries, we also investigated heterogeneities across socio-demographic sub-groups of the population. We find that extreme rightism is associated with a higher probability of a positive fertility intention only among the two youngest groups we considered. This may suggest that any effect on fertility outcomes might be limited, i.e. it may be only a *tempo* rather than a *quantum* effect. In other words, extreme-right-wing individuals may be more likely to have children at younger ages, but at older ages the other political orientation groups may reduce or close the fertility gap. Within the TPB, together with other attitudes, political orientation may be included among the so-called *background* factors that may influence normative beliefs leading to the formation of subjective norms about fertility, i.e. the likelihood that important referent individuals or groups approve or disapprove of performing a given behavior weighted by the importance attached to the approval or disapproval of relevant others (Billari, Philipov, and Testa 2009). Our finding about the importance of political orientation only at younger ages is consistent with the *impressionable years hypothesis* (Dinas and Stoker 2014). Although political attitudes are substantially influenced by genetics (Hatemi and McDermott 2016; Klemmensen et al. 2014), political orientation is shaped during adolescence and early adulthood, when individuals more strongly internalize social norms of their family/political group of reference. So, for younger individuals the link between political orientation and fertility intentions may due to a stronger effect of the latter on subjective norms formation during "impressionable years". At older ages, the link between political orientation and subjective norms may weaken also due to a growing importance of

other factors for fertility decisions, including a raising risk of remaining childless with age. At younger ages, the effect of the family background as opposed to genetic factors may more strongly influence political ideology than at older ages (Eaves et al. 1997).

Age differences might have also been partially driven by different prevalence of positive fertility intentions across age groups that are higher at younger ages (in our sample this varied from 28 % to 4 % for individuals aged 20–29 and those aged 40 and above, respectively). This might lead to insufficient power and inability to detect potentially relevant heterogeneous effects. Future studies may test age differences with bigger samples.

Extreme-right-wing individuals were found to be more likely to intend to have a child among those with the higher levels of education. The non-significant association between rightism and fertility intentions that we find among lower educated (less than upper secondary) individuals may be due to a non-trivial multi-way interaction between education, political orientation, religiosity and other attitudes (including gender roles attitudes). It may be that the effect of rightism is trumped by other "traditionalism" dimensions (e.g. religiosity) that may be stronger among lower educated individuals. This can be investigated in future research. Other explanations are also possible. Empirically, the size of individuals in the "low" education group is lower than in the other groups and their prevalence of positive fertility intention is also lower, which may imply insufficient power to appropriately estimate heterogeneous effects. In addition, lower educated individuals may be constrained in their fertility decision by poorer economic resources, which may not be sufficiently captured by our subjective measure of financial resources.

Finally, although in all country groups extreme-right-wing individuals show high predicted probability of a positive fertility intentions, the differences compared to other groups are statistically significant only in Eastern Europe. In Southern Europe, this holds for the (non-extreme) right-wing group. In Eastern Europe, we find a sort of "U-shaped" pattern of association between political ideology and fertility intentions: also left-wing individuals show significantly higher predicted probabilities compared to centrists. These differences may partly due to the varying share of (extreme-)-right-wing individuals across country groups, but also to the historical and current context. For example, the strong influence of religious institutions in certain countries (e.g. Southern Europe) may have levelled out differences across political ideology groups (especially those ranging from center-left to the right). In other contexts, for example the Nordic countries characterized by the Social Democratic welfare state, the availability of generous and universalistic family policies may imply a less salient role of individuals' political ideology in influencing fertility decisions. Differences across groups of countries may also change over time. Fieder and Huber (2018) showed that in the US in the 1970s and in 1980s both political

extremes had a fertility advantage that afterwards was kept only among the right-wing. Future research can assess whether the pattern observed for Easter Europe will change with newer data and to what extent older data would show a similar "U-shaped" pattern also in other geographical contexts.

This study offers empirical evidence on the (heterogeneous) association between political ideology and fertility (intentions). Future studies, also using richer data, can deepen the understanding of the complex mechanisms linking political orientation and fertility, and how this is modified by individual and contextual circumstances.

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Supplementary Material: This article contains supplementary material (https://doi.org/10.1515/spp-2023-0038).