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Fathers' Involvement in the Family, Fertility, and Maternal Employment: Evidence From Central and Eastern Europe

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Abstract

For a sample of Central and Eastern European countries, characterized by historically high female labor force participation and currently low fertility rates, we analyze whether fathers' increased involvement in the family (housework and childcare) has the potential of increasing both fertility and maternal employment. Using two waves of the Generations and Gender Survey, we show that more paternal involvement in the family increases the likelihood that the mother will have a second child and work full-time. Men's fertility and work decisions are instead unrelated to mothers' housework and childcare. We also show that fathers' involvement in housework plays a more important role than involvement in childcare. The role of fathers' involvement in housework is confirmed when we consider women who initially wanted or intended to have a child, whose partner also wanted a child, or who intended to continue working.

Keywords

Gender revolution; Demographic trends; Working mothers; Gender roles; Fertility

Introduction

Central and Eastern European countries are currently experiencing low fertility levels that, combined with migration losses and low mortality, are leading to population aging and decline (Cekota and Trentini 2012; Lutz 2010; Petrova and Inglot 2020). In these countries with traditionally high female employment, can a more balanced allocation of household chores and childcare within the couple—the so-called second half of the gender revolution (Goldscheider et al. 2010)—drive an increase in fertility? What are the effects on maternal employment?

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We expect fathers' involvement in housework and childcare activities to have a positive impact on both fertility decisions and mothers' full-time employment because it helps alleviate the work-family trade-off, supporting women's decision to have additional children and continue to work.

To test these hypotheses, we use the two waves of panel data from the Generations and Gender Survey (GGS) for five countries in Central and Eastern Europe (Bulgaria, the Czech Republic, Hungary, Poland, and Russia). Taking into account a large set of individual characteristics of both the mother and the father, we show that a father's greater involvement in housework at the time of the first interview is associated with a higher likelihood that the mother will have a second child, work full-time, and have both a second child and full-time employment during the second interview. Father's involvement in childcare, however, is not consistently significant.

Our study advances previous research by carefully identifying the consequences of fathers' involvement. First, we jointly consider second child and work probabilities in addition to analyzing the two outcomes separately. Second, we analyze the effect of both housework and childcare: their impact is likely to differ because housework is less directly related to fertility choices but is also perceived as more onerous and less enjoyable (Gershuny 2013). Third, we focus on the transition to the second child, which is the most debated demographic issue (Van Bavel and Różańska-Putek 2010): biological, psychological, and social incentives remain indeed strong enough to have at least one child (Kohler et al. 2006; Morgan and Taylor 2006); and despite the below-replacement levels of fertility, the proportion of women who intend to have two children is dominant in most developed countries (Bongaarts 2002). Finally, our gender-differentiated analysis allows us to identify the differences between women and men in their perceptions of the division of domestic tasks and the related differential effect on fertility and employment decisions: that is, the fact that men tend to overestimate (or women underestimate) their contribution, even though they agree that wives spend more time on housework than they do (Lee and Waite 2005).

Our analysis makes two additional contributions. First, we focus on a sample of Central and Eastern European countries. These countries are particularly interesting because of their historically high female employment and women's integration into the labor market, which have occurred in tandem with low levels of fertility that recently attracted the attention of policy-makers.

Second, on the methodological side, we carefully address potential endogeneity and selectivity issues. Reverse causality implies that fathers contribute more to housework because of a second child or because the mother works full-time. To avoid this concern, we measure the level of involvement of fathers in the first wave and measure fertility and employment outcomes only in the second wave. We also perform a sensitivity analysis to address potential selectivity issues of women who choose more collaborative partners because they have high fertility intentions (or desires) or high employment attachment and men who are collaborative because they want another child. We restrict the analysis to those individuals who declare that they want or intend to have a child within three years, those who declare that their partner also wants a child, and those who intend to continue working.

Overall, our results suggest that fathers' greater involvement in domestic activities may increase fertility while allowing women to work full-time: fathers' involvement at home helps to overcome women's trade-off between having a second child and working full-time in countries characterized by traditionally high female employment but currently experiencing low fertility rates.

Fertility and Maternal Employment in Central and Eastern Europe

Our analysis includes five countries in Central and Eastern Europe: Bulgaria, the Czech Republic, Hungary, Poland, and Russia. They all share a history of state socialism and similar trends in female employment and fertility: a decrease during the last decade of the twentieth century followed by a slight increase or flat pattern. The socialist regime greatly expanded women's access to education and reproductive rights, establishing extensive state infant and childcare provisions. Female employment was higher than in any other part of the world (United Nations 1991), although women were usually employed in low-skilled jobs and lacked opportunities for career advancements. After 1989, these countries underwent significant economic transformations, shifting from the security of generous welfare states to the instability of free market economies. Policies were dismantled, and maternity leave and subsidies for childcare were substantially reduced (Mishtal 2009). As a consequence, female employment fell: women started to face the same unsustainable situation characterizing the first half of the gender revolution in Western countries, with insufficient external support to balance work and family (UNIFEM 2006).

After 1989, fertility rates started to decline: many features of contemporary capitalism (e.g., competitive labor markets, the spread of modern contraceptives) created considerably more restraining conditions for childbearing (Caldwell and Schindlmayr 2003). Immediately after the demise of state socialism, governments were preoccupied with economic and political reforms and did not pay much attention to social and family policies (Frejka and Gietel-Basten 2016).

Given migration losses and moderate mortality, low birth rates later became a crucial concern. The dominant norm expects women to have a first birth before age 30 (Mynarska 2010; Perelli-Harris 2005; Potančoková 2009), and the acceptance of women's role as income providers is long-standing (Matysiak and Vignoli 2013). These factors contribute to a context where women's employment seems to depress fertility less than in Western Europe (Matysiak and Vignoli 2008) and employed women are at least as likely to give birth to a first child as are nonemployed women (Kantorová 2004; Matysiak 2009; Robert and Bukodi 2005). However, population aging and decline advanced rapidly (Lutz 2010), and governments increasingly turned their attention to social and family policies, implementing pronatalist measures.

We are aware that these countries differ in some aspects. In Bulgaria, Hungary, and Russia, people generally hold more conservative views concerning gender roles, whereas those in the Czech Republic and Poland have more liberal, modern attitudes (Fodor and Balogh 2010). During the period considered (2004–2015), Russia had a female employment rate higher than 50%, Hungary was slightly below 40%, and the others were around 45%. The

levels of women's employment also reflect the general labor market situation, being parallel to that of men. Moreover, even though governments have been implementing pronatalist measures in all these countries, the features and effectiveness of these policies vary by country (see the online appendix, section A).

Despite some differences, all these countries have female employment rates close to the European average and total fertility rates below replacement level. The period we study (2004–2015) represents the general patterns of employment and fertility following the end of the communist regime. The finding that in these countries, father's involvement at home supports fertility without reducing maternal employment is encouraging for countries where acceptance of women's employment is still evolving and for countries that are implementing policies to promote fertility.

Background and Hypotheses

Demographers have widely analyzed the relationship between the increasing role of women in the economy and society in Western countries, known as the *gender revolution* (Goldscheider 2000), and the decline of fertility in the last century. During the first half of the gender revolution, characterized by the marked increase in women's higher education and the subsequent strengthening of their labor market role, working women bear the burden of working while continuing to be primary homemakers and caregivers. This first stage of the gender revolution is problematic (Goldscheider et al. 2015): the double burden is difficult to sustain (Hochschild and Machung 1990), and a situation in which women have to deal with both market work and family without help from partners causes a societal disequilibrium. Therefore, the emergence of a new equilibrium with couples choosing the duality of work and family can be expected (Esping-Andersen and Billari 2015). As the second half of the gender revolution slowly emerges—where men join women in the private sphere of the household—gender equality may strengthen families and have positive effects on fertility (Goldscheider et al. 2015; Goldscheider et al. 2010; McDonald 2000a, b). As macro-level evidence of this assumption, studies have shown that the most developed and gender-equal countries are experiencing a reversal in fertility rates (Goldstein et al. 2009; Myrskylä et al. 2009).

The gender revolution in Central and Eastern European countries is following a slightly different path because female employment was already high during the communist period. As Hochschild and Machung (1990) noted, the extra burden of women in the Soviet Union was disguised, as it was for the Black matriarch in the United States, with the image of the supermom working and being the primary housekeeper. Now a more gender-egalitarian culture is (slowly) spreading, such that the involvement of men at home may help women balance work and family and thus enhance fertility.

However, this is not the only possible scenario. Westoff and Higgins (2009) argued that the relationship between gender equality and fertility is context-specific and depends on how the two dimensions are measured. Along the same lines, Neyer et al. (2013) argued that the results of empirical analyses vary depending on which indicators of gender equality are included, whether women or men are studied, and which parity transition and which country

are considered in the analysis. Men's greater involvement in domestic tasks could hinder fertility, increasing work-family conflicts (Schieman et al. 2009) and men's opportunity cost of an additional child. Moreover, a female partner who works full-time increases family income, and if parents prefer to invest more in one child instead of dividing the additional resources among more children (quality-quantity trade-off; Becker and Lewis 1973), this could be another mechanism working against higher fertility.

Research finding a positive relationship between fathers' involvement at home and fertility has focused on fertility intentions rather than actual behavior or has used retrospective information, which cannot identify the causal effect of *ex ante* fathers' involvement on *ex post* fertility (Meil 2013; Mencarini and Tanturri 2004; Mills et al. 2008; Oláh 2003; Pinnelli and Fiori 2008; Puur et al. 2008; Tazi-Preve et al. 2004). Although intentions are a good proxy of actual decisions, certain socioeconomic and unexpected factors can still prevent their realization (Régnier-Loilier and Vignoli 2011; Riederer et al. 2019). Moreover, the relation between intentions and behavior depends on the measurement of components of intentions over a shorter or longer period or on age and family status (Hayford 2009). Few existing studies have linked *ex ante* fathers' involvement to *ex post* fertility. Torr and Short (2004) studied a sample of U.S. couples and found that both the most modern and the most traditional housework arrangements are positively associated with fertility. Cooke (2004, 2008) found that a father's involvement in childcare increases a couple's odds of a second birth in Germany and Italy.[1]

Considering that developed countries still have a mean ideal number of children above two (Bongaarts 2002; OECD 2016) and that the recent pattern of fertility in the countries of our sample has been increasing or at least stable (Pison 2020), more equal sharing of domestic tasks is likely to help couples to achieve the ideal number of children. We thus propose the following first hypothesis.

> *Hypothesis 1:* The involvement of fathers in housework and childcare duties at the time of the first wave of the survey increases the probability of having a second birth between the first and the second wave.

To appropriately test this first hypothesis, we analyze the actual fertility of respondents, taking their fertility intentions into account. For the same individual, we observe fathers' involvement *ex ante* and fertility outcome *ex post*.

Fathers' involvement in the family may also be relevant for maternal employment. The literature about the effects of partners' support on maternal employment, actual or intentional, is still quite limited. Werbel (1998) found that it is positively associated with women's intention to work before childbirth in the United States, and Seiger and Wiese (2011) found a positive association with mothers' affective well-being during their return to employment after maternity leave in Switzerland. Moreover, Stertz et al. (2017) showed that women with more egalitarian partners take shorter leaves and decrease their working hours less in Germany, Austria, and Switzerland. In contrast, mothers' attitudes do not

[1]Some scholars (Aassve et al. 2015; Goldscheider et al. 2013; McDonald 2000a, 2000b, 2006) have also argued that the mismatch between gender attitudes and behavior matters more for fertility than does the division of tasks per se.

influence their husbands' behavior. Finally, Almeida et al. (1993) found that wives' longer employment hours are linked to their lower proportional share of childcare and lower absolute levels of housework among Canadian couples. We thus propose the following second hypothesis.

> *Hypothesis 2:* The involvement of fathers in housework and childcare duties at the time of the first wave of the survey increases the probability that the mother works full-time during the second wave.

It is then important to analyze together the two decisions—on fertility and maternal employment—in relation to the partner's contribution and support: indeed, previous research that considered fertility and maternal employment together took into account only the reciprocity between them (Kantorová 2004; Matysiak 2009; Matysiak and Vignoli 2013; Robert and Bukodi 2005), thus missing the potential impact of a partner's behavior on both decisions.

We thus propose a third hypothesis, which combines the previous two.[2]

> *Hypothesis 3:* The involvement of fathers in housework and childcare duties at the time of the first wave increases the joint probability of transitioning to a second child and working full-time after childbirth.

Finally, we discuss the relative effect of fathers' involvement in childcare and housework on fertility and maternal employment. We expect housework sharing, especially in routine tasks that have traditionally belonged to women, to have a greater impact on their fertility and work decisions. Routine household tasks are considered to be more female-typed (e.g., washing dishes and cleaning), whereas nonroutine tasks are considered to be more male-typed (e.g., car repair, trash removal) (Carlson et al. 2018; Schneider 2012). During the last decades, men have increased and women have decreased their time in housework (Bianchi et al. 2012). However, the widest gender gaps remain in female-typed tasks (Craig and Mullan 2011), which most women and men dislike (Coltrane 2000). Thus, sharing these unpleasant housework tasks can be expected to be more effective in balancing women's conflict between work and family. This is not the only possible scenario: the role of fathers' involvement in childcare gains relevance if we consider that childcare is tiresome and cannot be postponed and that mothers are more involved in tasks requiring a rigid timetable and have more responsibilities overall (Craig 2006). Despite these considerations, existing research has shown that overall, housework is perceived as more onerous and less enjoyable than childcare (Gershuny 2013; Poortman and Van der Lippe 2009; Sullivan 1996). Therefore, although sharing childcare may be more directly linked to fertility outcomes, we can expect involvement in housework, especially in female-typed tasks, to be particularly beneficial for the reduction of women's work-family conflicts and, consequently, to have a greater impact than involvement in childcare on both women's work and fertility decisions. We propose the following corollary, which we will test in all three hypotheses.

[2]Hypothesis 2 posits that respondents (working and with one child during the first interview) continue working in the second interview regardless of whether they have a second birth, whereas Hypothesis 3 posits that respondents (working and with one child during the first interview) continue working in the second interview and have a second birth between the two waves.

Corollary: Fathers' involvement in housework is more effective than their involvement in childcare duties.

Data

We use data from the Generations and Gender Survey (GGS) conducted by the Generations and Gender Programme (GGP), a social science infrastructure for research on family dynamics and relationships. The survey provides micro- and macro-level data about partnerships, fertility, and attitudes of nationally representative samples of the 18- to 79-year-old resident population in a large set of countries. The essential feature of the GGS is that it interviews the same individual in two subsequent waves; this feature allows us to analyze the effect of the domestic division of tasks during the first interview on the likelihood of a second birth before the second interview, without the drawbacks of retrospective data (such as recall bias).

We use information on two subsequent waves for Bulgaria, the Czech Republic, Hungary, Poland, and Russia.[3] The first interview was conducted in a different year in each country: 2004 in Russia and Bulgaria, 2004–2005 in Hungary, 2005 in the Czech Republic, and 2010–2011 in Poland. The second wave was collected after two to three years in Bulgaria and Russia, and after three to four years in the Czech Republic, Hungary, and Poland.[4] To ensure that results are not driven by a particular country, we also perform the analysis by excluding one country at a time: we find consistent results, which are available upon request. The GGS provides a large set of useful information about the household, education, employment, and other socioeconomic variables. We consider men and women separately because GGS does not interview couples.

We restrict our sample to individuals cohabitating in the first wave,[5] with one biological child younger than 3 years old[6] whose mother/father remains the respondent's partner in the second wave. We do not include mothers who are already pregnant with a second child during the first interview or fathers whose partner is pregnant because we consider them as already having two children. Women are restricted to be under the age of 45 years old. These restrictions (cleaned from missing values) deliver a sample of 680 women and 490 men and guarantee that we consider individuals of fertile age who have children in need of care. We present results only for those respondents who were working at the time of the first interview; these respondents were facing the trade-off between work and family and are therefore the most interesting sample. This additionally restricts our sample to 540 women and 416 men.[7]

[3]Data are also available for France, but we restrict the sample to a group of countries that is geographically close, homogeneous in terms of past history, and (as explained) particularly interesting for their demographic and cultural characteristics.
[4]We assume that the small differences in the time passed from one wave to the other and in the year of the interview do not affect the results (Aassve et al. 2015; Riederer et al. 2019). However, as explained later, we adjust each country variable with the average length of the period between waves to avoid having this heterogeneity confound the magnitude of the odds.
[5]We also conduct the analysis on the more restricted sample of individuals who cohabitate with the same partner in the two interviews. The number of respondents is very similar; the results, available upon request, are confirmed.
[6]We exclude individuals with an older child, who are likely to have reached their intended fertility. For robustness, we also perform the analysis including them; the results, available upon request, confirm the positive effect of housework.
[7]We also perform the analysis on all respondents, including nonworking individuals, and on the restricted sample of couples of both working parents. The results, available in section A of the online appendix, confirm the positive and significant effect of fathers' involvement in housework.

GGS also provides information on the individual's intention and both the individual's and the partner's desire to have a child. We use this information to conduct the analysis on some restricted samples. We first consider individuals who declare that they want or intend to have a child, and then we consider those who declare that they want or intend to have a child and that their partner also wants a child.

Fertility intentions are captured by the question, "Do you intend to have a child in the following three years?" We consider both "Probably yes" and "Definitely yes" as positive answers, thus excluding "Probably not" and "Definitely not" answers. Fertility desires come from the questions, "Do you want a child?" and "Does your partner want a child?": we keep those respondents who answered both "Yes" and "Not sure," thus excluding only those who were sure about not wanting a child ("No") and those who declared they couldn't have a child ("Physically impossible to have a child").[8] The mismatch that we find for some (very few) respondents between fertility intentions and desires has been well explained in the literature by the conceptual difference between wanting and intending to have children. In general, fertility intentions are supposed to be more predictive than fertility desires because they can be viewed as the joint couple's plan (Thomson 1997), and they include a component of commitment in the wish for a child (Freitas and Testa 2017). However, there is also some evidence that desires may bypass intentionality and act directly on behavior (Miller 2011), and we thus decide to consider together individuals who either want or intend to have a child.

For employment intentions, we consider the question, "Do you intend to give up your paid work in the next three years?" We restrict the sample to those who do not intend to give up their job and who therefore intend to continue working, retaining only those who answered "Probably not" and "Definitively not."

These sample restrictions aim at solving the selection bias of women who choose more collaborative partners because they have high fertility intentions (or desires) or high employment attachment and men who are collaborative because they want another child. To summarize, we analyze the following subsamples of female and male respondents (all working during the first interview) according to the combination of their fertility and employment intentions[9] (N_w indicates the number of each subsample of women, and N_m indicates that of men):

- Want/intend to have a child in the following three years ($N_w = 394$; $N_m = 292$)
- Want/intend to have a child and whose partner wants a child ($N_w = 258$; $N_m = 185$)
- Intend to continue working in the following three years ($N_w = 512$; $N_m = 409$)
- Intend to continue working and want/intend to have a child ($N_w = 374$; $N_m = 288$)

[8]The analysis on the more restricted samples of individuals who answered only "Yes" and the analysis on the samples of individuals whose partner only wants a child are only slightly less significant.

[9]We verify with pairwise correlations and chi-squared statistics that these various subsamples are not already affected by housework and childcare arrangements.

- Intend to continue working, want/intend to have a child, and whose partner wants a child (N_w = 244; N_m = 182).

GGS provides information on the number of children and the working status of both the respondent and the partner, from which we derive our three dependent variables. The first one is a dummy variable that takes a value of 1 if the respondent has a second child between the two interviews. We attribute a value of 1 if two conditions are met: (1) the age of the youngest child in the second wave is lower than the period passed from nine months after the first and the second interview (to avoid the possibility that the mother was already pregnant when interviewed the first time), and (2) the total number of biological children declared during the second interview is higher than that declared during the first interview. We also attribute a value of 1 if the respondent declares being pregnant (or the partner is pregnant) at the time of the second interview.

The second dependent variable is a dummy variable that takes a value of 1 if the respondent works full-time (at least 40 hours per week) during the second interview. Women on maternity leave are considered to be working full-time if they have a 40-hour/week contract.[10]

Finally, we construct a third binary variable that takes a value of 1 if the respondent has a second child and works full-time during the second interview.[11]

To measure fathers' involvement in housework and childcare, we consider responses to the following item: "Please tell me who in your household does the following tasks." This item pertains to four housework tasks (preparing meals, washing dishes, shopping for food, and vacuuming the house)[12] and four childcare tasks (dressing the children, putting the children to bed, staying at home with children when they are ill, and playing or taking part in leisure activities).[13]

The possible answers for each task are, "Always the respondent," "Usually the respondent," "Respondent and partner about equally," "Usually the partner," "Always the partner," "Always or usually other persons in the household," "Always or usually someone not living in the household," and (for childcare tasks only) "Children do it themselves." The score for each task ranges from 0 (respondent always performs the task) to 4 (partner always performs the task). We assign the intermediate value of 2 if the two partners perform the task about equally and if the task is performed by someone else: "Always or usually other persons in the household," "Always or usually someone not living in the household," or "Children do it themselves." (The latter response option has very few observations given that children are younger than 3.) In these cases, there is not an unbalanced burden on either partner.

[10]An additional analysis excluding those on maternity leave during the second interview, and who therefore may stop working after the end of the maternity leave, confirms our findings.
[11]We also perform this third analysis using a biprobit model; results are shown in Table A1 in the online appendix.
[12]The survey provided information for a total number of seven housework activities. Following previous studies with GGS data (Aassve et al. 2015; Riederer et al. 2019), we consider only those activities more typically performed by women.
[13]Regarding childcare, the survey provides information for a total of six activities. We retain those consistent with the fact that respondents have only one child younger than 3 years old. Thus, we do not consider "Helping with homework" and "Taking the children to/from school, day care center, babysitter or leisure activities."

From these answers, we construct four indicators to measure men's and women's involvement in housework and childcare.[14] First, we perform a factor analysis (Kroll et al. 2016), and we create an indicator as a factor score of the four tasks for housework and childcare separately: a weighted linear combination of the four tasks, with the factor loadings as weights.[15] Each item's contribution to the factor score depends on how strongly it relates to the factor, and it slightly differs between women and men.[16]

Our factor analysis delivers the following indicators:

1. $Housework(Women) = 0.70 \times meals + 0.79 \times dish + 0.54 \times shop + 0.65 \times clean$
2. $Housework(Men) = 0.74 \times meals + 0.80 \times dish + 0.53 \times shop + 0.64 \times clean$
3. $Childcare(Women) = 0.78 \times dressing + 0.80 \times bed + 0.69 \times illness + 0.6 \times leisure$
4. $Childcare(Men) = 0.78 \times dressing + 0.79 \times bed + 0.67 \times illness + 0.57 \times leisure$

The indexes thus constructed range from 0 to approximately 10, with values around 5 corresponding to an equal contribution of the two partners in domestic tasks.[17] For women, both housework and childcare indexes have overall median values below egalitarian (2.65 and 2.9, respectively). For men, both indexes have overall median values above egalitarian (7.22 for housework and 7.73 for childcare), indicating that the great majority of male respondents declare that their female partner performs more than one-half of domestic activities. We transform these indexes into binary variables, considering country-specific thresholds: low partner involvement corresponds to values below the median of the respondent's country, and high partner involvement corresponds to values equal or above the median of the respondent's country.

To allow for comparability across countries, we also construct an alternative absolute measure of partner's involvement. We define involved fathers as those with a score higher than that obtained when the mother usually performs all tasks by herself, which corresponds to 2.7 for housework and 2.9 for childcare (see Figure A2, online appendix). In other words, involved fathers partially share tasks with the mother, such that the mother does not usually perform all four tasks by herself. We then define involved mothers as those who score more than 8.1 in housework and 8.4 in childcare for the sample of men (see Figure A3, online appendix). Scores higher than these values correspond to mothers that usually or always perform all tasks. When we use these absolute measures of involvement, the results of our main text are unchanged (see Table A3, online appendix).[18]

[14] In Table A2 in the online appendix, we show the results of the analysis performed on the separate housework and childcare tasks. Interestingly, we find that partner's involvement in washing dishes has the most significant effect, in line with the finding that sharing dishwashing is positively associated with women's relationship satisfaction (Carlson et al. 2018).

[15] Because we are dealing with categorical variables, before performing the factor analysis, we implement a polychoric correlation—a technique used for estimating the correlation between two theorized, normally distributed, continuous latent variables deriving from two observed ordinal variables (Holgado-Tello et al. 2010).

[16] The factor analysis confirmed our choice about the selection of the activities. Our four tasks have factor loadings higher than .4, suggesting a significant correlation with the latent factor. The three tasks that we dropped ("Doing small repairs in and around the house," "Paying bills and keeping financial records," and "Organizing social activities") have instead factor loadings lower than .4. Moreover, the items chosen show acceptable reliability (Cronbach's alpha > .5).

[17] See Figures A2 and A3 in the online appendix for the distributions of these indexes.

[18] In section B of the online appendix, we consider as a threshold the overall median value of the countries, and we construct the explanatory variable as the simple sum of the scores for each housework or childcare task.

GGS contains a set of individual variables that we use as controls: they are reported during the first interview. First, we include both the respondent's and the partner's age.[19] Two binary variables, one for each partner, indicate whether the individual has a college education.[20] We then consider as employed all individuals who are employed or self-employed, are temporarily on maternity or paternity leave, and work in military or social services. Because we are considering respondents with a child younger than 3 years old, women on maternity leave during the first interview constitute a significant proportion of our sample: women on maternity leave have a different experience than those who are currently working, but we argue that it is still a relevant condition to consider.[21] We then include two binary variables for women's part-time and full-time work. For the sample of working women, the reference category includes only those on maternity leave; for the sample of working men, nonworking female partners are included. We then include one dummy variable for full-time working men; we do not include a separate dummy variable for part-time work because of the low number of observations. For the sample of working men, the reference category includes both those on paternity leave and those working part-time, and the sample of working women also includes nonworking male partners.

Respondent characteristics relate to some survey questions for which information is available for the respondent but not for the partner: namely, a previous divorce, satisfaction with the partner relationship, and attitude toward gender roles. The variable of partnership quality is based on the question, "How satisfied are you with your relationship with your partner/spouse?" Respondents answered the question on a scale ranging from 0 (not at all satisfied) to 10 (completely satisfied). We include two indicators of gender attitude: one referring to the first half (women in the public sphere) and the other referring to the second half of the gender revolution (men in the private sphere). The first one derives from the question, "When jobs are scarce, men should have more right to a job than women" (Alesina et al. 2013; Campa et al. 2010). The scores of the answers range from 1 (strongly agree) to 5 (strongly disagree). We create an ordinal variable that takes a value of 1 if the respondent (strongly) agrees, 2 if the respondent neither agrees nor disagrees, and 3 if the respondent (strongly) disagrees. The second one derives from the survey question, "Children often suffer because fathers concentrate too much on work." The variable takes a value of 1 if the respondent (strongly) disagrees, 2 if the respondent neither agrees nor disagrees, and 3 if the respondent (strongly) agrees. In both cases, higher values correspond to a more gender-egalitarian attitude.

We also control for some characteristics of the couple and the household. Because income information is not available for all countries, we use the survey question, "Thinking of your household total monthly income, is your household able to make ends meet?" to control for the family economic situation. The possible answers range from 1 (with great difficulty) to 6 (very easily), and thus low values correspond to a difficult economic situation. A binary

[19]Because women are younger than 45 years old, a nonlinear relation between age and second child is unlikely. However, we also check this possibility by including the squared age, and our results are unchanged.

[20]To check that the correlation between mother's and father's education does not bias the results, we also perform the analysis considering only the highest education between the two partners.

[21]As a robustness check, we also perform the analysis without women on maternity leave. Despite the significantly lower number of observations, the results are confirmed in direction and significance for the majority of subsamples. Our main results are confirmed when excluding the Czech Republic and Hungary, the countries with the greatest proportion of women on maternity leave.

variable indicates whether the couple is married, and two binary variables control for the use of external paid childcare and for the regular help received by grandparents. Finally, to consider the relevance of the birth interval between the first and second child, we control for the age of the first child. Table 1 contains descriptive statistics of our variables.

Methods

We estimate the following three logit equations, which correspond to our three hypotheses:

$$P_{i,t}(NC) = \beta_0 + \beta_1(\textbf{Partner's Involvement}_{i,t-1}) + \beta_2(\mathbf{X_{i},}_{t-1}) + \varepsilon \quad (1)$$

$$P_{i,t}(FT) = \beta_0 + \beta_1(\textbf{Partner's Involvement}_{i,t-1}) + \beta_2(\mathbf{X_{i},}_{t-1}) + \varepsilon \quad (2)$$

$$P_{i,t}(NCFT) = \beta_0 + \beta_1(\textbf{Partner's Involvement}_{i,t-1}) + \beta_2(\mathbf{X_{i},}_{t-1}) + \varepsilon, \quad (3)$$

where

- P_{it} is the probability that individual i at time t has a new child (Eq. (1)), works full-time (Eq. (2)), or has a new child and works full-time (Eq. (3)).
- **Partner's Involvement**$_{i,t-1}$ is the indicator that captures the involvement of the partner of individual i at time $t-1$ for both housework and childcare activity, as described in the Data section.
- $\mathbf{X}_{i,t-1}$ are control variables for individual i at time $t-1$ as described in the Data section and Table 1 and referred separately to the interviewed individual and her/his partner.
- ε is the error term.

We cluster the standard errors at the country level, and we include country fixed effects.[22] To avoid having heterogeneity in the timing between the first and second surveys confound the magnitude of country coefficients, we adjust each country variable with the country-specific average period between the two waves.[23] Equations (1), (2), and (3) are estimated separately for women and men.

We present the results of the logistic regressions, which are appropriate to identify the direction and significance of the effect for our models with binary dependent variables. We are aware of the criticism that odds ratios from logistic regressions cannot be interpreted as effect measures or be reliably compared across groups because of an omitted variable bias (Mood 2010); however, results of linear probability models are not different from the ones we present and thus serve as a robustness check against this potential problem.

[22]We also control for the country-specific female and male employment rates during the first and second interview, confirming the main findings.

[23]The results for our variables of interest remain the same without this adjustment and when we conduct the analysis separately for countries for which the average period between the two waves is less than three years (Bulgaria and Russia) or more than three years (the Czech Republic, Hungary, and Poland).

Results

Fathers' Involvement and Fertility Outcomes

Table 2 shows the odds ratio of the estimates for Eq. (1) for the sample of women and men, respectively. Panel A shows that fathers' involvement in childcare is significantly related to the birth of a second child for only two subsamples of working women. However, fathers' involvement in household activities is positive and significant for all the subsamples considered, suggesting a more robust correlation. The strongest results are found for the subsample in which both partners want a child (column 3) and for the subsample of working women who intend to continue working, want a child, and have a partner who also wants a child (column 6): the odds of a second child are, respectively, 1.73 and 1.67 times higher if the father has a high rather than a low involvement in housework activities. These results suggest that an equal sharing of domestic activity is a significant driver of the choice of working women to have an additional child. Among the control variables, father's education (consistently with Trimarchi and Van Bavel 2017) and mother's education are relevant. Interestingly, grandparents' support does not seem to be significant for women's fertility decisions.

Panel B of Table 2 shows that when we consider men instead of women, mothers' involvement is not significant. This result is in line with the fact that women always contribute to domestic and childcare activities and men are marginal contributors.[24] Mother's age is negatively but weakly related to the probability of a second child as well as the age of the first child, the presence of a previous divorce, and the father's full-time work; however, the results of these last two variables could be biased by the unbalanced distributions of the observations in their categories. By contrast, egalitarian attitude (related to the second shift) of the father and good economic condition of the couple matter positively.[25]

Fathers' Involvement and Maternal Employment Outcomes

Panel A of Table 3 estimates Eq. (2) for women. Fathers' involvement in housework during the first interview is positively and significantly associated with the probability that the woman works full-time during the second interview in all subsamples. Control variables play an important role, particularly working full-time at the time of the first interview. Satisfaction with the relationship is negatively and significantly related to the probability of the woman's full-time work, and grandparents' support with childcare is positive and significant. This is an interesting finding for Central and Eastern European countries, where coresidence with grandparents is common (Jappens and Van Bavel 2012).

Panel B of Table 3 estimates Eq. (2) for men. As expected, we observe that the probability of working full-time for men is not affected by the division of domestic tasks.

[24]Considering the positive effect of fathers' involvement on women's fertility outcomes, one could expect a symmetric negative effect of mother's involvement for men. However, our female and male respondents are not partnered with each other, and moreover, women and men have different perceptions about their own contributions and their partner's contributions to housework (Lee and Waite 2005).
[25]Coefficients for country variables that account for the average time between waves capture contextual differences between countries, with respect to institutional settings, family, and pronatalist policies.

Fathers' Involvement, Fertility, and Maternal Employment Outcomes

We finally estimate Eq. (3) and consider the joint probability of having a second child and working full-time. Panel A of Table 4 shows that fathers' involvement in household work is positive and significant in all subsamples. The involvement of fathers in childcare is positive but never significant. Mothers' involvement is again not significantly related to fathers' decisions (Table 4, panel B).

In section C of the online appendix, we also analyze heterogeneous effects within the group of women. We find that fathers' involvement helps to support the decision of more career-oriented women to have a second child and the decision of less career-oriented women to work full-time.

Discussion and Conclusion

Considering five Central and Eastern European countries, we show that when fathers participate in household chores, women are more likely to have a second child and work full-time. By contrast, the involvement of women in housework and childcare plays no role in men's decisions. These results are confirmed for women who want or intend to have a child, women whose partners also want a child, or women who intend to continue working. Although fathers' involvement in housework is always positive and significant for women's fertility and work decisions, involvement in childcare does not play the same consistent, significant role. However, when we consider women's probability of having a second child, fathers' involvement in childcare is also positive, and in some subsamples, it turns out also to be significant. It is instead never significant for maternal employment.

Our results refer to the context of Central and Eastern European countries, which are interesting because of both female employment and fertility trends. These countries show levels of women's employment in line with the European average (higher than in Southern and lower than in Northern Europe) and a current fertility rate below replacement. These countries offer the unique opportunity to understand the role of fathers' involvement in a context where women have been traditionally integrated into the labor market and to draw lessons for countries where the role of women as workers is still evolving. It will be worth testing our results in different contexts and analyzing different societal-level factors when data from a larger set of countries become available. Future research will also explain how other demographic dynamics, such as divorce, are influenced by the allocation of family chores within the couple and the birth of a second child.

Population aging and decline accompanied by low fertility rates raise doubts about the future sustainability of welfare states. Observed fertility that is lower than desired also suggests that individuals and couples have fewer children than they want (Morgan 2003). Indeed, our results show that sharing domestic activities may help couples to close this gap (Esping-Andersen 2017), such that favoring fertility could have positive effects at the societal and individual levels. Moreover, gender equality in the private sphere can also reinforce gender equality in the public sphere. Our finding that fathers' greater involvement in housework may increase fertility while allowing women to continue working full-time has strong policy implications. Policies that encourage a symmetric division of labor within the couple, such

as exclusive paternity leaves, may sustain the double-earner family model and the recovery of fertility rates, leading toward a more gender-egalitarian equilibrium where mothers work and couples reach their fertility intentions.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1

Descriptive statistics, by country, for working respondents with one child during the first interview, with partners working or not

	Bulgaria		Czech Republic		Hungary		Poland		Russia		Total	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Partner's Involvement in Housework [range: 1 to −10]	3.33	7.53	2.36	8.14	2.41	7.75	3.41	7.57	2.71	7.41	2.93	7.61
Partner's Involvement in Childcare [range: 1 to −11]	2.60	8.19	2.31	8.54	2.65	7.55	3.49	7.72	2.46	8.34	2.80	7.91
Mother's Characteristics												
Age	27.43	27.89	26.45	29.53	27.22	29.03	29.70	29.18	26.03	26.56	27.70	28.44
College education (%)	45.19	39.29	9.68	15.79	24.84	15.93	63.04	48.44	58.67	63.89	43.52	38.94
Not working (%)	—	20.24	—	0.00	—	7.96	—	28.91	—	27.78	—	19.95
Currently on maternity leave (%)	48.15	40.48	96.77	94.74	79.50	69.03	37.68	12.50	57.33	45.83	58.89	43.03
Part-time working (%)	5.19	7.14	0.00	0.00	4.97	2.65	14.49	10.94	13.33	8.33	8.33	6.97
Full-time working (%)	46.67	32.14	3.23	5.26	15.53	20.35	47.83	47.66	29.33	18.06	32.78	30.05
Father's Characteristics												
Age	32.42	30.75	30.77	30.74	30.48	30.20	32.64	31.41	29.63	28.00	31.41	30.33
College education (%)	28.89	23.81	9.68	15.79	17.39	16.81	39.13	39.06	40.00	37.50	28.52	28.61
Not working (%)	14.81	—	3.23	—	8.70	—	5.07	—	4.00	—	8.33	—
Currently on paternity leave (%)	0.00	0.00	0.00	0.00	0.62	4.42	0.72	0.00	0.00	0.00	0.37	1.20
Part-time working (%)	4.44	4.76	0.00	5.26	6.21	6.19	4.35	10.16	9.33	4.17	5.37	6.73
Full-time working (%)	80.74	95.24	96.77	94.74	84.47	89.38	89.86	89.84	86.67	95.83	85.93	92.07
Respondent's Characteristics												
Previous divorce (%)	3.70	0.00	6.45	0.00	1.86	1.77	1.45	2.34	5.33	9.72	2.96	2.88
Satisfaction with relation to partner [range = 1 to 10]	8.92	8.98	9.26	8.79	8.86	8.97	9.11	9.44	7.85	8.94	8.82	9.10
Egalitarian attitude, first half [range = 1 to 3]	2.53	1.90	2.45	1.84	2.39	2.22	2.47	2.21	2.19	2.04	2.42	2.11
Egalitarian attitude, second half [range = 1 to 3]	2.43	2.38	2.52	2.63	2.76	2.71	2.67	2.64	2.64	2.51	2.63	2.58
Couple Characteristics												
Household able to make ends meet [range = 1 to 6]	2.55	2.50	3.10	2.89	3.39	3.23	3.73	3.63	2.69	2.81	3.15	3.12
Married (%)	80.00	85.71	77.42	89.47	79.50	82.30	92.03	90.63	90.67	90.28	84.26	87.26
External childcare (%)	34.81	33.33	6.45	0.00	19.88	33.63	25.36	26.56	36.00	29.17	26.48	29.09
Grandparents' help with children (%)	31.85	26.19	9.68	5.26	58.39	46.90	31.88	20.31	38.67	27.78	39.44	29.33
Age of the first child	1.68	1.61	1.71	1.68	1.14	1.41	1.21	1.57	1.55	1.38	1.38	1.50

	Bulgaria		Czech Republic		Hungary		Poland		Russia		Total	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
With a second child in the second interview (%)	21.48	21.43	54.84	21.05	47.83	38.05	40.58	51.56	18.67	9.72	35.74	33.17
Number of Years Between the Two Waves	2.52	2.52	3.08	3.11	3.96	3.95	3.88	3.84	2.87	2.86	3.38	3.40
Number of Respondents	135	84	31	19	161	113	138	128	75	72	540	416

Table 2

Odds ratios for the probability of having a second child

	All Sample	Want/Intend to Have a Child	Both Partners Want a Child	Intend to Work	Intend to Work and Want/Intend to Have a Child	Intend to Work and Both Partners Want a Child
A. Working Women						
Father's involvement in housework (ref. = low)						
High	1.27*	1.56**	1.73***	1.29*	1.55**	1.67***
Father's involvement in childcare (ref. = low)						
High	1.25	1.73*	1.98	1.30	1.76*	2.12
Mother's characteristics						
Age	0.98	0.99	1.07**	0.98	0.99	1.07**
College education	1.27*	1.19	0.74*	1.23**	1.16	0.74*
Working part-time	1.06	1.08	0.24**	1.04	1.05	0.22*
Working full-time	1.17	1.18	0.51	1.14	1.14	0.47
Previous divorce	0.88	1.01	0.55	1.05	1.43	0.99
Satisfaction with relationship to partner	1.09*	1.00	0.91*	1.09*	1.00	0.91*
Egalitarian attitude, first half	1.01	1.22	1.13	1.04	1.21	1.14
Egalitarian attitude, second half	1.16	1.15	0.94	1.18	1.18	0.98
Father's characteristics						
Age	0.96†	0.97†	0.99	0.96†	0.97†	0.99
College education	1.33	1.30	1.45**	1.27	1.28	1.41**
Working full-time	1.44	1.30	1.27	1.26	1.12	1.12
Couple characteristics						
The household can make ends meet	1.17	1.21†	1.13	1.13	1.15	1.08
Married couple	1.36	1.41	2.07†	1.34	1.38	2.19†
External help with childcare	1.02	0.77	0.89	1.07	0.80	0.90
Grandparents' help with childcare	0.84	0.96	0.99	0.82	0.98	1.00
Age of the youngest child	0.98	0.92	1.10	0.94	0.91†	1.09

	All Sample	Want/Intend to Have a Child	Both Partners Want a Child	Intend to Work	Intend to Work and Want/Intend to Have a Child	Intend to Work and Both Partners Want a Child
Country (ref. = Bulgaria)						
Czech Republic	1.63***	1.73***	1.56***	1.69***	1.82***	1.61***
Hungary	1.36***	1.38***	1.21***	1.34***	1.36***	1.19**
Poland	1.16***	1.17***	1.12**	1.15***	1.17***	1.12**
Russia	0.89*	0.91*	0.95	0.88*	0.99	1.02
Constant	0.13***	0.11***	0.04***	0.15***	0.14***	0.04***
Number of observations	540	394	258	512	374	244
B. Working Men						
Mother's involvement in housework (ref. = low)						
High	0.82	0.86	1.79	0.86	0.88	1.86
Mother's involvement in childcare (ref. = low)						
High	0.83	0.69	0.49**	0.86	0.67†	0.45**
Mother's characteristics						
Age	0.93***	0.92**	0.89***	0.93***	0.93*	0.90***
College education	1.52	1.55	0.86	1.44	1.55	0.82
Working part-time	1.39	1.73	3.54†	1.47†	1.65	3.46†
Working full-time	0.92	1.06	1.36	0.92	1.02	1.34
Father's characteristics						
Age	0.98	0.99	0.99	0.97	0.98	0.98
College education	1.08	0.99	1.23	1.19	0.98	1.17
Working full-time	0.49***	0.48*	0.47**	0.50***	0.47**	0.46**
Previous divorce	0.18***	0.17***	—	0.20***	0.18***	—
Satisfaction with relationship to partner	1.01	1.06	1.08	0.99	1.04	1.03
Egalitarian attitude, first half	1.10	1.15	1.17	1.11	1.12	1.13
Egalitarian attitude, second half	1.19***	1.34*	1.24	1.24***	1.40*	1.29
Couple characteristics						
The household can make ends meet	1.18†	1.36***	1.87***	1.18	1.36***	1.88***
Married couple	1.62	1.85	2.14	1.61	1.88	2.23

	All Sample	Want/Intend to Have a Child	Both Partners Want a Child	Intend to Work	Intend to Work and Want/Intend to Have a Child	Intend to Work and Both Partners Want a Child
External help with childcare	1.18	1.06	1.15	1.27†	1.09	1.20
Grandparents' help with childcare	1.61***	1.19	1.56	1.62***	1.19	1.52
Age of the youngest child	0.88†	0.85*	0.59***	0.87*	0.85*	0.58**
Country (ref. = Bulgaria)						
Czech Republic	1.10†	0.97	1.32***	1.13*	0.97	1.32**
Hungary	1.21***	1.25***	1.21*	1.20***	1.23***	1.17
Poland	1.39***	1.29***	1.46***	1.38***	1.26***	1.42***
Russia	0.63***	0.54***	0.62***	0.58***	0.54***	0.62***
Constant	1.66	0.71	0.76	2.21†	0.78	1.19
Number of observations	416	292	185	409	288	182

†$p < .10$

*$p < .05$

**$p < .01$

***$p < .001$

Table 3

Odds ratios for the probability of working full-time during the second wave

	All Sample (1)	Want/Intend to Have a Child (2)	Both Partners Want a Child (3)	Intend to Work (4)	Intend to Work and Want/Intend to Have a Child (5)	Intend to Work and Both Partners Want a Child (6)
A. Working Women						
Father's involvement in housework (ref. = low)						
High	1.48†	1.83***	1.80**	1.45†	1.76***	1.69***
Father's involvement in childcare (ref. = low)						
High	0.81	0.72	0.79	0.79	0.73	0.83
Mother's characteristics						
Age	1.05†	1.07	1.03	1.04	1.06	1.01
College education	1.07	1.13	1.33	1.23	1.21	1.49
Working part-time	0.65*	0.88	0.86	0.68**	0.98	0.88
Working full-time	2.42***	3.00**	2.70***	2.30***	2.70**	2.35***
Previous divorce	0.84	0.38	0.27†	0.98	0.36	0.22
Satisfaction with relationship to partner	0.85**	0.79***	0.79†	0.86**	0.79***	0.77†
Egalitarian attitude, first half	0.95	0.80	0.85	0.94	0.82	0.88
Egalitarian attitude, second half	0.77	0.78*	0.81	0.80	0.85†	0.88
Father's characteristics						
Age	1.00	0.99	0.98	1.00	0.99	0.99
College education	0.93	0.87	0.79	0..85	0.85	0.72
Working full-time	1.28	1.28	1.19	1.33	1.26	1.02
Couple characteristics						
The household can make ends meet	0.91*	1.02	1.05	0.90†	1.01	1.07
Married couple	1.03	0.78	1.69*	1.03	0.72	1.82
External help with childcare	1.42	0.98	1.49	1.43	1.06	1.71
Grandparents' help with childcare	1.53**	1.40**	1.32**	1.49*	1.31*	1.21*
Age of the youngest child	0.92	1.04	0.87	0.92	1.06	0.89

	All Sample (1)	Want/Intend to Have a Child (2)	Both Partners Want a Child (3)	Intend to Work (4)	Intend to Work and Want/Intend to Have a Child (5)	Intend to Work and Both Partners Want a Child (6)
Country (ref. = Bulgaria)						
Czech Republic	0.56***	0.53***	0.56***	0.57***	0.54***	0.55***
Hungary	0.76**	0.74***	0.82**	0.76***	0.73***	0.79***
Poland	0.95***	0.97	1.04	0.93***	0.94***	1.00
Russia	0.72***	0.68***	0.73**	0.67***	0.64***	0.66***
Constant	3.22	6.51*	8.38	3.65	8.57**	15.78
Number of observations	540	394	258	512	374	244
B. Working Men						
Mother's involvement in housework (ref. = low)						
High	1.01	0.99	1.32	0.97	0.97	1.35
Mother's involvement in childcare (ref. = low)						
High	1.31	1.04	1.37	1.41	1.09	1.36
Mother's characteristics						
Age	0.96	0.90***	0.89*	0.94	0.90***	0.90†
College education	1.35	1.40	1.03	1.40	1.49	1.15
Working part-time	0.77	1.25	1.81	0.80	1.28	1.74
Working full-time	0.75	0.60	0.85	0.74	0.57	0.78
Father's characteristics						
Age	1.04	1.10*	1.10†	1.05	1.10*	1.10†
College education	1.05	1.08	1.65	1.09	1.13	1.70
Working full-time	2.80**	4.21***	3.84*	2.92**	4.10***	3.74*
Previous divorce	1.65	—	—	1.35	—	—
Satisfaction with relationship to partner	1.14***	1.18	0.98	1.16***	1.24*	1.02
Egalitarian attitude, first half	1.07	0.97	1.17	1.10	0.98	1.17
Egalitarian attitude, second half	1.27*	1.63*	2.38***	1.31**	1.65*	2.44***
Couple characteristics						
The household can make ends meet	1.18	1.25†	1.09	1.19	1.21	1.06

	All Sample (1)	Want/Intend to Have a Child (2)	Both Partners Want a Child (3)	Intend to Work (4)	Intend to Work and Want/Intend to Have a Child (5)	Intend to Work and Both Partners Want a Child (6)
Married couple	0.92	1.58	2.61***	0.88	1.56	2.55***
External help with childcare	1.54†	1.65	0.84	1.57†	1.61	0.83
Grandparents' help with childcare	1.53**	1.28	1.23	1.51**	1.31	1.26
Age of the youngest child	0.88	0.77*	0.86	0.89	0.78†	0.89
Country (ref. = Bulgaria)						
Czech Republic	0.97	0.94	0.71***	0.92	0.95	0.68***
Hungary	0.91†	0.83***	0.74*	0.93	0.84***	0.75*
Poland	0.98	0.90*	0.76***	0.98	0.91*	0.75**
Russia	0.89*	0.77**	0.76†	0.88*	0.78**	0.76†
Constant	0.26	0.10*	0.18	0.20	0.06**	0.11
Number of observations	416	284	185	409	281	182

†$p < .10$

*$p < .05$

**$p < .01$

***$p < .001$

Table 4

Odds ratios for the probability of having a second child and working full-time during the second wave

	All Sample (1)	Want/Intend to Have a Child (2)	Both Partners Want a Child (3)	Intend to Work (4)	Intend to Work and Want/Intend to Have a Child (5)	Intend to Work and Both Partners Want a Child (6)
A. Working Women						
Father's involvement in housework (ref. = low)						
High	1.62†	1.77**	2.22*	1.67†	1.73*	2.07*
Father's involvement in childcare (ref. = low)						
High	1.28	1.57	2.61	1.31	1.54	2.47
Mother's characteristics						
Age	1.06	1.11†	1.14†	1.06	1.12†	1.15†
College education	1.24	1.06	0.93	1.28	1.01	0.95
Working part-time	1.29	1.31	0.24*	1.16	1.23	0.23*
Working full-time	1.46	1.76*	0.55	1.32	1.65	0.48
Previous divorce	0.46	0.36	—	0.60	0.57	—
Satisfaction with relationship to partner	0.92*	0.84***	0.78***	0.91***	0.83***	0.78***
Egalitarian attitude, first half	0.83	0.97	0.74	0.84	0.98	0.71
Egalitarian attitude, second half	0.98	0.93	0.56	0.98	0.93	0.57
Father's characteristics						
Age	0.96	0.96	1.04	0.96	0.97	1.04
College education	0.72	0.62**	0.56***	0.60	0.57***	0.49***
Working full-time	1.10	0.94	0.60	0.92	0.78	0.53
Couple characteristics						
The household can make ends meet	1.30*	1.23	0.94	1.30	1.16	0.91
Married couple	1.24	1.00	11.34***	1.24	1.03	12.12***
External help with childcare	1.29	0.89	0.99	1.31	0.90	1.07
Grandparents' help with childcare	0.69*	0.97	1.11	0.70†	1.05	1.22
Age of the youngest child	0.88	0.88	1.04	0.85†	0.88	1.04

	All Sample (1)	Want/Intend to Have a Child (2)	Both Partners Want a Child (3)	Intend to Work (4)	Intend to Work and Want/Intend to Have a Child (5)	Intend to Work and Both Partners Want a Child (6)
Country (ref. = Bulgaria)						
Czech Republic	—	—	—	—	—	—
Hungary	0.94	0.90†	0.91	0.91	0.90†	0.88
Poland	1 12***	1 14***	1.22***	1.10**	1.15***	1 19***
Russia	0.87**	0.96	1.13	0.82**	1.02	1.10
Constant	0.09***	0.08**	0.01***	0.11***	0.08**	0.02***
Number of observations	509	366	232	483	348	221
B. Working Men						
Mother's involvement in housework (ref. = low)						
High	0.85	0.99	1.87	0.89	1.02	1.95
Mother's involvement in childcare (ref. = low)						
High	0.90	0.65	0.49*	0.95	0.63†	0.44*
Mother's characteristics						
Age	0.91***	0.89***	0.85***	0.90***	0.89**	0.86***
College education	1.84	1.79	0.95	1.79	1.81	0.90
Working part-time	1.42	1.64	3.41	1.51	1.55	3.29
Working full-time	1.07	1.14	1.60*	1.06	1.08	1.56
Father's characteristics						
Age	1.01	1.04	1.03*	1.00	1.04	1.03†
College education	0.96	0.89	0.98	1.07	0.90	0.95
Working full-time	1.42**	1.68*	1.41	1.52**	1.63*	1.40
Previous divorce	0.21**	0.22**	—	0.24**	0.24**	—
Satisfaction with relationship to partner	1.10***	1.15†	1.06	1.08***	1.14	1.01
Egalitarian attitude, first half	1.04	1.08	1.12	1.06	1.06	1.07
Egalitarian attitude, second half	1.22***	1.40**	1.45	1.28***	1.48*	1.53
Couple characteristics						
The household can make ends meet	1.16	1.33**	1.80***	1.15	1.32*	1.80**

	All Sample (1)	Want/Intend to Have a Child (2)	Both Partners Want a Child (3)	Intend to Work (4)	Intend to Work and Want/Intend to Have a Child (5)	Intend to Work and Both Partners Want a Child (6)
Married couple	1.37	1.87	2.20	1.34	1.88	2.28
External help with childcare	1.45*	1.50†	1.31	1.60**	1.54*	1.35
Grandparents' help with childcare	2.05***	1.53*	1.77*	2.06***	1.54**	1.73*
Age of the youngest child	0	0.73***	0.57***	0.78***	0.73***	0.57***
Country (ref. = Bulgaria)						
Czech Republic	0.77***	0.76***	1.07	0.79***	0.76***	1.05
Hungary	1.22**	1.26***	1.18†	1.21**	1 24***	1.14
Poland	1.43***	1.33***	1 42***	1.42***	1.31***	1.37***
Russia	0.71***	0.65***	0.69***	0.65***	0.64***	0.69***
Constant	0.18	0.04†	0.17	0.23*	0.04†	0.24
Number of observations	416	292	185	409	288	182

† $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$