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**FERTILITY AND DOMESTIC GENDER EQUALITY IN RUSSIA**

A Thesis in  
Sociology and Demography  
by  
Cadhla McDonnell

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The thesis of Cadhla McDonnell was reviewed and approved\* by the following:

Nancy S. Landale

Liberal Arts Research Professor of Sociology and Demography

Thesis Adviser

Nancy K. Luke

Associate Professor of Sociology and Demography

Michelle L. Frisco

Associate Professor of Sociology and Demography

Melissa A. Hardy

Distinguished Professor of Sociology and Demography

Director, Graduate Program in Sociology

\*Signatures are on file in the Graduate School.

## **ABSTRACT**

Russian fertility is below replacement largely because of a lack of second- and higher-order births. This study seeks to better understand the association between domestic gender equality and the transition to a second birth for Russian men and women. In this study the associations between domestic gender equality—measured using the division of household labor and satisfaction with the division of household labor—and both wanting another child and having another child are modelled using logistic regression and event history analysis. The data used are from the 2004 and 2007 waves of the Russian Generations and Gender Survey. The results of the analysis indicate that role conflict lowers the fertility intentions of Russian women and reduces the likelihood of having a second birth, however fertility intentions and actual births are associated with different aspects of the division of labor. The results for Russian men are weak suggesting that they may be weakly involved in fertility decisions.

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## INTRODUCTION

Since the 1980s, developed countries with high levels of female labor force participation have had higher fertility rates than those with low levels of female labor force participation (Ahn and Mira 2002). To explain this association, scholars have suggested that in countries where combining work and family is relatively easy, both fertility rates and women's labor force participation will be higher than in countries where the difficulty of successfully combining work and family forces some women to choose between career and children (Brewster and Rindfuss 2000). Factors that may make it easier for women to combine work and family include policies that support working mothers and greater male participation in household labor.

The majority of the empirical research on this issue has focused on countries in Southern Europe and industrialized English-speaking countries (Cooke 2009; Craig and Siminski 2010; Mills, Mencarini, Tanturri, and Begall 2008; Torr and Short 2004). One country with a long history of female labor force participation where this issue has not been examined is Russia. Researchers have found that family policy in Russia, even before recent pro-fertility policies, was supportive of women who wished to combine work and family (Motiejunaite and Kravchenko 2008) but no research has examined the effects men's participation in domestic labor on Russian fertility.

This study focuses on the relationship between domestic gender equality and second births. While first births are almost universal in Russia, second births are much less common and there is no consensus on why some couples transition to a second birth while others do not. The two-child family is the foundation of replacement fertility and there has been a sharp increase in one-child families in Russia and elsewhere in Europe (Frejka, Hoem, and Sobotka 2008). This suggests that

the decision to have a second child is a critical decision point in determining fertility rates. In this analysis I use logistic regression and event history analysis to analyze longitudinal data from the Russian Generations and Gender Survey in order to determine how men's participation in housework and childcare and satisfaction with the division of housework and childcare at one point in time are associated with fertility intentions at the same time, and with births occurring in the next four years.

## **BACKGROUND**

### **Gender Roles and Fertility in Developed Countries**

As women in industrialized countries have increased their participation in education and the labor force, their relative share of the household labor has fallen. This is due to both decreases in the amount of domestic labor that women do and increases in the amount that men do (Bianchi, Milkie, Sayer, and Robinson 2000). In addition, women's movement into paid work has been associated with changes in the family, including patterns of childbearing. One finding that has puzzled family scholars is that developed countries with relatively high female labor force participation also have relatively high fertility. This may be because in countries where many women work it is easier for women to successfully combine work and family than in countries where fewer women work (Brewster and Rindfuss 2000; Chesnais 1996; Rindfuss, Guzzo, and Morgan 2003).

Various theories have been proposed to explain how and why fertility outcomes and women's domestic labor might be related. One school of thought is that the role conflict experienced by

women who are struggling to fulfill competing work and family ideals lowers fertility (Brewster and Rindfuss 2000). Role conflict is expected to be particularly salient for women who work and who already have children who may avoid further role conflict is by limiting their fertility. It can be expected then that women who experience high levels of conflict between their work and family roles will generally have lower fertility than women who experience less role conflict. Role conflict theory implies that anything that reduces the level of role conflict will increase fertility (Rindfuss and Brewster 1996). For example, if the institutional context in countries with high female labor force participation facilitates women's combining work and family more effectively than the institutional context elsewhere, this would reduce women's role conflict. Another way that women's role conflict can be reduced is through men's increased participation in domestic work, which spreads the demands associated with homemaking more evenly across partners, thus reducing the homemaking demands experienced by women.

Empirical research supports the notion that trying to fulfill competing demands can dampen women's fertility outcomes. Italian and Dutch women who performed a high proportion of the domestic labor were found to reduce their fertility intentions only when they also worked long hours outside the home and/or already had children (Mills, Mencarini, Tanturri, and Begall 2008). An increase in the absolute amount of time that Australian mothers spend on household labor, as measured using time-use data, was negatively associated with the likelihood of having a second child, though the relative distribution of household labor between partners was not significant (Craig and Siminski 2011). In this study, which focuses on working parents and uses a measure of relative contribution to household labor, role conflict theory would be supported if mothers or fathers who perform a high proportion of the household labor have reduced fertility intentions or



a lower likelihood of having a second child when compared to those who undertake a smaller share of the domestic labor.

A second theory that is tested in this analysis is gender equity theory. Gender equity theory states that it is incoherence in the level of gender equity found in social institutions that deal with individuals and those that deal with the family that reduces fertility (McDonald 2000a). Birthrates will decline when there is high gender equity in individual-oriented social institutions, such as education and the labor market, and low gender equity in family-oriented social institutions, such as family services, the tax system, social security and, most importantly, the family itself (McDonald 2000b). In such settings, women have many opportunities for self-fulfillment outside the home but those opportunities are severely limited by childbearing. In response a substantial minority of women will choose to postpone, limit or forgo childbearing in order to avoid negative repercussions for their careers and/or their self-fulfillment outside the family. For gender equity theory, it is the perceived fairness of the division of labor rather than how tasks are distributed that matters for fertility. An arrangement is considered equitable if both partners consider it to be fair, regardless of how caring and income-earning roles are distributed (McDonald 2013). Although McDonald developed gender equity theory as a macro theory for explaining differences in fertility rates across contexts, it has often been applied to examine fertility differences across individuals within a particular context (McDonald 2013).

In this analysis I follow the practice of Neyer and colleagues in using satisfaction with the distribution of domestic labor as a proxy for the perceived fairness of the distribution of labor (Neyer, Lappegard, and Vignoli 2013). While satisfaction with the distribution of labor is not a perfect substitution for the perceived fairness of the distribution of labor, it seems plausible that

respondents who report that they are satisfied with the distribution of domestic labor also consider the distribution of labor to be fair. Empirical research testing gender equity theory has had inconsistent results, though one study did find that fertility increases in Italy were observed only when there was gender equity in both individual-oriented and family-oriented institutions (Arpino and Tavares 2013). When Neyer and colleagues tested the association between fertility and both the division of domestic labor and satisfaction with the division of labor, it was male respondents who reported lower fertility intentions when they were dissatisfied while female respondents' fertility intentions were more closely associated with the actual distribution of tasks between partners (Neyer, Lappegard, and Vignoli 2013). In the current study, gender equity theory would be supported if respondents who express dissatisfaction with the distribution of domestic labor have lower fertility intentions, or are less likely to have a second child, than respondents who are satisfied with the distribution of labor.

The literature on the association between the division of domestic labor and fertility has largely ignored men's role in making fertility decisions. Research shows that men's fertility intentions can have an independent effect on births and that they should be considered when explaining fertility outcomes (Thomson 1997). Empirical research indicates that gender ideology is associated with men's and women's fertility intentions differently (Miettinen, Basten, and Rotkirch 2011), and there is some evidence that the division of domestic labor tasks affects men's fertility intentions differently than women's (Neyer, Lappegard, and Vignoli 2013). Role conflict is one theoretical perspective that can also be applied to men. Men can and do experience conflict between their work and family roles (Galinsky, Aumann, and Bond 2009) and it is possible that men who do

more of the domestic labor will reduce their fertility intentions as a means of preventing further role conflict, just as women do.

The relationship between household labor and fertility has been empirically tested at both the macro and micro levels. A positive association has been found at the macro level (Sullivan, Billari, and Altintas 2014) but at the micro level the association is more complex. Broadly, research has shown that mothers have higher fertility intentions when men share housework and childcare, and lower fertility intentions when the division of domestic labor is very unequal (Mills, Mencarini, Tanturri, and Begall 2008; Neyer, Lappegard, and Vignoli 2013; Pinnelli and Fiori 2008). While the division of housework does not appear to affect men's fertility intentions, fathers who are more involved in childcare do have higher fertility intentions than fathers who are less involved (Neyer, Lappegard, and Vignoli 2013). The causal implications of this association are unclear as it may be that men who place a higher value on children are both more involved in childcare and have higher fertility intentions.

The inconsistent results of previous research may be partly the result of the different dependent variables used in analyses. Some studies have looked at the effect of sharing domestic work on fertility intentions, while others have looked at the effect on births, usually second births. Generally the empirical findings are stronger for fertility intentions than for births, suggesting that while domestic labor sharing helps to shape individuals' desires to have a(nother) child, other factors may moderate the effects of sharing when it comes to actual births. In the current study I model both the intention to have a second child and whether a birth occurred, giving a fuller picture of the relationship between domestic gender equality and second births.

## **Gender Roles and Fertility in Russia**

### Gender Roles

Russia is an interesting and largely unexplored context for studying gender and fertility. Russian women have been fully integrated into the workforce for almost a hundred years, but Russia never experienced second-wave feminism, and the prevailing gender ideology remains traditional relative to countries in the West (Stickney and Konrad 2007). There is also less difference between men's and women's gender ideologies in Russia (and in other Eastern European and former Soviet countries) than in other developed countries (Stickney and Konrad 2007). Research shows that the vast majority of Russians still believe in the male breadwinner model of the family (Ashwin and Lytkina 2004; Dawn Metcalfe and Afanassieva 2005) and there is evidence that gender roles within the family have become increasingly stratified in the past two decades (Ashwin 2010). This trend has been presented in the popular discourse as a break with the past and a return to "correct" gender attitudes, which were destabilized by the Soviet state and undermined by an unnatural and forced "over-emancipation" of women (Kay 2002).

At the individual level, traditional gender ideology is closely associated with both an unequal division of labor and higher fertility outcomes. This may be because women with traditional gender ideologies may see motherhood as more central to their lives and their identities than egalitarian women do (Nock 1987). If men and women "do gender"—enacting their gender identity through their everyday behaviors and decisions (West and Zimmerman 1987)—then it may follow that traditional women will have larger families as a means of "doing gender." It may also be that women who are more egalitarian and who reject the gendered specialization of income earning and homemaking duties are less motivated to have children because of the many competing

sources of personal fulfillment available to them in the public sphere (Becker 1991). Yet, at the macro level research has shown a strong association between traditional gender ideologies and low fertility rates in developed countries (Mörtvik and Spånt 2005).

Although Russians still hold traditional views on gender ideology, the institutional context around fertility in Russia is relatively progressive. The employment system recognizes women's right to employment as being equal to that of men and provides protections and supports to facilitate women in combining work and family roles (Motiejunaite and Kravchenko 2008). Nevertheless, unlike in many other countries that have policies to facilitate combining work and family, there has been little or no attempt to encourage men's greater participation in childcare and domestic labor and men's role in the family continues to be primarily or solely that of breadwinner (Ashwin and Lytkina 2004). Thus the family model in Russia has been conceptualized as a "dual earner/state-female carer" model (Motiejunaite and Kravchenko 2008).

## Fertility

Russia has had one of the lowest fertility rates in the world since the 1960s, when fertility there first fell below replacement level. Fertility continued to decline through the 1970s and early 1980s but increased in the mid- and late 1980s in response to extensive pro-natalist policies (Zakharov 2008). The fall of the Soviet Union was followed by a sharp and prolonged decline in fertility rates with the total fertility rate reaching a low of 1.1 in the late 1990s (Zakharov 2008). For much of the 2000s fertility hovered around 1.3, but rates have risen steadily in the past few years, reaching 1.7 in 2013 (World Development Indicators, The World Bank). This recent increase in fertility may be a response to a series of pro-natalist measures introduced by the Russian government in January 2007 to encourage parents to have more than one child. However, preliminary evaluations

of the policy's effectiveness indicate that its impact is likely to be temporary (Frejka and Zakharov 2013).

While there has been some fertility postponement in Russia since the mid-1990s, this has been found to be an inadequate explanation of Russia's decline to very low fertility (Sobotka 2004). Mean age at first birth was just 24.6 in 2009, significantly lower than in almost all other countries experiencing prolonged below replacement fertility, including other former socialist countries in Eastern Europe. Unlike in most other countries with low fertility, childlessness remains uncommon in Russia, with various estimates putting voluntary childlessness at less than five percent (Zakharov 2008). This indicates that low fertility in Russia is primarily a result of couples choosing to forego second and higher-order births. This reality is reflected in the Russian government's decision to target these births in its recent quest to increase fertility.

Like elsewhere, the lack of higher-order births in Russia cannot be attributed to family-size preferences. Research shows that the two-child family remains the ideal for young Russians (Zakharov 2008). Various explanations for the lack of second births have been proposed including union instability, economic and social uncertainty and the small size of Russian homes (Rieck 2006; Spielauer, Kostova, and Koytcheva 2007; Zavisca 2012), but no consensus has been reached. The gendered specialization of domestic labor has not been examined as a possible determinant of fertility outcomes in Russia.

## DATA AND METHODS

### Data

The data in this study are from the Russian Generations and Gender Survey (GGS). The GGS is a panel study conducted at the household level in 19 countries (17 European countries, Australia, and Japan). The survey was designed to facilitate research into gender and family dynamics. The GGS questionnaire includes a comprehensive household roster as well as sections dedicated to fertility, attitudes and values, the division of housework and childcare, education, financial stability, and other socio-demographic variables.<sup>1</sup>

The Russian GGS is a multi-stage probability sample of non-institutionalized adults in the Russian Federation excluding Chechnya. Surveys were conducted in person in 32 regions of Russia and responses were recorded in hard copy. The initial response rate was 44% but comparisons show that the GGS is generally comparable with the Russian census in terms of major population characteristics (Houle and Shkolnikov 2005) Three waves of surveys were collected in Russia—in 2004, 2007 and 2011. This study uses data from the 2003 and 2007 waves of the Russian GGS. The 2011 data are not analyzed as they have not yet been publically released. There are 11,261 respondents in Wave 1. The attrition rate was 30% from Wave 1 to Wave 2.

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<sup>1</sup> The GGS is part of the Generations and Gender Programme, which is led by eleven European research institutes in cooperation with the UNECE Population Unit. The Russian GGS was administered by the Institute for Social Policy, which is based in Moscow.

## **Analytic Sample**

Of the 11,261 respondents interviewed in Wave 1, 4,300 lived in households consisting of a couple with children present. Of these, 3,152 were interviewed again at Wave 2 meaning that 27% of parent-child households attrited between waves. Of the remaining respondents, 1,762 had only one resident child, a requirement for the present study. Because the focus of this research is the intersection between female employment and fertility, the sample was further restricted to individuals in dual-earner couples. This left 1,094 respondents, of which 772 had a female partner aged 45 or younger at Wave 1. Of these, 519 had a child under the age of 14. Individuals with an older child were excluded because data on childcare were only collected for younger children. Of the remaining respondents, 69 were excluded because their partnership involved step-children or the female parent had a nonresident biological child (remaining  $n=439$ ). These respondents were excluded because both of these situations introduce complexities into the relationships of interest. Finally, 13 respondents who reported that one or both partners were “definitely” infecund were excluded (remaining  $n= 426$ ) as were 17 respondents who were already expecting a second child at Wave 1. This leaves a final sample of 409, comprising 223 women and 176 men. It should be noted that the data were not collected at the couple level—that is, each respondent reported on his or her spouse but data were not collected directly from the spouse.

## **Variables**

### Fertility Intentions

In the first stage of my analysis the dependent variable is an indicator of whether a respondent intends to have another child in the near future when interviewed at Wave 1. This variable is



constructed from responses to the question “Do you intend to have another child during the next three years?” Responses were “definitely yes”, “probably yes”, “probably no” and “definitely no.” For this analysis responses were collapsed into a dummy variable coded 0 for those who did not intend to have another child and 1 for those who did.

## Second Births

The second stage of the analysis predicts second births. The dependent variable in this stage of the analysis is a time-specific indicator of whether a couple had a second child. Second births were identified using the household roster data collected at the beginning of the second wave. The household roster includes information on the month and year of birth for each resident and on the relationship of the child to the respondent (e.g. biological child with current partner, biological child with previous partner, stepchild etc.). Information on deceased children is collected elsewhere in the survey and was also examined.

To be captured in this measure of second births a child must be the biological child of both partners. Female respondents who were pregnant at Wave 2 and male respondents who reported a pregnant partner are also captured if they indicated an intention to take the pregnancy to term. In this case the time of birth is recorded as the month in which the child was expected to be born.

## Male Share of Housework and Childcare

Housework and childcare are examined separately in this analysis as they involve very different tasks and may have differential rewards for parents. While housework is often seen exclusively as “work”, childcare includes activities that many parents find rewarding and enjoyable. This approach is supported by existing research that indicates that the impact of childcare work and

housework on fertility are not always the same (Mills, Mencarini, Tanturri, and Begall 2008; Neyer, Lappegard, and Vignoli 2013; Oláh 2003).

The housework variable is constructed using responses to a question about who does various housework tasks such as grocery shopping, preparing food, vacuum cleaning, and doing small repairs. Possible responses are “always respondent”, “usually respondent”, “respondent and partner about equally”, “usually partner”, “always partner”, “always or usually other person in the household”, “always or usually someone not living in the household”, and “not applicable.” Each task is given a numerical value between 1 and 5, where 1 indicates that the female partner always performs a certain task and 5 indicates that the male partner always performs a certain task. Responses indicating that a task is performed by someone else are not scored. Responses for individual tasks are then averaged to create an index of men’s contribution to housework. Higher values indicate relatively greater male contribution.

The childcare variable is constructed in a similar fashion using responses to a question about who does various childcare tasks such as dressing the children, transporting them to school/activities, putting them to bed, and helping with homework. There is an additional response category “children do it themselves”, which, like other responses indicating the task was performed by someone other than the respondent or his/her partner, is not scored when creating the variable.

#### Satisfaction with the Division of Labor

There are two variables that indicate the respondent’s level of satisfaction with the division of housework and the division of childcare. In each case the question about satisfaction with the division of labor was asked immediately after the question about who does which tasks. These

variables are coded from 0 to 10, where 0 indicates “not at all satisfied” and 10 indicates “completely satisfied.”

### Control Variables

In addition to the dependent and independent variables, several additional variables are included in the analysis as controls. The Wave 1 values for these variables are included because existing research indicates that they are significantly related to the likelihood of wanting, intending, or having a second child.

Controls include linear and squared terms representing the age of the first child in years. The respondent’s age in years is also controlled. The controls for age are time-varying in the event history models. Respondent’s education is controlled using a variable that indicates the highest level of educational attainment in line with the International Standard Classification of Education. Marital status is controlled using a dummy variable coded 0 for unmarried respondents and 1 for married respondents. Household income is controlled using a log transformation of the annual household income, as reported by the respondent. Further information for all variables included in the analysis is given in Table 2.

### **Missing data**

Missing data for fertility intentions, division of housework, division of childcare, satisfaction with childcare, education, and household income were imputed using multiple imputation in Stata.

## **Method**

I model both fertility intentions and second births in this analysis. In the first stage of the analysis I use logistic regression to predict fertility intentions using the male share of housework, satisfaction with housework, the male share of childcare and satisfaction with childcare, as well as selected control variables. Models are specified separately for housework and childcare because high levels of colinearity in the division of labor and satisfaction variables were found to bias results. Nevertheless a third model which includes both sets of predictors is also specified in order to determine which variables have the most significant independent effects on fertility intentions.

The second stage of my analysis uses discrete-time event history analysis to predict second births. There are a number of advantages to using event history analysis over simple logistic regression. First, event history analysis allows for an examination not only of the occurrence of a birth but also of the timing of the birth. Second, it handles right censoring appropriately, thus allowing for a nonbiased analysis of the fertility behavior of younger women who have not yet completed their reproductive years. Finally, it will allow me to include time-varying predictors for characteristics such as age. The event history analysis is conducted using one-month intervals and with a period-specific indicator of second births as the dependent variable. Cases are censored when a union dissolves, when the female partner reaches the maximum age for this study (45), and when a second birth occurs (or, in the case of respondents expecting a second child at Wave 2, when the second child is due.

As before, in the second stage of the analysis I also test housework and childcare separately and I then test a third model that includes the housework and childcare variables as well as the respondent's fertility intentions in order to get a better understanding of the mechanisms through

which the division of labor might affect fertility. In all models I test for nonlinear effects though the results are only shown when significant.<sup>2</sup>

## RESULTS

### Descriptive statistics

Almost half of all respondents (44% of women and 49% of men) reported intending to have another child in the next three years at Wave 1. However, by Wave 2, which was fielded around three years later, just eighteen percent of female respondents and thirteen percent of male respondents already had or were expecting a second child. This indicates that only around 40% of women and 27% of men who intended to have another child did so within the timeframe they had anticipated.

The mean scores for the housework and childcare variables (which are coded from 1 to 5 so that higher values indicate greater male participation) indicate that both are undertaken more by women than by men, though men do make a substantial contribution, especially to housework. This is not surprising given that the measure for housework participation includes several items that are not traditionally considered “female” tasks such as doing repairs, paying bills, and organizing social activities. Men report significantly more equal sharing of domestic labor than women, with the difference for both housework and childcare equal to more than half of one standard deviation of the overall distribution. This may be due to a tendency among respondents to overestimate their

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<sup>2</sup> In preliminary analyses, additional models were specified to test for the effects of gender ideology on fertility intentions and second births. I also tested for interactions between gender ideology and the division of labor or satisfaction with the division of labor in these models. Because there were no significant findings for gender ideology, it is not considered in the present analysis.

own contribution and/or to underestimate their partner's contribution. Men report being significantly more satisfied with the division of domestic labor, perhaps because they do less of it. On the whole, both men and women are relatively satisfied with the division of domestic labor in their homes, although there is greater variation in women's reported satisfaction than there is in men's.

Control variables are similar for male and female respondents with the exception that male respondents are significantly more likely to report being married to their current partners than female respondents ( $p < 0.05$ ). The variable for marital status is not significant in any of the subsequent analyses so this difference is not expected to bias the results.

Table 1:  
Means or proportions and standard deviations of analyses variables by gender

Variable	Women (n=233)		Men (n= 176)		
	Mean/ Prop.	S.D.	Mean/ Prop.	S.D.	
Second child born or expected at Wave 2	.18		.13		
R's intention to have a child in the next 3 years	.44		.49		
Male participation in housework	2.48	.54	2.78	.52	***
Male participation in childcare	2.10	.62	2.48	.62	***
Satisfaction with housework	7.23	2.41	8.72	1.79	***
Satisfaction with childcare	7.32	2.58	8.76	1.77	***
Age of first child	5.91	3.77	6.57	3.95	
Female partner's age	29.98	5.13	29.85	5.10	
Male partner's age	32.50	5.56	32.65	5.64	
Female partner's education	4.36	.88	4.52	.80	
Male partner's education	4.02	.97	3.93	1.04	
Household income (logged)	7.93	.63	7.94	.60	
Married	.89		.95		*

\*Statistically different from women at the  $p < 0.05$  level

\*\*\*Statistically different from women at the  $p < 0.001$  level

## **Fertility Intentions**

Greater male participation in housework has a consistent positive association with mothers' intentions to have an additional child in the next three years across all models shown in Table 2. The association is highly significant at the bivariate level. While it decreases somewhat in magnitude when satisfaction with housework and the control variables are included in Model 1, the association remains significant. Satisfaction with the division of housework has a highly significant association with mothers' fertility intentions at the bivariate level but it is only marginally significant in Model 1. This indicates that, for mothers, their partners' contribution to housework has a stronger association with fertility plans than their own satisfaction with housework does.

The opposite is true of childcare: satisfaction with the division of childcare is a significant predictor of fertility intentions while the actual division of childcare is not, even at the bivariate level. The magnitude of the relationship between satisfaction with childcare and fertility intentions increases slightly when the actual division of childcare and control variables are included in Model 2. The lack of significant findings for the division of childcare likely reflects the fact that, for many mothers, childcare is a source of fulfillment.

When both division of labor variables, both satisfaction variables and all controls are tested together in Model 3, only the division of housework remains significantly associated with mother's fertility intentions. The magnitude of the relationship is increased as compared to Model 1, with a one unit increase in the division of labor variable (which is coded from 1 to 5) doubling the odds that a mother intends to have another child in the next three years. The findings in relation to how the division of housework and satisfaction with housework affect women's fertility intentions align

with previous research (Neyer, Lappegard, and Vignoli 2013). The results indicate that role strain may be affecting women's fertility decisions. Having an additional child is certain to increase the amount of housework that needs to be performed and this may act as a deterrent to women who undertake a disproportionate amount of the existing housework. While having another child will also increase the amount of childcare needed, childcare offers rewards to parents that housework does not. It may be that among the women who do large shares of the childcare there are those who do it out of necessity—because their partners avoid childcare—and those who do it by choice—because they find childcare highly rewarding. While not significant in Model 3, satisfaction with the division of labor, particularly with childcare, was associated with fertility intentions in Models 1 and 2. This may support role strain, as women who feel more role strain may report less satisfaction or it may support gender equity theory because women who feel that the gendered division of labor is unfair may also be less likely to report satisfaction with the division of labor. Nonetheless, net of all other predictors, men's labor is the most important for women's fertility intentions.

Table 3 displays the regression results predicting fathers' intentions to have another child in the next three years using the division of housework, the division of childcare, satisfaction with the division of housework and satisfaction with the division of childcare, as well as selected control variables. None of the independent variables of interest are associated with men's fertility intentions either at the bivariate level or when controls are introduced.



Table 2:  
 Logistic regression predicting fertility intentions for female respondents with the division of housework and child care, satisfaction with the division of housework and child care, and selected control variables

Independent Variable	Bivariate associations			Model 1			Model 2			Model 3						
	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.				
Male share of h/w	.969	***	(.271)	2.636	.667	*	(.304)	1.949			.743	*	(.329)	2.102		
Satisfaction with h/w	.173	**	(.060)	1.189	.129	†	(.069)	1.137			.046		(.093)	1.047		
Male share of child care	.313		(.225)	1.368					.044		(.257)	1.045	-.173	(.289)	.841	
Satisfaction with cc	.157	**	(.056)	1.170					.161	*	(.063)	1.174	.112	(.086)	1.119	
Child's age <sup>a</sup>	.428	**	(.144)	1.533	.528	**	(.155)	1.695	.532	**	(.157)	1.702	.562	***	(.160)	1.755
Child's age squared <sup>a</sup>	-.040	***	(.011)	.961	-.038	**	(.012)	.962	-.038	**	(.012)	.962	-.041	**	(.012)	.960
Respondent's age	-.112	***	(.030)	.894	-.127	**	(.045)	.881	-.139	**	(.046)	.870	-.128	**	(.045)	.880
HH income (logged)	.318		(.219)	1.375	.189		(.247)	1.208	.253		(.246)	1.288	.188	(.248)	1.207	
Education	.108		(.159)	1.115	.190		(.187)	1.210	.241		(.188)	1.273	.187	(.191)	1.205	
Married	.550		(.472)	1.733	.388		(.523)	1.474	.326		(.528)	1.386	.345	(.528)	1.412	
Constant					-3.055		(2.309)	.047	-2.058		(2.252)	.128	-3.088	(2.322)	.046	

n=233

NOTE: Standard errors are shown in parentheses.

a. Child's age and child's age squared are tested jointly at the bivariate stage

Table 3:  
Logistic regression predicting fertility intentions for male respondents with the division of housework and child care, satisfaction with the division of housework and child care, and selected control variables

Independent Variable	Bivariate associations			Model 1			Model 2			Model 3		
	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.
Male share of h/w	.389	(.301)	1.476	.378	(.322)	1.459				.446	(.345)	1.563
Satisfaction with h/w	.069	(.087)	1.072	.050	(.092)	1.051				.150	(.122)	1.162
Male share of child care	.103	(.244)	1.109				-.074	(.269)	.929	-.197	(.292)	.821
Satisfaction with cc	-.040	(.087)	.960				-.076	(.095)	.927	-.164	(.125)	.849
Child's age <sup>a</sup>	.346	* (.156)	1.413	.511	** (.176)	1.667	.528	** (.178)	1.695	.531	** (.181)	1.701
Child's age squared <sup>a</sup>	-.027	* (.011)	.974	-.033	** (.012)	.968	-.034	** (.012)	.966	-.034	** (.012)	.966
Respondent's age	-.061	* (.029)	.940	-.117	** (.041)	.890	-.113	** (.041)	.894	-.118	** (.042)	.889
HH income (logged)	.281	(.276)	1.325	.121	(.307)	1.128	.155	(.304)	1.167	.106	(.308)	1.111
Education	.188	(.156)	1.207	.306	† (.176)	1.357	.343	† (.176)	1.409	.298	† (.178)	1.347
Married	.878	(.802)	2.406	.743	(.842)	2.102	.880	(.845)	2.410	.888	(.856)	2.430
Constant				-2.030	(2.958)	.131	-.387	(2.983)	.679	-1.147	(3.037)	.318

n= 176

NOTE: Standard errors are shown in parentheses.

a. Child's age and child's age squared are tested jointly at the bivariate stage

†p<0.1, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

## Second Births

Results for predicting second births for female respondents are shown in Table 4. On the whole there are fewer significant results than there are for fertility intentions. Though the division of housework was a strong predictor of mothers' intentions to have another child in the next three years, there is no significant association between the division of housework and second births in any model. There is also no association between women's reported satisfaction with the division of housework or women's reported satisfaction with the division of childcare and second births.

The division of childcare is not a significant predictor of second births at the bivariate level; however a significant non-linear relationship emerges in Models 2 and 3. Results indicate that the predicted probability of having a second birth is fairly stable at lower values for the division of childcare, but when mothers report that fathers do half or more of the childcare, the probability of having a second child increases. The childcare coefficients increase in magnitude and significance when fertility intentions are included in Model 3, indicating that the effect of childcare on births is not mediated by intentions. This is unsurprising given that the division of childcare was not a significant predictor of women's fertility intentions. Men's fertility intentions are not controlled in this model so one possible explanation for the effect of the division of childcare on second births is that fathers who do a greater portion of the childcare are more family oriented and may also have higher fertility intentions than fathers who do less childcare, thus increasing the likelihood that couples will have a second child. However, the results predicting second births for male respondents do not support this. An alternative explanation is that when mothers *feel* like men are doing a substantial portion of the childcare, they are more likely to follow through with their plans to have an additional child, either because they expect less severe role conflict when a second child

is added to the family than women whose partners do less, or because they perceive the situation to be more fair than do women whose partners do not contribute equally to childcare.

Table 5 shows the results for predicting second births for male respondents. Once again, none of the independent variables of interest are associated with second births in these models. In fact, even men's fertility intentions are only marginally associated with births at the bivariate level and this association becomes insignificant in the full model.

Table 4:  
Event history model predicting second births for female respondents with the division of housework and childcare, satisfaction with the division of housework and childcare, and selected control variables

Independent Variable	Bivariate associations			Model 1			Model 2			Model 3						
	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.				
Fertility intentions	1.777	***	(.396)	5.911												
Male share of h/w	.150		(.292)	1.162	-.072	(.316)	.930									
Satisfaction with h/w	.036		(.068)	1.036	.012	(.076)	1.012									
Male share of cc <sup>a</sup>	-.899		(.655)	.407				-1.467	*	(.700)	.231	-2.101	**	(.744)	.122	
Male share of cc sq. <sup>a</sup>	.247	†	(.129)	1.280				.333	*	(.139)	1.395	.467	**	(.146)	1.596	
Satisfaction with cc	.066		(.066)	1.069				.068		(.070)	1.070	.081		(.092)	1.085	
Child's age <sup>a</sup>	.650	**	(.251)	1.916	.651	**	(.251)	1.918	.674	**	(.251)	1.962	.557	*	(.259)	1.746
Child's age squared <sup>a</sup>	-.043	**	(.015)	.957	-.040	**	(.015)	.961	-.041	**	(.015)	.960	-.035	*	(.016)	.966
Respondent's age	-.066	*	(.033)	.936	-.061		(.046)	.941	-.060		(.047)	.942	-.010		(.052)	.990
HH income (logged)	.430		(.271)	1.537	.382		(.273)	1.465	.360		(.276)	1.434	.362		(.268)	1.435
Education	.029		(.184)	1.029	.105		(.196)	1.111	.121		(.195)	1.128	.025		(.199)	1.025
Married	.841		(.726)	2.320	.814		(.734)	2.258	.722		(.739)	2.059	.509		(.737)	1.664
Constant					-9.804	***	(2.781)	.000	-8.878	**	(2.838)	.000	-7.201	**	(2.706)	.001

n=8488 person  
months

NOTE: Standard errors are shown in parentheses.

a. Child's age and the division of childcare are each tested with the relevant square term at the bivariate stage

†p<0.1, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001.

Table 5:  
Event history model predicting second births for male respondents with the division of housework and childcare, satisfaction with the division of housework and childcare, and selected control variables

Independent Variable	Bivariate associations			Model 1			Model 2			Model 3		
	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.	Est.	(S.E.)	O.R.
Fertility intentions	.837	† (.458)	2.310							.530	(.482)	1.699
Division of housework	.278	(.413)	1.320	.287	(.430)	1.333				.186	(.468)	1.204
Satisfaction with h/w	-.059	(.107)	.943	-.120	(.105)	.887				-.120	(.146)	.887
Division of childcare	.191	(.321)	1.210				.135	(.375)	1.144	.099	(.411)	1.104
Satisfaction with cc	-.049	(.114)	.952				-.100	(.122)	.905	-.007	(.169)	.993
Child's age <sup>a</sup>	.525	* (.263)	1.691	.664	* (.275)	1.943	.634	* (.279)	1.886	.609	* (.285)	1.838
Child's age squared <sup>a</sup>	-.050	* (.022)	.952	-.056	* (.022)	.946	-.054	* (.022)	.947	-.052	* (.022)	.949
Respondent's age	-.060	(.042)	.942	-.074	(.055)	.929	-.068	(.054)	.934	-.060	(.058)	.942
HH income (logged)	.025	(.368)	1.025	-.176	(.382)	.838	-.142	(.370)	.867	-.156	(.379)	.856
Education	.183	(.217)	1.200	.361	(.244)	1.435	.355	(.238)	1.426	.333	(.244)	1.395
Married	-.666	(.744)	.514	-.887	(.772)	.412	-.730	(.781)	.482	-.958	(.796)	.384
Constant				-3.712	(3.337)	.024	-3.869	(3.491)	.021	-4.197	(3.528)	.015

*n* = 6839 person months

NOTE: Standard errors are shown in parentheses.

a. Child's age and child's age squared are tested jointly at the bivariate stage

†*p*<0.1, \**p*<0.05, \*\**p*<0.01, \*\*\**p*<0.001.

## CONCLUSION

The findings of this analysis are limited by the small sample. If a larger sample had been available, there may have been more significant findings. An additional limitation is that only one respondent per household was interviewed in the GGS. Had data been collected from both partners a fuller picture of the fertility processes might have emerged. Nevertheless, it is clear from this analysis that the gendered division of household labor is associated with fertility outcomes for Russian women.

Taken together the results support the argument that role conflict is a factor in determining women's fertility intentions and second births. Gender equity theory, when defined as a conscious rejection of childbearing due to the perceived unfairness of the gender system (McDonald 2013), is not supported in this analysis. Women who report that their partners share in the domestic labor, thereby lessening the strain that women experience when combining work and family, are more likely to both intend to have another child and to actually have another child than women who report that their partners contribute less at home. However, for both intentions and births the actual division of labor has a stronger and more significant relationship with fertility outcomes than satisfaction with the division of labor does.

The association between the division of labor and fertility outcomes is complex. While there is strong and consistent evidence that the smaller the share of the housework a woman performs, the more likely she is to intend to have another child, it is the division of childcare that matters when it comes to the models predicting second births. Women who report that their partners share childcare equally are substantially more likely to have a second child than those who report that

their partners do less than half of the childcare. Why housework and childcare are associated with intentions and birth in this way is unclear. Future research should determine whether a similar pattern is observed in other contexts and, if so, why.

The division of labor has a stronger association with women's fertility intentions in these models than it does with second births, despite the fact that women's fertility intentions are highly predictive of births. It may be that if there was a larger sample, more significant associations would be found. Alternatively it may be that even though the division of household labor is associated with mothers' intentions to have a second child, other factors not measured in these models are more important when translating intentions into births.

Men's fertility outcomes appear to be entirely unrelated to the division of labor in this research. This does not align with previous research using pooled GGS data for multiple countries, which found that the division of childcare as well as men's satisfaction with the division of housework and childcare are significantly associated with fertility intentions (Neyer, Lappegard, and Vignoli 2013). The differences in results may be because the sample sizes in this study are substantially smaller or because, for Russian fathers, other factors, such as women's experiences and fertility intentions, are more important in determining fertility outcomes.

An alternative explanation is that Russian men are only marginally involved in fertility decisions. This is supported by the finding that men's fertility intentions are not significantly associated with births, even at the bivariate level. Qualitative research has found that Russian men are weakly integrated into the family (Ashwin and Lytkina 2004; Rotkirch 2000). The reasons for this are historical: the Soviet regime actively undermined fathers' role in the family, while celebrating and glorifying the role of mothers. The Soviet state positioned itself as the universal patriarch,



replacing men in their traditional roles as fathers and providers (Ashwin 2002). Thus, while women in Soviet Russia had duties both to work and to care for the family, the duties and roles of men were confined to the public sphere alone (Ashwin 2002; Ashwin and Lytkina 2004). As a consequence, childrearing and fertility decisions in Soviet Russia were largely the domain of mothers and other female relatives, while fathers were often excluded (Rotkirch 2000). It is possible men's weak involvement in fertility decisions is a legacy from this period.

This research contributes to the current knowledge in several ways. In addition to giving a fuller understanding of the processes underlying fertility behavior in Russia, it shows that the gendered division of household labor is related to fertility outcomes even in contexts, such as Russia, where fertility postponement is minimal and voluntary childlessness is rare. The finding that fertility intentions and second births are related to the division of labor differently highlights the importance of examining multiple facets of fertility. The inconsistencies in the existing literature on the division of labor and fertility may, in part, be due to the different measures of fertility examined. Future research should investigate why it is that the division of labor is more strongly related to fertility intentions than to actual births.

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