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Three dimensions of the relationship between gender role attitudes and fertility intentions

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Abstract: The relationship between gender role attitudes and fertility intentions is highly debated among social scientists. We emphasize the need for a multi-dimensional theoretical and empirical approach extending the two-step behavioral gender revolution approach towards a three-step attitudinal gender revolution approach. Making use of the Generations and Gender Survey of eight European countries we demonstrate the usefulness of such an approach. First, gender roles concern different areas of life requiring that we distinguish between three essential dimensions of gender roles: gender roles in the public sphere, mothers' role in the family, and fathers' role in the family. We show that attitudes towards gender roles in the public sphere and mothers' role in the family create more variation in fertility intentions than attitudes towards fathers' role in the family. Second, gender equality affects women's and men's lives differently and our results show that gender role attitudes create more variation in women's fertility intentions than in men's intentions. Last, people's expectations about gender roles and family life vary across context. In the Western European countries we find examples of a negative association between egalitarian gender role attitudes and fertility intentions, while in the Eastern European countries we find examples of a positive relationship.

1. Introduction

Throughout modern societies there has been a long-term trend towards greater gender equality in attitudes and values concerning women's and men's role in society and in family life. The focus has been mainly on women, on their role in the labor market and in the public sphere, and on their role as mothers (e.g. Lesthaeghe 1995; Brewster and Padavic 2000; Thornton and Young-DeMarco 2001; Inglehart and Norris 2003; Jansen and Liefbroer 2006; Scott 2008; Testa 2007; Egmond, et al. 2010). Gender-equal attitudes have not spread equally across all social groups and all Western developed societies: In general, women hold more egalitarian attitudes than men do (Davis and Robinson 1991; Kane and Sanchez 1994; Brewster and Padavic 2000; Ciabattari 2001; Scott 2008), and across Europe and the US., countries vary greatly in the extent to which gender equality concerning women and men, the public and the private sphere, has become socially accepted (Inglehart and Norris 2003).

At the same time, many countries are facing low fertility and low intentions to have children. In family demographic research gender and gender equality have become important features to understand low fertility. How gender equality is related to fertility intentions and fertility behavior is contested, and the results of empirical analyses vary considerably depending on which indicator of gender equality is used, whether women's or men's fertility intentions are studied and which parity is addressed (Neyer, Lappegård, and Vignoli 2013). People's view of women's and men's roles in society and in the family is part of this puzzle. The aim of this article is to investigate the relationship between gender role attitudes and fertility intentions.

Gender role attitudes¹ are different from gender behavior, but they are important to understand intentions and actual behavior (Ajzen and Fishbein 1973): Gender role attitudes reflect what one personally or society as a whole conceive as the appropriate, expected, and preferred behavior of women and men, while gender behavior is what women and men actually do. People have different expectations about how women and men should behave in society and in the family. These expectations are assumed to influence people's desire for children. However, the empirical findings on the relationship between gender role attitudes and fertility are ambiguous (Kaufmann 2000; Philipov 2008; Puur, Oláh, Tazi-Preve, and Dorbritz 2008; Westoff and Higgins 2009; Goldscheider, Oláh and Puur 2010; Miettinen, Basten, and Rotkirch 2011).

Using data from the United States and focusing on the gender roles in the family, Kaufmann (2000) finds that men holding egalitarian attitudes are more likely than men

holding traditional attitudes to intend to have a child, while the opposite is the case among women, i.e. women holding egalitarian attitudes are less likely to intend to have a child than women holding traditional attitudes. Using the same data, Torr and Short (2004), however, find no significant relationship between egalitarian gender ideology and the likelihood of having a second birth.

In Europe, several studies have come to different conclusions using the same comparative data (Philipov 2008; Puur et al. 2008; Westoff and Higgins 2009). Focusing on women's gender role in ten European countries, Philipov (2008) finds no link between gender attitudes and the intention to have a second or subsequent child. First-birth intentions and gender role attitudes are correlated in some countries, but not in others. The association is also different for women than for men. Women holding egalitarian attitudes have lower intentions to become parents, while the inverse is found for men (Philipov 2008). Focusing on men's gender role, Puur et al. (2008) find a positive relationship between men's egalitarian attitudes and fertility aspirations, while focusing on more general gender roles, Westoff and Higgins (2009) find a negative relationship between men's egalitarian gender role attitudes and fertility intentions. Combining a wide range of items on gender role expectations of women and of men into one measure of gender role attitudes, Miettinen et al. (2011) find a U-shaped relationship between gender role attitudes and fertility intentions among men in Finland. Both the most egalitarian and the most traditional men appear to be most eager to become fathers, while the impact of gender attitudes is smaller and more ambiguous among women.

At first sight, the lack of a uniform relationship between individual gender role attitudes and fertility is puzzling. For, in the main, demographers assume that gender equality boosts fertility (McDonald 2000); they thus also assume that gender egalitarian attitudes stimulate fertility intentions. We argue that conceiving gender role attitudes only along the dimension of traditional vs. egalitarian is insufficient to capture the links between gender attitudes and fertility intentions. For, gender role attitudes may address gender roles in the family or in the public sphere; they may target women's or men's roles; and they may vary across countries. Three reasons can be given why these distinctions are necessary when analyzing the relationship between gender role attitudes and fertility intentions: First, gender is a structuring element of all relationships in societies (Scott 1986). As such, gender roles are to be found in different areas of life such as in the labor market and in the family. Therefore, we need to separate between expected positions of women and men in the public sphere and their expected positions in the private sphere, i.e. in the family. Second, the relationship between gender role attitudes and fertility intentions may operate differently among women

and men because gender equality influences women's and men's lives differently. Most studies on the relationship between gender equality and fertility focus on women's fertility; far less attention is paid to men's fertility. The omission of men may give a distorted picture of the association between gender equality and fertility (Watkins 1993). We need to acknowledge this and investigate the relationship between gender role attitudes and fertility intentions for women and for men. Third, the relationship between gender role attitudes and fertility intentions may vary across countries. Countries vary regarding the prevalence of traditional or egalitarian attitudes towards women's and men's roles in the public sphere and in the private sphere (Sjöberg 2010); but countries also vary by factual gender equality (in public and in family life) (Evertsson 2014) as well as by how much the welfare state supports different aspects of gender equality. To get a better understanding of the association between gender role attitudes and fertility intentions, we need a cross-national perspective and examine the linkage across countries with different societal gender role attitudes.

As demographic research puts more emphasis on investigating the relationship between gender equality and fertility, we need a theoretical framework which takes these different dimensions of gender ideology into account. This implies that we need to distinguish between gender role attitudes related to the public sphere, to the private sphere, to women's and to men's gender roles, and we need to account for country differences in these gender-role attitudes. In Section 2 we outline such a framework. Extending the theory of a two-step gender revolution, we argue that attitudinal changes occur in three steps, affecting first gender attitudes in the public sphere, followed by attitudes towards mothers' role in the family and finally attitudes towards fathers' role in the family. This framework provides the theoretical background for our empirical analysis (Section 3) which examines the association between the three outlined dimensions of gender-role attitudes and (short-term) fertility intentions in four Eastern and four Western European countries with different gender-equality status (Russia, Romania, Bulgaria, Hungary, Austria, Germany, France, and Norway). The results of this analysis provide not only insight into the link between gender-role attitudes and fertility intentions, but they also offer new perspectives to advance the theoretical concepts regarding gender and fertility (Section 4).

2. Theoretical framework to link gender role attitudes and fertility

One of the most fundamental social changes of industrialized countries since the middle of the 20th century is the shift towards greater gender equality. The move from gender-segregated

roles for women and for men to more gender-equal roles has not been uniform (England 2010). It has rather been described as a 'gender revolution in two steps' (Goldscheider, Bernhardt and Lappegård 2014). The main idea of this concept is that the movement towards gender equality starts with women entering the public sphere and taking part in politics, employment, and education, followed by men becoming more involved in family matters (Goldscheider et al. 2014). The two-step gender revolution thus targets women and men in different ways: The first step of the gender revolution concerns mainly women and their participation outside the home, the second step concerns mainly men and their participation in family work. Researchers in general agree that the first step of the gender revolution lowers fertility, because employment and/or public engagement put a "double burden" on women if there is no concomitant change in men's family behavior (Goldscheider et al. 2014; McDonald 2000).

The second step of the gender revolution, namely men's participation in household work and care, will lead to a more gender symmetric arrangement of family responsibilities. Researchers argue that this supports fertility decisions (Goldscheider et al. 2010; McDonald 2000). Although most industrialized countries follow this two-step movement towards gender equality, there is large variation in where in this process countries currently are. The Nordic countries are often described as forerunners in the process both with regard to gender equality in the public sphere as well as in the family sphere. The countries of Southern Europe are lagging behind, in women's integration into the public sphere, as well as in men's participation in family work. The western continental European countries lie between these two country groups, with the German-speaking countries being more gender conservative and France more gender-egalitarian. With their focus on full employment of both women and men, the former communist Eastern European countries had once been far ahead of the West in accomplishing the first step of the gender revolution; however, gender equality in the family had hardly been an issue. Since the fall of communism, these countries experienced a backlash in women's participation in the public sphere (Funk and Müller 1993; Gal and Kligman 2000a 2000b; Szelewa and Polakowski 2008; Saxenberg 2014) and no substantial changes towards greater gender equality in the private sphere. Despite progress towards gender equality, no country – not even the most advanced Nordic countries – has achieved complete gender equality in either sphere so far, and many countries have not entered the second stage of the gender revolution to an extent which would signal relevant changes in men's roles in family issues.

From the theoretical framework of the two-step gender revolution two questions emerge regarding the relationship between gender role attitudes and fertility intentions. First,

how does the development of changing gender behavior relate to the development of gender role attitudes? Second, how does the relationship between factual and attitudinal development relate to fertility (intentions)?

2.1. Three steps of changes in gender role attitudes

As regards the first question, there is evidence that the change in gender role attitudes towards greater equality follows a step-wise process, as well. In contrast to the behavioral change, which takes two steps, we believe that the attitudinal change occurs in three steps. The reason for this is that there are divergent expectations about women's and men's behavior in the family. Women are expected to devote their lives to caring for their children, while men are expected to be the breadwinner. As a consequence, attitudinal changes towards gender equality regarding women's and men's role in the family require changes in opposite directions for women and for men. Since changes in attitudes towards women's role in the family are closely linked to changes in attitudes towards women's role in the public sphere, we assume these changes to precede those of attitudes towards men's role in the family. Moreover, availability of public childcare services and household assistance from outside the family may delay changes in attitudes towards fathers' role in the family.²

Consequently, as with the behavioral gender change, we assume that the development of attitudinal gender change starts with the gradual acceptance of women in the public sphere. This is followed by a change in attitudes towards women's role in the family, in particular by a change of the view that mothers should be the sole carers of children. In a third step, attitudes towards fathers' role in the family change; fathers' as carers of children and equal parenting become more accepted.

The process of changing attitudes may be explained by both exposure and interests. On the one hand, attitudes may be seen as something that is formed during childhood in relation to the historical and cultural context at the time. In this view, gender role attitudes remain reasonably stable over the life course and shape subsequent beliefs and preferences (Blunsdon and Reed 2005; Brewster and Padavic 2000; Brooks and Bolzendahl 2004; Egmond et al. 2010). On the other hand, gender role attitudes may also be seen as something that can change over the life course and in particular at key life course stages (Egmond et al. 2010). Using data from the United States, Brooks and Bolzendahl (2004) find support for both arguments. Their study shows that changes in gender attitudes are mainly driven by cohort replacement, but that some of the changes are also due to social structural factors. Bolzendahl and Meyers (2004) argue that exposure to new and progressive ideas about gender relations

may change attitudes towards favoring gender equality. They see the continued experience of new gender roles in society as altering gender attitudes. The participation of women in the public sphere was accepted earlier than gender changes in the family because the increasing share of women in education, employment, politics and other public institutions made it difficult to maintain traditional attitudes of women's roles in society. As a consequence, throughout Europe there is a strong consensus that both women and men should contribute to the household income, while at the same time there are also strong views that mothers should be the primary caregivers and that children suffer if their mothers work (Testa 2007). There are also some signs of an emerging trend towards the third stage of the gender revolution among younger cohorts, in that many young Europeans think that family life suffers if men concentrate too much on their work (Testa 2007).

There are good reasons to believe that women have a greater interest in promoting gender equality in the public sphere and in the private sphere, and that they therefore hold more gender-equal attitudes than men do. On the whole, women gain more from equal access to public institutions, from equal rights and regulations, and from men's equal participation in care and domestic work. For men, greater gender equality entails more family obligations and more work at home, so that one may assume that men cling longer to gender segregated attitudes regarding the private sphere than women do.

2.2. Gender role attitudes and fertility intentions

The second question arising from our gender-revolution approach concerns the relationship between changes in gender role attitudes and fertility intentions. Following our theoretical framework of a three-stage gender revolution, we may regard people's decisions about childbearing as a response to the different stages of gender-role changes. In (traditional) gendered societies in which gender attitudes assign clear public and familial roles to women and to men, fertility and fertility intentions are "high".³ During the first stage of the attitudinal changes, when women's participation in public life becomes widely accepted, but expectations about parental roles in the family remain largely untouched, fertility is expected to fall and fertility intentions are therefore low (Goldscheider et al. 2014; McDonald 2000). For, the process of changing gender attitudes towards women in the public sphere and the persistence of gendered attitudes concerning women and men in the private sphere may lead to an unclear and ambiguous situation about gender roles (Sjöberg 2010). For instance, women might be torn between favoring female employment and career advancement on the one hand, and devoting themselves to their children, on the other hand (Sjöberg 2010).

Research has shown that women who perceive a conflict between their role as worker and their role as mother tend to prefer fewer children than women who do not experience such a conflict (Testa 2007). Likewise, women prefer smaller families in countries where this conflict is perceived more strongly than in countries where people express more egalitarian gender attitudes towards mothers' and fathers' roles in the family. The argument for this is that women in countries with a stronger gap in attitudes towards gender roles may “feel their family tasks as a threat for their working career or they perceive their working career would keep them from being a good mother” (Testa 2007: 376).

A similar ambivalence depressing fertility intentions may arise during the second and third stage of the attitudinal gender-role change when the views that women should bear the sole responsibility for family matters erode and demands on men to share family responsibilities emerge. This may lead to diverging and inconsistent gender role attitudes and to an ambivalent assessment of one's own or the partner's roles. For example, young men might expect their partner to combine earning with caregiving (and housekeeping), while young women may want a good provider as well as a partner who is an involved father and one to share housework with (Goldscheider et al. 2010; Testa 2007). Findings indicate that such discrepancies between assigned gender roles are likely to lead to a disjunction between attitudes and factual behavior and to dissatisfaction with the factual situation. Both are found to hamper fertility intentions (Kjeldstad and Lappegård 2014; Goldscheider, Bernhardt and Branden 2013; Neyer et al. 2013). Only when the last stage of the gender revolution is reached and gender-equal attitudes towards women's and men's roles in the family correspond to men's greater involvement in family matters are fertility intentions expected to rise (see also Goldscheider et al. 2014 and McDonald 2000 for fertility as a whole).

Based on the framework of a three-step attitudinal change towards greater gender equality, we can specify more detailed hypotheses for our empirical analysis of the relationship between gender attitudes and fertility.

2.2.1. Gender roles in the public sphere and fertility intentions

Attitudes towards gender roles in the public sphere are more precisely about expected behavior of men and women in education, labor market, and political institutions. The relationship between attitudes towards gender roles in the public sphere and fertility intentions may follow two lines of arguments: preferences and gender equality. First, decisions about fertility are a reflection of women's views about the role of women in society (Nock 1987). This means that preferences for motherhood and work life are reflected in attitudes towards

gender roles in the public sphere. Following Nock, motherhood can be seen as a central part of traditional women's lives and identity, while for egalitarian women, motherhood is only one part of their lives (Nock 1987). We may therefore expect that women with egalitarian attitudes towards gender role in the society have stronger preferences for work life, and that this orientation is associated with less desire for children. Second, gender equality in the public sphere is mainly about women entering that arena through education, labor force participation, and political engagement. This expansion of women's realm beyond the home increases women's workload as long as the entire household and care work remains their sole responsibility (Goldscheider et al. 2014; see also above). In addition, since no society has reached gender equality in the public sphere yet, women usually need to put more efforts into their public engagement than men do in order to be treated equally. The outcome of this uneven situation is pressures put on families, and this potentially lowers their desire for children, for women more so than for men. One could argue that men's attitudes towards gender roles in the public sphere have no depressing influence on their fertility intentions as long as women keep fulfilling all domestic duties. However, women's participation in the public sphere increases the competition for men and puts demands on them to contribute (more and equally) to family work. Through their partner, men may also become aware of the pressure put on women to achieve equality in the public sphere and/or to manage the dual burden of work and care. From these lines of arguments one may assume that for both women and men egalitarian attitudes towards gender roles in the public sphere are associated with lower intentions to have children, which leads us to our first hypothesis.

Hypothesis 1: women and men holding egalitarian attitudes towards gender roles in the public sphere are less likely to have positive fertility intentions than women and men holding more traditional attitudes.

As long as the gender revolution is incomplete there is a gap between gender equality in the public sphere and the private sphere. As mentioned, the process of changing gender roles has not taken the same development in all countries, nor has the process towards more gender equality in the private sphere followed the same pace as the process towards more gender equality in the public sphere. This means that countries that have moved further in the process towards more gender equality in the public sphere may be facing a larger gap between gender equality in the two spheres. As a consequence women and men with egalitarian attitudes in these countries may be even less likely to intend to have a child than women and

men in countries with a narrower gap in gender equality. This leads us to our second hypothesis.

Hypothesis 2: the relationship between egalitarian attitudes towards gender roles in the public sphere and fertility intentions is more strongly negative in countries that have moved further in the process towards more gender equality in general than in other countries.

2.2.2. Mother's role in the family and fertility intentions

Egalitarian attitudes towards gender roles in the family concern both the acceptance of mothers as breadwinners and the acceptance of fathers as caregivers. Attitudes towards mother's role in the family are interlinked with attitudes towards gender roles in the public sphere. But the two are not completely correlated. Gender roles in the public sphere concern women in general, while mothers' role in the family concerns women as both caregivers and breadwinners.

In most countries egalitarian gender roles in the family are still an unfulfilled promise, and this affects women more than men. Kaufman (2000) argues that women who believe in an equal division of housework and child care may face another reality than women who regard family work as their sole duty. Women who hold gender equal attitudes, but lack support from their partner and/or regard the division of household work and care as unequal, unfair or unjust, may lower their childbearing intentions and abstain from having a(nother) child (Kaufman 2000; Neyer et al. 2013; Goldscheider et al. 2013). This effect has proved to be stronger for mothers than for childless women (Goldscheider et al. 2013; Neyer et al. 2013). As for women, we expect men holding non-traditional attitudes towards mother's role in the family to be less inclined to want a(nother) child than those who hold traditional attitudes. The reason for this is that those who believe that family work is not women's responsibility alone do more of (or are more under pressure to do) their share of family work and care. However, since it is still women who do the lion share of private work, the negative association between gender-equal attitudes towards mother's role in the family and fertility intentions may be stronger among women than among men. In summarizing, we expect a negative relationship between egalitarian attitudes towards mother's role in the family and fertility intentions and we have formulated the following hypothesis:

Hypothesis 3: women and men holding egalitarian attitudes towards mother's role in the family are less likely to voice positive fertility intentions than women and men holding more traditional attitudes.

Following the same line of arguments as for attitudes towards gender roles in the public sphere we assume that the negative association between egalitarian attitudes towards mother's role in the family and fertility intentions is stronger in countries that are facing a larger gap between gender equality in the public and the private sphere than in other countries. In addition, in countries in which the attitudes towards the traditional role of mothers have sufficiently eroded, there might be a larger dissonance between women's and men's gender-equal attitudes regarding family work and their behavior. This may create conflicts, which weaken fertility intentions. By contrast, if mother's role in the family goes largely unchallenged and men are not affected by ongoing changes, we may expect little or no association between men's attitudes towards mother's role in the family and their fertility intentions. This leads us to our fourth hypothesis.

Hypothesis 4: the relationship between egalitarian attitudes towards mother's role in the family and fertility intentions is more strongly negative in countries that have moved further in the process towards more gender equality in general than in other countries.

2.2.3. Father's role in the family and fertility intentions

Attitudes towards father's role in the family are about expected behavior of men in the family. In a traditional male breadwinner family the tasks of active parenting are carried out by the mother, active fathering may be seen as undermining male identity (Puur et al. 2008), and the gender segregation of public and private work as the "natural" way of completing the family (Kaufmann 2000). As societies are moving away from the male breadwinner model fathering becomes more related to expectations about caring for children and contributing equally to parenting. More modern fatherhood implies more family obligations for men and more investment of time and energy into their off-springs (Puur et al. 2008). This may lower men's fertility intentions, and in particular father's intentions to have another child.⁴ For women, on the other hand, holding gender equal attitudes towards fathers' role in the family means that they want a partner who is an involved father and who shares housework. Since gender-equal active fatherhood is still not very common, such expectations may curb fertility intentions. In addition, the movement towards gender-equal parenthood has led to a new re-distribution of parental rights, leading to uncertainty as who may have the children in case of parental separation. This uncertainty may hamper fertility intentions. In general, we therefore expect a negative relationship between egalitarian attitudes towards father's role in the family and fertility intentions, and we have formulated the following hypothesis.

Hypothesis 5: women and men holding egalitarian attitudes towards father's role in the family are less likely to have positive fertility intentions than women and men holding more traditional attitudes.

The relationship between attitudes towards father's role in the family and fertility intentions may be strongly linked to where a country is in the process towards more gender equality. Changes in fathers' role in the family constitute the last step in the three-step revolution towards gender-equal attitudes. Therefore, we expect that gender-equal attitudes towards father's role in the family are least wide-spread in all countries and that no country has reached a gender-egalitarian status with active fatherhood as the norm. We thus expect that across all countries gender-equal attitudes towards fatherhood are associated with lower fertility intentions. Since the demands on men to be active fathers are greater in countries which have moved further towards gender-equal roles for fathers, we expect fertility intentions in these countries to be lower than in countries in which views of fatherhood have largely remained unchallenged. This leads us to the following assumption:

Hypothesis 6: the relationship between attitudes towards father's role in the family and fertility intentions is more strongly negative in countries that have moved further in the process towards more gender equality than in other countries.

We expect this relationship to be the same among both men and women, but we expect the association to be stronger among men than among women.

3. Empirical analysis of the relationship between gender attitudes and fertility intentions

3.1. Data and methods

We make use of data from the Generations and Gender Surveys (GGS).⁵ The GGS was specifically designed to facilitate research on the relationship between gender aspects, family dynamics, and fertility intentions (see Vikat et al. 2007 and UNECE/PAU 2008a and UNECE/PAU 2008b). We used the first wave of the GGS of Austria, Bulgaria, France, Germany, Norway, Romania, and Russia, as well as the Hungarian Survey "Turning Point of the Life Course". The latter survey incorporates large parts of the GGS and is part of the Generations and Gender Programme. All national datasets were harmonized and made available by the project "GGP-Design Studies for Research Infrastructure" funded through the 7th Framework Program (FP7) of the EU (Grant 212749). The fieldwork of the first wave of

the GGS was carried out in the various countries between 2001 (Hungary) and 2008/2009 (Austria), with fieldwork in most countries taking place in 2004/2005. All GGSs comprise information on women and on men aged 18 to 79. For our study on childbearing intentions, we limited the sample to non-pregnant women aged 18 to 42 and to men aged 18 to 49 at the time of the interview. We chose these age ranges because the decision to have a child beyond these ages may be less influenced by economic, private, and gender-equality considerations than the decision to have a child at a socially accepted childbearing age.⁶ Moreover, very few of the interviewed women and men beyond these ages intended to have a(nother) child.

Our investigation focuses on the intention to have a child within the next three years (as reported at the interview date). Under the realistic assumption that, in an almost perfect contraceptive regime, having a child is the result of a reasoned, although imperfect, decision, it is easier to link gender role attitudes to fertility intentions. We concentrate on fertility intentions, but our approach is also applicable to fertility behavior. At the individual level fertility intentions may be regarded as a suitable predictor of actual behavior (Westoff and Ryder 1977; Rindfuss et al. 1988; Schoen et al. 1999), provided we specify a time period close enough to the prospective behavior so that we may draw inferences from the respondent's circumstances and viewpoints at the time of interview to her/his prospective behavior (Ajzen and Fishbein 1973; Thomson 1997; Schoen et al. 1999; Quesnel-Vallée and Morgan 2003; Billari, Philipov and Testa 2009; Régnier-Loilier and Vignoli 2011; Balbo and Mills 2011). Given such a time period, positive fertility intentions, that is, intentions to have a child within the specified time period, prove to be a valid predictor of actual behavior, although they partly overestimate fertility realizations (e.g., Régnier-Loilier and Vignoli 2011).

In the Generations and Gender Survey respondents were asked whether they intend to have a(nother) child within the next three years. This is a reasonable time frame to assume that the expressed intentions do not simply mirror societal norms about how many children one should have, but that they reflect a respondent's reasoned decision, however vague this decision may be at the time of the interview. The overview of positive and negative fertility intentions by gender, parity and country confirms our theoretical expectations and findings from other research: Childless women are less inclined to become a parent than childless men. The gender difference persists for parents, but is much less pronounced. Women and men in Eastern European countries are more prone to intend to have a first child than women and men in Western European countries. Overall, following the notion that most people want at

least one child, intentions to have a child in the next three years are expressed more often by childless women and men than by parents (see appendix Table 1).

We use logistic regressions with the intention to have or not to have a(nother) child within the next three years as the dependent outcome⁷. We estimate two sets of models. First, we look at the influence of the three dimensions of gender role attitudes – gender roles in the public sphere, mother's roles, and father's role – on women's and men's childbearing intentions separately and we differentiate between intentions to have a first child and intentions to have subsequent children. We thus recognize that attitudes towards gender-equal roles may change once women and men become parents (Neyer et al. 2013). Second, we estimate the influence of the three dimensions of gender role attitudes on women's and men's intention to have a(nother) child differentiating by country. We thus recognize that countries are at a different state in the gender revolution. In short, in the first set of models, we pool all countries into one dataset, while in the second set, we pool all parities. We could not simultaneously stratify the analysis by gender, country, and parity because the resulting samples were too small.

In the sample we include both respondents who are in a relationship (LAT, cohabiting or married) and those who are not in a relationship.⁸ We control for a respondent's union status, age, educational attainment, and employment status, as well as her or his partner's educational attainment and employment status. In the models of parents and the models including all parities (also childless) we control for the number of children. In the models including all countries we control for country of residence, and we adjust the estimates for intra-cluster (i.e. country) correlation. Age is coded as below age 30 or above age 30 (up to the specified maximal age for women and for men). Following the ISCED classification of educational levels we grouped educational attainment into the three standard levels: basic education, secondary and upper secondary education, and post-secondary and tertiary education. As for the employment status, we distinguish between whether the respondent and/or the partner are employed or not.

We have included eight European countries which differ considerably regarding the gender-role dispositions and the prevalence of gender equal attitudes in their population. Women and men in the Eastern European countries hold far more traditional and much less gender-equal attitudes concerning women in the public sphere, mother's role, and father's role in the family (see Table 1) than those in the Western European countries. Despite this commonality, the prevalent gender attitudes across Eastern European countries differ partly clearly, depending on which dimension of gender attitudes one considers. For example, Hungary lags far behind the other Eastern European countries with regard to gender-equal

attitudes towards mother's role in the family (see Table 1, and also Saxenberg 2014), but it leads with regard to gender-equal attitudes towards women in the public sphere. In the Western European countries, gender-equal attitudes are less wide-spread in the conservative countries, Austria and Germany, than in France and Norway, both of which have long promoted women's and gender equality. In all countries, there is a clear gradient in gender attitudes concerning the public sphere, mother's role in the family, and father's role in the family (see Table 1). This supports our assumption that the gender revolution in attitudes occurs in three stages.⁹

3.2. Three dimensions of gender ideology

The GGS offers three items which represent each of the three gender role attitudes that are of focus in this study. First, attitudes towards gender equality in the public sphere are measured through the following statement: “On the whole, men make better political leaders than women do”. This is a clear statement about the expected positioning of women and men in the public sphere.

Second, attitudes towards gender equality in the private sphere are divided between mothers' role in the family and fathers' role in the family. Attitudes towards mothers' role in the family are measured via the statement: “A pre-school child is likely to suffer if his/her mother works”. This item concerns gender assumptions about caregiving in the family as well as about the acceptance of mothers as breadwinners. It also indicates whether women's participation in the public sphere is accompanied by a shift in gender expectations regarding mothers' work in the family.

Third, attitudes towards fathers' role in the family are measured through the item: “If parents divorce it is better for the child to stay with the mother than with the father”. This item addresses fathering, namely whether the respondent considers the father as equally well suited as the mother to take care of the child. It also addresses men's rights as fathers and thus the respondent's acceptance of equal rights to parenting.

For each statement the respondent could answer 'strongly agree', 'agree', 'neither agree nor disagree', 'disagree', and 'strongly disagree'. We classified the answers as “traditional gender attitudes” ('strongly agree' and 'agree'), “intermediate” ('neither agree nor disagree') and “egalitarian” ('disagree', and 'strongly disagree').

The distribution of attitudes towards the three items of gender roles varies by country and gender (Table 1). Three issues are especially noteworthy: First, there are generally more

egalitarian attitudes towards gender roles in the public sphere than in the private sphere. For instance, 71% of women in Germany hold egalitarian attitudes towards gender role in the public sphere, while 49% hold egalitarian attitudes towards mother's role in the family. This is not surprising given that in all countries the process towards more gender equality affected first gender relationships in the public sphere. This led to generally more gender equality in the public sphere than in the private sphere. Second, women are generally more egalitarian than men are, except with regard to fathers' role in the family. For instance, 45% of women in Bulgaria, but only 19% of men in this country, hold egalitarian attitudes towards gender role in the public sphere. Women also express more often gender equal attitudes towards mother's role than towards father's role in the family. For example, in Austria, 43% of women support an egalitarian position of mothers, but only 20% of fathers do so. By contrast, men's gender-equal attitudes towards mother's role and towards father's role do not differ much (except in Romania and Hungary). Third, as mentioned above, men and women in Western European countries have more egalitarian attitudes than those in Eastern European countries. For instance, 59% of men in France hold egalitarian attitudes towards gender roles in the public sphere, while only 18% of men in Russia state a similar opinion; likewise, 66% of women in Norway hold egalitarian attitudes towards mother's role in the family, but only 9% of women in Hungary have similar views. All these variations support our claim that we need to investigate the relationship between gender role attitudes and fertility intentions along several dimensions.

3.3. Results

Following the theoretical reflections we tested the influence of attitudes towards gender role in the public sphere, mother's role in the family, and father's role in the family on women's and men's fertility intentions in different European settings. The estimates are presented in Table 2 and Table 3. Table 2 shows the estimates for all countries pooled together, but separated by parity, in order to test the general relationship between gender role attitudes and fertility intentions, and Table 3 shows the estimates for each country separately in order to look for country differences.

We start with the relationship between attitudes towards gender roles in the public sphere, i.e. "On the whole, men make better political leaders than women do" and fertility intentions. For men, there are no differences in the relationship between attitudes towards gender roles in the public sphere and fertility intentions, neither among the childless nor

among fathers. For women there are significant differences among both childless and mothers, i.e. women with egalitarian attitudes are less likely to consider having a child in the next three years than women with traditional attitudes. The difference between those with egalitarian attitudes and those with traditional attitudes are slightly more pronounced among the childless than among mothers. Overall, this finding confirms the need to investigate childbearing decisions of women, of men, and for parity separately (e.g., Neyer et al. 2013), since gender role attitudes play out differently for each of them. *Hypothesis 1* stated that women and men holding egalitarian attitudes towards gender roles in the public sphere are less likely to want a child in the next few years than women and men holding more traditional attitudes. This hypothesis holds for women, but not for men. From a theoretical perspective, we argued that egalitarian gender roles in the public sphere do not have any direct consequences for men, but that they may operate indirectly through their partner. This means that it is more likely that there are differences in women's fertility intentions by attitudes towards gender roles in the public sphere than in men's intentions. The estimates from our models support this assumption and suggest that among men attitudes towards gender roles in public sphere do not matter for their decision-making about childbearing.

When running the models separately by country, we also do not find significant differences among men in any country. *Hypothesis 2* stated that the relationship between attitudes towards gender roles in the public sphere and fertility intentions is more strongly negative in countries that have moved further in the process toward more gender equality than other countries. This hypothesis cannot be confirmed for men. For women we find a negative relationship between egalitarian attitudes in Austria and Norway, but not in any of the other countries. Norway is the most advanced country regarding gender equal attitudes in the public sphere; Austria lags somewhat behind the other Western European countries, but is ahead of the Eastern European countries. Hypothesis 2 can thus be partly confirmed for women.

Next, we present the results for the relationship between attitudes towards mother's role in the family, i.e. "A pre-school child is likely to suffer if his/her mother works", and fertility intentions. The results from the model in which all countries are pooled together show that there is no significant association between egalitarian attitudes towards mother's role in the family and fertility intentions for childless men. There is, however, a negative relationship between intermediate attitudes and fertility intentions among fathers. Turning to women, we find that childless women holding intermediate and egalitarian attitudes are less likely to intend to have a child than women with traditional attitudes, but we find no such differences among mothers. *Hypothesis 3* stated that men and women holding egalitarian attitudes

towards mother's role in the family are less likely to intend to have a child within the next three years than men and women holding more traditional attitudes. This hypothesis is only confirmed for childless women.

The country-specific estimates show both positive and negative relationships between egalitarian attitudes towards mother's role in the family and fertility intentions. Although the results are only significant for some countries and the significance differs between women and men, they reveal a clear East-West gradient, for both women and men. In Eastern European countries, women and men holding more gender equal attitudes towards mothers' role in the family are either more inclined to consider having a child or their childbearing intentions do not differ much from those who adhere to gender-stereotypical views of mother's role (except women in Hungary). In Western European countries, women and men who express gender-equal attitudes about mothers' role in the family are less inclined to consider having a child than those with traditional attitudes. *Hypothesis 4* stated that the relationship between attitudes towards mother's role in the family and fertility intentions is more strongly negative in countries that have moved further in the process towards more gender equality than in other countries. This hypothesis can be partly confirmed. We did not expect any positive relationship neither among men nor women, and the positive relationship between egalitarian attitudes towards mother's role in the family and fertility intentions is somewhat surprising. Yet, we find the elevated intentions of egalitarian minded women and men mainly in the Eastern European countries. Their previous policies of universal childcare and support for mothers may still influence the relationship between attitudes towards mothers' role in the family and fertility intentions.

Last, we present the results from the models on the relationship between attitudes towards father's role in the family, i.e. "If parents divorce it is better for the child to stay with the mother than with the father" and fertility intentions. Looking at all the countries together we find no differences between men's attitudes towards father's role in the family and fertility intentions, while among women there is a positive relationship between intermediate attitudes and fertility intentions of mothers. In *Hypothesis 5* we stated that women and men holding egalitarian attitudes towards fathers' role in the family are less likely to intend to have a child than women and men holding more traditional attitudes. This hypothesis could not be confirmed.

The relationship between attitudes towards father's role in the family and fertility intentions is somewhat different when running the models separately by country. As for the attitudes towards mother's role in the family, we find both positive and negative relationships

between egalitarian attitudes towards father's role in the family and fertility intentions. We find a strongly positive relationship for men in Russia and Bulgaria, and there are also signs of a positive relationship among egalitarian oriented men in the other Eastern European countries. Since egalitarian attitudes towards fathers' role are rare in the Eastern European countries, we assume men with such attitudes belong to a select group (see also previous footnotes). The relationship for men is negative in Austria and Norway, the two Western European countries with the lowest and the highest share of men with egalitarian attitudes towards father's role in the family. Among women, the pattern also shows positive (Hungary, Germany) and negative (Austria) relationships, but there is no obvious link to the respective countries' status of gender equality.¹⁰ *Hypothesis 6* stated that the relationship between attitudes towards father's role in the family and fertility intentions are more strongly negative in countries that have moved further in the process towards more gender equality than in other countries. This hypothesis can be partly confirmed.

4. Discussion

The relationship between gender role attitudes and fertility intentions is a complex issue. Taking inconclusive results from previous research as our starting point, we analyzed the relationship between gender ideology and fertility intentions in eight European countries using data from the Generations and Gender Survey. We took into account the possibility that gender role attitudes are influenced by a person's social and economic status, and we included several covariates that are known to be related to people's fertility intentions. Our main argument in this paper is that gender role attitudes do not constitute a unified entity and cannot be captured by a single measure.

Expanding the theoretical concept of the two-step gender revolution, we suggested that attitudinal changes towards gender equality occur in three steps: The first one concerns gender attitudes towards women the public sphere, the second and third step concern women's and men's roles in the private sphere. In our approach we assumed that these three attitudinal dimensions affect women and men differently since gender equality influences the lives of women and men differently. We furthermore argued that countries are at different stages of the gender revolution and that therefore individual gender attitudes play out differently depending on the country context. Our empirical results back our theoretical approach.

First, our findings support our assumption that the gender revolution of attitudes proceeds in three steps. Gender equal attitudes related to the public sphere are more wide

spread than those concerning mother's role in the family and father's role in the family. We also find that attitudinal changes take a different pace in different countries. Our results of the analyses of fertility intentions clearly show that the relationship between gender role attitudes and fertility intentions depends on the area of life the gender attitude is directed to. Attitudes towards gender roles in the public sphere and mother's role in the family create more variation in fertility intentions compared to attitudes towards father's role in the family (Table 2). This applies in particular to women. Egalitarian attitudes towards gender roles in the public sphere and mother's role in the family signal preferences for women combining work life and motherhood, which generally are associated with lower fertility. As long as women are doing the lion share at home, egalitarian attitudes towards gender equality in these areas create conflicts and are expected to be negatively associated with fertility intentions. The theoretical model predicts that fertility will increase once father's role in the family is viewed (and lived) gender equally. Our results provide some support for this assumption. Although attitudes towards father's role in the family create little variation in fertility intentions among women and men in our sample, we find that mothers with intermediate and egalitarian attitudes towards fathers' role in the family tend to be more inclined to want another child than those who adhere to traditional views of father's role (Table 2).

Second, we find that the relationship between gender role attitudes and fertility intentions differs among women and men. In general gender role attitudes create more variation in women's fertility intentions than in men's intentions. The lives of men and women are affected differently by gender equality which means that the relationship between attitudes towards gender roles and fertility intentions is closer among women than men. As predicted egalitarian gender attitudes concerning the public sphere have no effect on men's fertility intentions, while they lower both childless women's and mothers' childbearing intentions. Attitudes towards mothers' role in the family play out differently for women and men, as well. Egalitarian views of mothers' role restrain fertility intentions of childless women, but not of mothers; while among men, it is rather egalitarian oriented fathers than childless men who tend to abstain from wanting another child. This indicates that gender ideology influences women's and men's fertility decisions differently at different stages in their family life course. When running the models separately by country there is also variation in fertility intention among men holding gender-equal attitudes towards mother's and father's role in the private sphere while there is no variation for different attitudes towards gender roles in the public sphere. In general, men and women have more gender equal attitudes towards gender roles in the public sphere than gender roles in the family. Gender roles in the

public sphere concern women and men in a broader sense and they usually do not affect their private lives directly. Attitudes towards mother's and father's role in the family concern preferences for different ways of organizing family life and affect family life and women's and men's contribution to family work and care more explicitly.

Last, we find that the relationship between gender role attitudes and fertility intentions depends on the gender context in the country. There is extensive variation between the countries in gender role attitudes. Having gender equal attitudes may mean something different in a country where the majority shares the same attitudes than in a country where gender equal attitudes are held only by a select group. In neither of the Eastern European countries do we find a negative association between egalitarian gender role attitudes and fertility intentions as we find it in the Western European countries. In the Eastern European countries we do, however, find examples of a positive relationship between egalitarian attitudes towards gender roles in the family and fertility intentions, while there is no such relationship between attitudes towards gender roles in the public sphere and fertility intentions. A positive relationship between attitudes towards father's role in the family and fertility intentions has been explained by egalitarian fathers being more family oriented than others and thus giving more priority to family life (Kaufman 2000; Miettinen et al. 2011; Duvander and Andersson 2006; Duvander et al. 2010). The same argument cannot, however, be used to explain a positive relationship between attitudes towards mother's role in the family and fertility intentions. Traditional mothers are expected to be more family oriented than egalitarian mothers and a positive relationship may seem like a puzzle. In order to get a better understanding of this we examined whether the relationship was the same among childless and parents. We find (numbers not shown) that the positive relationship in Eastern Europe is dominated by childless people (for Russia men and for Romania women). The positive relationship may reflect the prevalent norm in these countries to have at least one child, and may also be influenced by the Eastern European past with its emphasis on state-supported work-oriented motherhood. The positive relationship may thus be a temporary status that disappears when the first child is born and the gender arrangements within couples becomes more complicated, or when childbearing norms loosen and the dual pressure on women is not counterbalanced by public childcare support.

To conclude, one may contest the implementation of the selected dimensions of gender role attitudes via Gender and Generation Survey data. In addition, one may argue that these dimensions and their representations are interrelated. However, our outcomes provide us with useful input, demonstrating the complexity of the link between gender role attitudes and

fertility intentions. They cannot be reconciled with any notion of a simple, uniform, and unidirectional relationship between gender role attitudes and fertility intentions. They rather emphasize the need for a multi-dimensional approach, as outlined in this paper. We question that it is possible to say “gender equal attitudes” increase or decrease fertility intentions because of the incongruities between attitudes regarding the public sphere, mothers' role in the private sphere and father's role in the private sphere, between men and women, and between individual and societal levels of gender equality. We further question that the concept of a two-step gender revolution describing behavioral changes can be unconditionally applied to attitudinal changes. We have demonstrated that attitudes towards mothers' and fathers' roles in the family do not change simultaneously, but that changes towards gender equal views of father's role in the family lag behind the changes towards gender equal attitudes of mother's role in the family. From a broader theoretical perspective this underlines that we need to look closely which gender equality we are talking about when investigating the relationship between gender equality and social and individual behavior.

In conclusion, we believe our research represents an empirical as well as a theoretical contribution to the systematic study of the influence of gender aspects on fertility behavior proving the distinction between gender role in the public sphere, mother's role in the family, and father's role in the family to be a strategy that discourages an oversimplification of the complexity of gender-related factors leading to fertility (intentions).

Endnotes

1 Following the Encyclopedia of Sociology we use gender role attitudes, gender attitudes, gender ideology, gender role ideology interchangeably.

2 This was largely the case in Eastern European countries (Saxenberg 2014).

3 This applies, for example, to Western societies of the 1950s and early 1960s when gender role attitudes and social policies assigned men the role of the family provider and women the role of the homemaker and child rearer.

4 Some research has shown that families in which the father engages actively in childrearing have higher childbearing risks and fertility intentions than families in which the father does not engage actively in childrearing (Duvander and Andersson 2006; Duvander, Lappegård, and Andersson 2010; Lappegård 2010; Neyer et al. 2013; Dommermuth, Hohmann-Marriott forthcoming). However, this only holds if fathers do some childcare, while equal sharing seems to lower fertility and fertility intentions. It is assumed that fathers who engage in childrearing are more family- and childprone, and that they thus constitute a select group (Duvander and Andersson 2006; Duvander et al. 2010; Kaufman 2000; Miettinen et al. 2011).

5 For more information on the Generations and Gender Programme see Vikat et al 2007; UNECE/PAU 2008a; UNECE/PAU 2008b, as well as the homepage of UNECE/PAU at <http://www.unece.org/pau/ggp/Welcome> and the homepage of the EU-project “GGP Design Studies for Research Infrastructure” at <http://www.ggp-i.org>.

6 We chose upper age limits which lie about “half-way” within the socially accepted age ranges found by Billari et al. (2011). Using the European Social Survey for 25 countries Billari et al. found that there is considerable variation in socially accepted age limits for fertility in Europe. For men, the accepted upper age limit varies between 45.3 years and 51.2 years, for women between 39.3 and 43.8 years. We also chose these age ranges to recognize the tendency towards fertility at higher ages, in high-order parities or the possibilities offered by assisted reproductive technology to realize fertility intentions at higher ages.

7 Most GGSs offer respondents four options to answer the question about their intention to have a child in the next three years: probably yes, definitely yes, probably no, definitely no. The Norwegian GGS only offers yes or no. We therefore recoded all answers to these two options.

8 This was done mainly to assure sufficiently large samples for the analyses. There are content-related arguments which support or contest the strategy to pool all relationships. One

may argue that the short-term intentions of those who are in a relationship are more "realistic" than the short-term intentions of those who are not in a relationship. By contrast, one may argue that there is no difference between them, because three years is a sufficiently long time-frame to find a partner (or make use of reproductive technology) in order to realize one's childbearing intentions.

9 Among men in some Eastern European countries (Russia and Bulgaria) the gradient across the three stages of gender attitudes is less pronounced than in all other countries. In those countries, only a minority of men hold gender equal attitudes. We assume that if traditional attitudes dominate and the gender revolution has not gained momentum yet, there may be a polarization between traditionalists and egalitarians: Those who hold egalitarian attitudes do it on all accounts, while those who hold traditional attitudes have not started to accept gender equality in any area of life.

10 If we include the non-significant results in our reflections, there is a clear east-west divide. Women in Eastern European holding gender egalitarian attitudes towards father's role in the family tend to be more inclined to have another child than those holding traditional attitudes, while in Western European countries, the opposite applies. This supports Hypothesis 6 that fertility intentions are negative in countries which have moved further in their acceptance of gender equal roles of fathers.

References

- Ajzen, Icek and Martin Fishbein. 1973. "Attitudinal and normative variables as predictors of specific behaviors." *Journal of Personality and Social Psychology* 27: 41-57.
- Balbo, Nicoletta and Melinda Mills. 2011. "The effect of social capital and social pressure on the intention to have a second or third child in France, Germany, and Bulgaria, 2004–05." *Population Studies* 65(3): 335–351.
- Bolzendahl, Catherine I. and Daniel J. Myers. 2004. "Feminist attitudes and support for gender equality: Opinion change in women and men, 1974–1998." *Social Forces* 83(2): 759–789.
- Billari, Francesco C., Dimiter Philipov and Maria Rita Testa. 2009. "Attitudes, norms and perceived behavioural control: Explaining fertility intentions in Bulgaria." *European Journal of Population* 25(4): 439–465.
- Billari, Francesco. C., Alice Goisis, Aat C. Liefbroer, Richard A. Settersten, Arnstein Aassve, Gunhild Hagestad and Zolt Spéder. 2011. "Social age deadlines for the childbearing of women and men." *Human Reproduction* 26(3): 616-622.
- Blunsdon, Betsy and Ken Reed. 2005. "Changes in attitudes to mothers working: Evidence from Australian surveys." *Labour & Industry: A journal of the social and economic relations of work* 16(2): 15–27.
- Brewster, Karin L. and Irene Padavic. 2000. «Change in gender-ideology, 1977–1996: The contributions of intracohort change and population turnover." *Journal of Marriage and Family* 62(2): 477–487.
- Brooks, Clem and Catherine Bolzendahl. 2004. "The transformation of US gender role attitudes: Cohort replacement, social-structural change, and ideological learning." *Social Science Research* 33(1): 106–133.
- Ciabattari, Teresa 2001. "Changes in men's conservative gender ideologies, cohort and period influences." *Gender and Society* 15(4): 574–591.
- Davis, Nancy J. and Robert V. Robinson. 1991. "Men's and women's consciousness of gender inequality, Austria, West Germany, Great Britain, and the United States." *American Sociological Review* 56(1): 72–84.
- Dommermuth, Lars, Bryndl Hohmann-Marriott and Trude Lappegård. Forthcoming. "Gender Equality in the Family and Childbearing." *Journal of Family Issues*.

- Duvander, Ann-Zofie and Gunnar Andersson. 2006. "Gender equality and fertility in Sweden: A study on the impact of the father's uptake of parental leave on continued childbearing." *Marriage and Family Review* 39(1-2): 121-142.
- Duvander, Ann-Zofie, Trude Lappegård and Gunnar Andersson. 2010. "Family policy and fertility: Fathers' and mothers' use of parental leave and continued childbearing in Norway and Sweden." *Journal of European Social Policy* 20(1): 45-57.
- Egmond, Marcel van, Janeen Baxter, Sandra Buchler and Mark Western. 2010. "A stalled revolution? Gender role attitudes in Australia, 1986-2005." *Journal of Population Research* 27:147-168.
- England, Paula. 2010. "The Gender Revolution Uneven and Stalled." *Gender & Society* 24: 149-166.
- Evertsson, Marie. 2014. "Gender Ideology and the Sharing of Housework and Child Care in Sweden." *Journal of Family Issues* 35(7): 927-949.
- Funk, Nanette and Magda Müller (eds.). 1993. *Gender politics and post-communism. Reflections from Eastern Europe and the Former Soviet Union*. London: Routledge.
- Gal, Susan and Gail Kligman. 2000a. Reproduction as politics, In: Gal, Susan and Gail Kligman: *The politics of gender after socialism* Princeton: Princeton University Press: 15-36.
- (eds.). 2000b. *Reproducing gender*. Princeton: Princeton University Press.
- Goldscheider, Frances K, Livia S. Olah and Alan Puur. 2010. "Reconciling studies of men's gender attitudes and fertility: Response to Westoff and Higgins." *Demographic Research* 22:189-198.
- Goldscheider, Frances K., Eva Bernhardt and Trude Lappegård. 2014. "The Second Half of the Gender Revolution in Sweden: Will it Strengthen the Family?" *Domestic Gender Equality and Modern Family Patterns Working Paper Series EQUAL WP 07*, Stockholm University.
- Goldscheider, Frances K., Eva Bernhardt and Maria Brandén. 2013. "Domestic gender equality and childbearing in Sweden." *Demographic Research* 29(40): 1097-1126.
- Inglehart, Ronald and Pippa Norris. 2003. *Rising tide: Gender equality and cultural change around the world*. Cambridge: Cambridge University Press.

- Jansen, Miranda and Aat C. Liefbroer. 2006. "Couples' Attitudes, Childbirth, and the Division of Labor." *Journal of Family Issues* 27: 487-1511.
- Kane, Emily W. and Laura Sanchez. 1994. "Family status and criticism of gender inequality at home and at work." *Social Forces* 72(4): 1079–1102.
- Kaufman, Gayle. 2000. "Do gender role attitudes matter? Family formation among and dissolution among traditional and egalitarian men and women." *Journal of Family Issues* 21(1): 128-144.
- Kjeldstad, Randi and Trude Lappegård. 2014. "How do gender values and household practices cohere? Value-practice configurations in a gender egalitarian context." *NORA - Nordic Journal of Feminist and Gender Research* 22(3): 219-237.
- Lappegård, Trude. 2010. "Family Policies and Fertility in Norway." *European Journal of Population* 26:99-116.
- Lesthaeghe, Ron. 1995. "The unfolding story of the second demographic transition." *Population and Development Review* 36(2): 211-251.
- McDonald, Peter. 2000. "Gender equity, social institutions and the future of fertility." *Journal of Population Research* 17(1): 1-16.
- Miettinen, Anneli, Stuart Basten and Anna Rotkirch. 2011. Gender equality and fertility intentions revisited: Evidence from Finland. *Demographic Research* 24(20): 469-496.
- Neyer, Gerda, Trude Lappegård and Daniele Vignoli. 2013. Gender Equality and Fertility: Which Equality Matters? *European Journal of Population* 29: 245–272.
- Nock, Steven L. 1987. "The Symbolic Meaning of Childbearing." *Journal of Family Issues* 8: 373-393.
- Philipov, Dimiter. 2008. "Family-related gender attitudes: The three dimensions: "Gender-role ideology", "Consequences for the family", and "Economic consequences"", in Höhn, Charlotte, Dragana Avramov and Irena E. Kotowska (eds.). *People, Population Change and Policies: Lessons from the Population Policy Acceptance Study*. A. Dordrecht (Net): Springer: 153-174.
- Puur, Allan, Livia. S. Oláh, Mariam I. Tazi-Preve and Jürgen Dorbritz. 2008. "Men's childbearing desires and views of the male role in Europe at the dawn of the 21st century." *Demographic Research* 19(56): 1883-1912.

- Quesnel-Vallée, Amélie and Morgan, S. Philip. 2003. "Missing the target? Correspondence of fertility intentions and behavior in the U.S." *Population Research and Policy Review* 22(5-6): 497-525.
- Régnier-Loilier, Arnaud and Daniele Vignoli. 2011. "Fertility intentions and obstacles to their realization in France and Italy." *Population-E* 66 (2): 361-390.
- Rindfuss, Ronald R., S. Philip Morgan and Gray Swicegood. 1988. *First births in America: Changes in timing of parenthood*. Berkeley: University of California Press.
- Saxenberg, Steven. 2014. *Gendering Family Policies in Post-Communist Europe. A Historical-Institutional Analysis*. New York: Palgrave MacMillan.
- Schoen, Robert, Nan Marie Astone, Young J. Kim, Constance A. Nathanson and Jason M. Fields. 1999. "Do fertility intentions affect fertility behavior? Journal of Marriage and the Family." 61(3): 790–799.
- Scott, Joan W. 1986. "Gender: A useful category of historical analysis." *American Historical Review* 91(5): 1053–1075.
- Scott, Jacqueline. 2008. "Changing gender role attitudes." In Jacqueline. Scott, and Shirley Dex and Heather Joshi (Eds.), *Women and employment: Changing lives and new challenges* (pp. 156–178). Cheltenham: Edward Elgar.
- Sjöberg, Ola. 2010. "Ambivalent attitudes, contradictory institutions. Ambivalence in gender-role attitudes in comparative perspective." *International Journal of Comparative Sociology* 5(1): 33-57.
- Szelewa, Dorota and Michal P. Polakowski. 2008. "Who cares? Changing patterns of childcare in Central and Eastern Europe." *Journal of European Social Policy* 18(2): 115-131.
- Tazi-Preve, Irene M., Dieter Bichbauer and Anne Goujon. 2004. "Gender trouble and its impact on fertility intentions." *Yearbook of Population Research in Finland* 40: 5-24.
- Testa, Maria Rita. 2007. "Childbearing preferences and family issues in Europe: evidence from the Eurobarometer 2006 Survey." *Vienna Yearbook of Population Research* 2007: 357-379.
- Thomson, Elisabeth. 1997. "Couple childbearing desires, intentions, and births." *Demography* 34(3): 343–354.

- Thornton, Arland and Linda Young-DeMarco. 2001. "Four Decades of Trends in Attitudes toward Family Issues in the United States: The 1960s through the 1990s." *Journal of Marriage and Family* 63(4): 1009-1037.
- Torr, Berna M. and Susan E. Short. 2004. "Second births and the second shift: A research note on gender equity and fertility." *Population and Development Review* 30(1): 109-130.
- UNECE/PAU. 2008a. *Generations and Gender Programme: Concepts and Guidelines*. Geneva: United Nations Economic Commission for Europe.
- . 2008b. *Generations and Gender Programme: Survey Instruments*. Geneva: United Nations Economic Commission for Europe.
- Vikat, Andres et al. 2007. "Generations and Gender Survey (GGS): Towards a better understanding of relationships and processes in the life course," *Demographic Research* 17: 389-439.
- West, Candace and Don H. Zimmerman. 1987. "Doing gender." *Gender and Society* 1(2): 125-151.
- Westoff, Charles F. and Norman B. Ryder. 1977. "The predictive validity of reproductive intentions." *Demography* 14: 431-453.
- Westoff, C.F. and J. Higgins. 2009. Relationships between men's gender attitudes and fertility: Response to Puur et al.'s "Men's childbearing desires and views of the male role in Europe at the dawn of the 21st century", *Demographic Research* 19:1883-1912. *Demographic Research* 21:65-74.

Table 1 – Gender ideology by gender and country. Percent

Men	Romania	Russia	Bulgaria	Hungary	Germany	Austria	France	Norway
Gender roles in the public sphere								
Traditional	52.2	59.6	52.1	37.1	23.9	21.3	12.4	17.9
Intermediate	28.6	22.0	28.8	33.6	24.6	36.6	28.6	32.6
Egalitarian	19.2	18.3	19.1	29.2	51.5	42.0	59.0	49.4
Mother's role in the family								
Traditional	44.3	67.9	60.2	82.3	45.7	53.6	42.6	25.7
Intermediate	27.4	16.9	23.0	10.3	17.5	23.4	16.4	29.8
Egalitarian	28.7	15.2	16.7	7.4	36.9	23.0	37.6	44.5
Father's role in the family								
Traditional	51.2	46.3	42.3	39.9	26.7	25.7	22.9	17.9
Intermediate	38.9	37.7	41.7	41.5	39.0	53.9	38.9	38.9
Egalitarian	9.9	15.9	16.0	18.7	34.3	20.4	38.1	43.2
N	3,165	2,629	3,628	3,392	1,947	1,916	2,132	3,889

Women	Romania	Russia	Bulgaria	Hungary	Germany	Austria	France	Norway
Gender roles in the public sphere								
Traditional	30.4	41.7	24.3	25.1	13.5	10.8	9.6	7.6
Intermediate	31.8	22.9	30.6	30.4	15.3	22.4	21.5	17.9
Egalitarian	37.9	35.3	45.1	44.5	71.2	66.8	69.0	74.5
Mother's role in the family								
Traditional	44.4	62.6	64.4	82.5	36.0	32.3	38.1	15.6
Intermediate	25.4	19.4	20.0	8.9	15.3	25.1	16.3	18.3
Egalitarian	30.2	18.1	15.6	8.6	48.7	42.6	45.5	66.1
Father's role in the family								
Traditional	73.4	70.5	67.7	52.7	33.0	25.9	25.8	18.0
Intermediate	23.2	24.4	26.6	37.4	37.5	53.8	43.0	42.9
Egalitarian	3.4	5.1	5.6	9.9	29.4	20.3	31.2	39.1
N	2,210	2,844	4,144	2,911	2,354	2,703	2,312	3,314

Table 2 – Intentions to have a(nother) child by gender ideology. OR

Gender roles in the public sphere

		Men		Women	
		OR	P value	OR	P value
<i>Childless</i>	Intermediate	0.97	0.578	1.10	0.195
	Egalitarian	0.98	0.760	0.86	0.050
<i>Parents</i>	Intermediate	0.99	0.887	0.90	0.060
	Egalitarian	0.96	0.544	0.91	0.030

Mother's role in the family

		Men		Women	
		OR	P value	OR	P value
<i>Childless</i>	Intermediate	0.96	0.545	0.86	0.045
	Egalitarian	1.01	0.813	0.87	0.063
<i>Parents</i>	Intermediate	0.81	0.07	1.06	0.330
	Egalitarian	0.86	0.194	0.91	0.306

Father's role in the family

		Men		Women	
		OR	P value	OR	P value
<i>Childless</i>	Intermediate	0.96	0.368	0.87	0.219
	Egalitarian	1.06	0.573	0.85	0.127
<i>Parents</i>	Intermediate	0.94	0.216	1.10	0.021
	Egalitarian	1.07	0.358	1.17	0.205

Table 3 – Intentions to have a(nother) child by gender ideology. OR

Gender roles in the public sphere

		Men		Women	
		OR	P value	OR	P value
Romania	Intermediate	0.94	0.553	0.83	0.218
	Egalitarian	1.04	0.767	0.89	0.402
Russia	Intermediate	1.01	0.963	0.99	0.946
	Egalitarian	1.05	0.687	1.04	0.707
Bulgaria	Intermediate	0.96	0.683	0.95	0.663
	Egalitarian	1.05	0.649	0.89	0.294
Hungary	Intermediate	0.94	0.495	1.11	0.413
	Egalitarian	1.00	0.987	1.00	0.973
Austria	Intermediate	0.81	0.129	0.91	0.570
	Egalitarian	0.83	0.184	0.70	0.021
Germany	Intermediate	0.94	0.732	1.03	0.871
	Egalitarian	1.08	0.594	0.93	0.660
France	Intermediate	0.92	0.616	1.14	0.495
	Egalitarian	0.86	0.366	0.91	0.584
Norway	Intermediate	1.13	0.325	0.66	0.031
	Egalitarian	0.95	0.661	0.62	0.005

Note: Controlled for respondents age, educational attainment, activity status, union status and number of children. For those in couple also controlled for partner's education and activity status. In model of all we control for country of residence and the estimates are adjusted for intra-cluster (i.e., country) correlation.

Mother's role in the family

		Men		Women	
		OR	P value	OR	P value
Romania	Intermediate	0.95	<i>0.677</i>	1.21	<i>0.195</i>
	Egalitarian	0.95	<i>0.641</i>	1.35	<i>0.031</i>
Russia	Intermediate	1.07	<i>0.576</i>	1.08	<i>0.496</i>
	Egalitarian	1.26	<i>0.060</i>	1.06	<i>0.627</i>
Bulgaria	Intermediate	0.92	<i>0.395</i>	0.92	<i>0.395</i>
	Egalitarian	0.99	<i>0.962</i>	0.98	<i>0.860</i>
Hungary	Intermediate	1.01	<i>0.912</i>	1.12	<i>0.467</i>
	Egalitarian	1.19	<i>0.247</i>	0.60	<i>0.002</i>
Austria	Intermediate	0.86	<i>0.250</i>	0.77	<i>0.035</i>
	Egalitarian	0.77	<i>0.047</i>	0.78	<i>0.023</i>
Germany	Intermediate	0.86	<i>0.339</i>	0.84	<i>0.275</i>
	Egalitarian	0.97	<i>0.782</i>	0.99	<i>0.934</i>
France	Intermediate	0.62	<i>0.002</i>	0.81	<i>0.164</i>
	Egalitarian	0.88	<i>0.278</i>	0.83	<i>0.085</i>
Norway	Intermediate	0.90	<i>0.378</i>	1.16	<i>0.352</i>
	Egalitarian	0.82	<i>0.072</i>	0.84	<i>0.207</i>

Note: Controlled for respondents age, educational attainment, activity status, union status and number of children. For those in couple also controlled for partner's education and activity status. In model of all we control for country of residence and the estimates are adjusted for intra-cluster (i.e., country) correlation.

Father's role in the family

		Men		Women	
		OR	P value	OR	P value
Romania	Intermediate	0.98	<i>0.811</i>	0.70	<i>0.012</i>
	Egalitarian	1.10	<i>0.569</i>	1.11	<i>0.755</i>
Russia	Intermediate	0.95	<i>0.636</i>	1.05	<i>0.664</i>
	Egalitarian	1.59	<i>0.000</i>	1.12	<i>0.579</i>
Bulgaria	Intermediate	1.04	<i>0.672</i>	1.07	<i>0.463</i>
	Egalitarian	1.48	<i>0.001</i>	1.12	<i>0.539</i>
Hungary	Intermediate	0.93	<i>0.444</i>	1.09	<i>0.414</i>
	Egalitarian	1.08	<i>0.523</i>	1.36	<i>0.055</i>
Austria	Intermediate	0.90	<i>0.408</i>	0.81	<i>0.066</i>
	Egalitarian	0.70	<i>0.022</i>	0.67	<i>0.005</i>
Germany	Intermediate	0.96	<i>0.794</i>	1.05	<i>0.690</i>
	Egalitarian	1.20	<i>0.211</i>	1.44	<i>0.006</i>
France	Intermediate	0.85	<i>0.253</i>	0.87	<i>0.254</i>
	Egalitarian	0.98	<i>0.897</i>	0.85	<i>0.236</i>
Norway	Intermediate	0.83	<i>0.112</i>	0.99	<i>0.966</i>
	Egalitarian	0.77	<i>0.030</i>	0.86	<i>0.278</i>

Note: Controlled for respondents age, educational attainment, activity status, union status and number of children. For those in couple also controlled for partner's education and activity status. In model of all we control for country of residence and the estimates are adjusted for intra-cluster (i.e., country) correlation.

Appendix table 1 – Intention to have a child in the next three years by gender, parity, and country

Women									
Childless					Parents				
<i>Intent. to have a child</i>		<i>No</i>	<i>Yes</i>	<i>Total</i>	<i>Intent. to have a child</i>		<i>No</i>	<i>Yes</i>	<i>Total</i>
Romania	N	642	569	1,211	Romania	N	1,646	308	1,954
	%	53.01	46.99	100		%	84.24	15.76	100
Russia	N	505	421	926	Russia	N	1,256	447	1,703
	%	54.54	45.46	100		%	73.75	26.25	100
Bulgaria	N	741	875	1,616	Bulgaria	N	1,615	397	2,012
	%	45.85	54.15	100		%	80.27	19.73	100
Hungary	N	698	856	1,554	Hungary	N	1,383	455	1,838
	%	44.92	55.08	100		%	75.24	24.76	100
Austria	N	619	420	1,039	Austria	N	663	214	877
	%	59.58	40.42	100		%	75.6	24.4	100
Germany	N	671	367	1,038	Germany	N	771	138	909
	%	64.64	35.36	100		%	84.82	15.18	100
France	N	575	348	923	France	N	957	252	1,209
	%	62.3	37.7	100		%	79.16	20.84	100
Norway	N	1,177	464	1,641	Norway	N	1,862	386	2,248
	%	71.72	28.28	100		%	82.83	17.17	100
Total	N	5,628	4,320	9,948	Total	N	10,153	2,597	12,750
	%	56.57	43.43	100		%	79.63	20.37	100
Men									
Childless					Parents				
<i>Intent. to have a child</i>		<i>No</i>	<i>Yes</i>	<i>Total</i>	<i>Intent. to have a child</i>		<i>No</i>	<i>Yes</i>	<i>Total</i>
Romania	N	274	336	610	Romania	N	1,350	250	1,600
	%	44.92	55.08	100		%	84.38	15.63	100
Russia	N	327	352	679	Russia	N	1,610	555	2,165
	%	48.16	51.84	100		%	74.36	25.64	100
Bulgaria	N	546	694	1,240	Bulgaria	N	2,369	535	2,904
	%	44.03	55.97	100		%	81.58	18.42	100
Hungary	N	359	708	1,067	Hungary	N	1,372	472	1,844
	%	33.65	66.35	100		%	74.4	25.6	100
Austria	N	676	443	1,119	Austria	N	1,235	349	1,584
	%	60.41	39.59	100		%	77.97	22.03	100
Germany	N	519	350	869	Germany	N	1,210	275	1,485
	%	59.72	40.28	100		%	81.48	18.52	100
France	N	565	436	1,001	France	N	991	320	1,311
	%	56.44	43.56	100		%	75.59	24.41	100
Norway	N	804	494	1,298	Norway	N	1,625	391	2,016
	%	61.94	38.06	100		%	80.61	19.39	100
Total	N	4,070	3,813	7,883	Total	N	11,762	3,147	14,909
	%	51.63	48.37	100		%	78.89	21.11	100