

**Low Fertility in South Korea:  
Effects of Micro-level Gender Equity and Family Support on Fertility**

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**Short Abstract**

Most demographic theories regarding low fertility focus upon the lack of institutional support facilitating the abilities of households to balance the demands of paid employment and family care. Yet, even within low fertility countries, fertility intentions and outcomes vary within households. This paper examines the effects of micro-level gender equity and family support on fertility in South Korea. Within a country experiencing low fertility, do the childcare resources available to specific households influence a transition to a second- birth from its intentions? How does the relationship between household labor and fertility intersect with family composition? Using the South Korean Longitudinal Survey of Women & Families, I test whether women with family support are more likely to reach their fertility goals. The empirical findings will contribute to our understanding of individual variations of fertility in a lowest-low fertility country and suggest possible pathways that can lead to higher levels of fertility.

## INTRODUCTION

Low fertility is a global trend that most economically advanced countries are experiencing, and even fertility levels in some countries are categorized as lowest-low fertility. However, recent trends in low fertility cannot account for the variations in women's childbearing intentions in those countries (Morgan and Rackin 2010). It has been observed that the number of children women want to have is close to two children in most advanced countries (Bongaarts 2002; Hagewen and Morgan 2005; Morgan and Rackin 2010). Recent survey data indicate that, for instance, South Korean women, regardless of age, education, or work status, view a two-child family as ideal. Also, more than half of the respondents identify low fertility as a social problem. Yet South Korea's current total fertility rate (TFR) stands at a mere 1.3. This apparent inconsistency between fertility intentions and outcomes play a role in explaining low fertility.

Most demographic theories regarding low fertility focus on the lack of institutional support facilitating the abilities of households to balance the demands of paid employment and family care. Major concerns stem from the absence of institutional support for households seeking childcare. Peter McDonald (2000a; 2000b) explains this global phenomenon by establishing his theory of gender equity. His theory of gender equity posits that the national emergence of low fertility stems from the level of gender equity in individual-oriented institutions and family-oriented institutions in a given society. Yet, even within low fertility countries, fertility intentions and outcomes vary within households. How should we approach, then, an examination of individual fertility variations within a single country with low fertility? What factors are involved in the process of women's fertility decisions? What enables women to achieve their fertility intentions?

The purpose of this study is twofold: first, building on the theory of gender equity, I seek to expand the current gender equity framework to fit the investigation of fertility variations

across households in the context of lowest-low fertility by incorporating measures of individual experiences and perceptions of gender equity, which I label “micro-level gender equity.” Second, I examine the relevance of family support to fertility decision-making. Given the institutional context in which incoherent levels of gender equity play a role in shaping low fertility, investigation of the influence of non-institutional support from a family may provide an insight into identifying determinants that would enable women to realize their desired fertility goals. Using the South Korean Longitudinal Survey of Women & Families from 2007 to 2010, I estimate the effect of micro-level gender equity and family support with regard to the realization of a second-child fertility intentions.

## BACKGROUND

### *Gender equity and fertility*

The importance of gender equity in fertility studies has been emphasized over the last decade, especially since the establishment of McDonald’s theory (2000a; 2000b) of gender equity. The relationship between gender equity and fertility has theoretical, methodological, and policy implications pertaining to low fertility. Drawing on Mason’s (1997: 158) definition of gender system, McDonald defines gender equity as an institutional characteristic formulated by the assessments of women in society, which that leads to different outcomes for men and women (McDonald 2013: 983). If we focus on women’s reproductive rights in relation to gender equity, it can be interpreted that McDonald follows the point of the importance of changing power relations within the family—a topic that Folbre (1983) raised. It is associated with the idea of women’s empowerment, which enabled them to choose reproductive timing, and further, to choose a career over family responsibilities (Presser 2001). Further, there has been a vigorous

policy discourse whether the gender equity raise fertility in the context of Europe (Oláh 2011; Philipov 2011; Toulemon 2011; Neyer 2011). The role of gender equity has been emphasized as an agenda that the national governments in European Union should deal with to raise fertility.

Gender equity is a complex concept which is beyond the unidirectional, sameness-based concept of gender equality. Levels of gender equity are determined by an evaluation of social, political, and reproductive rights, based on values of women and men in a society under study (McDonald 2000b). Since gender equity concerns perceptions of fairness and justice, it has been pointed out that the effects of gender equity on fertility can be indistinguishable (Neyer et al. 2011). Thus, Neyer and her colleagues consider gender equity as a baseline concept for gender equality and re-conceptualize gender equality as “it captures the gender-equality-relevant meaning of employment, care, financial resources, and family work” (p. 4). It is suggested that various dimensions of gender equity may play out differently for fertility intentions at different parities (*ibid.*). Their reconceptualization of gender equality is useful for my study in that it accounts for diverse dimensions of the subject. McDonald’s theory has also stimulated many recent empirical studies across the unit of analysis including macro-level and micro-level that concerns gender equity as a determinant of low fertility (Balbo et al. 2013; Mills 2010). The below section discuss empirical evidence and what have been used as measures of gender equity.

#### *Empirical evidence and measures of gender equity*

Many European empirical studies, drawing on the theory of gender equity (McDonald 2000a; 2000b), examined the effects of family-level gender equity, focusing on gender roles (Mills et al. 2008; Oláh 2003; Tazi-Preve et al. 2004). Oláh (2003) combined the division of housework and childcare work in order to measure gender relations at the family-level, based on data taken from

the Hungarian Fertility and Family Surveys of 1992/93. The results suggested that women in couples who distribute domestic tasks more equally have higher the second-birth intensity. This concurs with the work of Tazi-Preve et al. (2004), who showed the detrimental effects of unequal distribution of household labor on fertility in Austria. Following these empirical studies, Mills et al. (2008) also used distribution of household labor as a measure of gender equity at the family level in Italy and Netherlands. They found that an unequal division of household labor links to lowered fertility intentions in low-fertility setting (e.g., Italy). Their empirical evidence suggests that the effects on unequal division of daily household labor on women's fertility intentions are dependent upon women's role conflicts, such as work outside the home.

Likewise, in the context of the United States, Becker and Moen (1999) found that conflicting roles between parenthood and paid work, resulting in higher role status, produces a strain on women, thereby playing a role in decreasing fertility intentions. Positive relationship between household gender equity and fertility were also supported in the U.S. (Torr and Short 2004). Household gender equity is measured as operationalizing the division of household labor between couples. It is important to note that the authors included a measure of gender ideology as another layer of gender equity because it can influence feelings of overwork and fertility (p. 117). Although neither men's egalitarian gender ideology nor women's egalitarian gender ideology was found to be significant in their analyses, further investigation of unmeasured dimensions of gender ideology will contribute to improving measures of gender equity.

Recently, Neyer, Lappegård, and Vignoli (2011) operationalized gender equality, considering gender equity not only within the family but also outside the family. They classify gender equality into four dimensions, including gender equality in employment, financial resources, childcare, and family work (p. 8). They differentiate the measures for the division of

household labor and for childcare tasks, and these are estimated from men's involvement (no involvement vs. much involvement) in family work. Respondents' satisfaction with the division of household work and childcare was included as a measure of gender equity. This is an exceptional study that recognizes the importance of women's labor force participation and their capability to choose between work and family, which has often been viewed as work status. However, their measures overemphasized women's employment status and economic independence.

Reviewed literature reveals that the effects of women's work and gender division of labor on fertility are mediated by institutional arrangements, social structure, and other related individual factors, including socioeconomic resources. In addition, measurements of gender equity vary substantially and have not clearly reflected the purpose of the theory. Recently, McDonald contends that "the purpose of gender equity theory is to provide an explanation for observed differences in fertility across countries. While the theory has often been applied to investigate fertility across individuals within a single context, this is not its purpose" (McDonald 2013: 985). This comment can be interpreted that we need a more adequate theoretical background for examination of individual-level fertility variations.

This study is not based on the macro-level analyses that McDonald centers upon in his theory. Although McDonald acknowledges the limitations of his theory in terms of its application to micro-level investigation, his arguments about the low level of gender equity within the family provides insight for fertility studies examining individual-level variations. His arguments lead us to postulate about how individual countries can emerge as the ones with lowest-low fertility via fertility variations across individuals within this context. Examination of individual fertility differentials in a country is called for to explore individual resiliency leading

to a higher fertility, against the institutional context forced to lowest-low fertility. In this regard, we should consider what constitute a “childcare-friendly or family-friendly” environment—that is, one that is conducive to families of, potentially, two children.

### *Family support and fertility*

Recent demographic research has developed a theoretical framework that focuses on the relationship between social capital and fertility. Social capital refers to the available resources that people have to gain access via their social networks to reach their goal (Bühler and Philipov 2005). Social capital resources range from monetary support, to informal child care arrangements, to emotional support and advice (*ibid.*). The social capital of the family, which is the relationship between children and parents, is the most important resources (Coleman 1988).

People may rely more on support from social networks, especially when the state and other relevant social institutions do not provide appropriate support for people in need (Philipov et al. 2006). A body of empirical studies found supportive influence of social capital on fertility intentions. Hank and Kreyenfeld (2003) examined the role of the access to informal care arrangements, measured by a dichotomous variable that equals 1 if the respondent’s parents live in the same town, and 0 otherwise. They found that, in western Germany, informal care from the respondent’s parents significantly increases the probability of entering parenthood. Along this line, Bühler and Philipov (2005) also found, in Bulgaria, a positive impact from the availability of ‘important and substantive resources,’ one of three different kinds of resources, on the quantum and the timing of fertility intentions. They provided a detailed discussion of the theoretical background of the role of social capital in demographic behavior and measured social capital by the size of networks, gauged by available resources. Following these measures

Philipov et al. (2006) used the same type of questions about exchange of help for both Bulgaria and Hungary. Social capital was positively associated with the likelihood of the intention to have a second child. It should be noted that most of empirical evidence was supported in Eastern European countries with very low fertility levels, below TFRs of 1.5, and focused on fertility intentions only.

However, there is little research on the relationship between social capital and the realization of fertility intentions. Certainly, it can be hypothesized that the realization of women's fertility intentions can be affected by the role of social capital. Recently, Balbo and Mills (2011) built on and contributed to the literature by investigating the impact of social capital on the realization of fertility intentions. Notably, a negative association between social capital and the realization of fertility intentions was supported in Netherlands. The same negative association was supported with the fertility intention to have a first child as a dependent variable. This recent finding implies a contradictory interpretation of the role of social capital—specifically family support—on the realization of fertility intentions. It has been suggested that this inconsistent evidence might result from the interaction between a family's role and the macro institutional and cultural contexts (Balbo and Mills 2011: 200). Therefore, how does the role of family support play out differently in advanced East Asian countries experiencing lowest-low fertility? Building on reviewed research, this study examines the impact of family support on the realization of fertility intentions to have a second child in South Korea where the institutional support for a family (i.e., social expenditures for families and children) is scarce and the patriarchal gender system still has a marked influence on gender roles. The following section provides an overview of current explanations of declining and persistently low fertility in South Korea.



### *The South Korean Setting*

According to the World Bank, South Korea's indicated GDP per capita—an indicator of a country's standard of living—was \$22,424 in 2011, based on current US dollars. In 2001, it was just slightly above \$10,000 (\$10,655). At the same time, the monthly cost of living for a two-member salary or wage earners' household in South Korea has been rising, from \$1,650 in 2006, to \$2,072 in 2012 (Statistics Korea 2012). Rising incomes and gains in female educational attainment have occurred at the same time as female participation in the labor force has risen. Also, the OECD.Stat reports that South Korean women show the longest average hours worked per week (41.7 hours per week). This increase in labor force participation for women has influenced age-specific fertility rates and has led to increasing trends in age-at-first-marriage. This latter trend is crucial for determining the fertility rate in South Korea, where marriage is a strongly held social norm for childbearing (Eun 2003; 2007). The age-at-first-marriage for both males and females has gradually increased between 1990 and 2011 from 27.8 to 31.9 for males and from 24.8 to 29.1 for females (KOSIS 2012).

Women's rapidly increasing level of educational attainment is astonishing; however, gender expectations for women as the main supporter of household tasks are observed to be associated with low fertility. The Human Development Report by UNDP (2003) reveals that South Korean women spend 4.6 times more time on unpaid work, housework and childcare than men. In comparison, Dutch women spend 2.4 times more and Australian women spend 1.8 times more on unpaid domestic work than their male counterparts. The respective TFRs for Netherlands and Austria are 1.7 and 1.9 in 2012. As reviewed in an earlier section, the unequal distribution of household tasks, a standard measure of household gender equity, is found to be

associated with low fertility. These results may indicate that high demands on family, especially on women, are closely related to lowest-low fertility in South Korea.

Likewise, a lack of institutional support for children and working-women should be considered in relation to low fertility in South Korea. The OECD Family Database reveals a striking report about public spending on family benefits. Public spending on family benefits refers to financial support for families and children, including child-related cash transfers to families with children, public spending on services for families with children, and financial support for families as provided through the tax system (OECD 2012). On average, OECD countries spend 2.6% of their GDP on family benefits with substantial variations across countries. Public spending in this area for South Korea is mere 1% of GDP, which is the lowest among OECD countries. Conversely, Northern European countries (e.g., Ireland, Luxembourg and the United Kingdom) are in the group with the highest level of public spending on family benefits—around 4% of GDP. Many demographic studies have argued that unless current conditions with patriarchal customs and attitudes embedded in social institutions— including family and the workplace— are replaced with family- and child-friendly environments, very low fertility will remain the trend (Chang 2003; Chung 2009; Eun 2007; Frejka et al. 2010; Jones 2011; Kim 2005).

Taken together, it appears that the rising cost of living, increased investments needed for children, women's role as the main caregiver for household responsibilities, and the lack of institutional support for children and family all come into play in creating difficulties with regard to balancing demands of work and family. However, some studies that have emphasized the effects of women's overwhelming role conflicts on fertility in South Korea have yet to identify the best measures of gender equity—instead relying solely upon the gender division of

household labor. As suggested in this paper, diverse dimensions of gender equity should be included and properly measured in order to better understand the link between gender equity and the issues of low fertility.

### *Conceptualization of micro-level gender equity*

My operational definition of micro-level gender equity (MLGE) derives from the concept of gender equity McDonald (2000a; 2000b; 2013). Building on McDonald, I will expand the concept of gender equity by solidifying it to micro-level gender equity because I am looking at individual experiences and attitudes associated with gender roles and women's household decision-making. Micro-level gender equity is a multifaceted concept that concerns individuals'—mainly women's—general experiences and attitudes toward gender roles in a given society. It refers to women's experiences associated with gender roles and expectations that encompass diverse domains of one's life. Thus, MLGE should be understood more thoroughly by integrating women's experiences and attitudes—not based solely on the equal distribution of housework between husbands and wives. I incorporate women's attitudes toward marriage and household gender expectations, and women's household decision-making. These new elements are closely associated with women's experiences and reflect their perceptions of gender equity in the institution of the family.

A significant difference between my study and previous empirical studies examining the role of gender equity at the micro-level, building on McDonald's theory, lies in its extended attitudinal and experiential measures of micro-level gender equity. MLGE will uncover the ways in which married women become resilient toward the institutional shift that tends toward lowest-fertility. A large body of empirical research has studied the gendered division of domestic

labor between husbands and wives as a single measure of gender equity and has found that a more equal distribution of housework between husbands and wives is associated with a higher probability of having a second child or at least additional fertility intentions (i.e., Cooke 2009; Mills et al. 2008; Oláh 2003; Short and Torr 2004; Tazi-Preve et al. 2004). However, I measure MLGE more inclusively with women's reported gender experiences, including attitudes toward marriage, household decision-making, housework hours per week, and level of satisfaction with their husband's involvement in housework. It should be noted that women's experiences and attitudes toward gender roles and gender stratification within a given society do not stem solely from their experiences regarding division of housework with their husbands. In this regard, my measures of micro-level gender equity will contribute to the idea that gender equity is very complex (Neyer et al. 2011).

## DATA

This study draws data from the Korean Longitudinal Survey of Women & Families (KLoWF), conducted by the Korean Women's Development Institute from 2007, 2008 and 2010. Using a stratified, two-stage probability sampling based on the 2005 South Korean Census districts, a total of 9,068 households, containing approximately 10,000 women between the ages of 19 and 64, are being surveyed. Seven thousand, eight hundred and eighty-three respondents have provided for all three waves since the first wave (among 9,997 respondents). I confine my interest to married women who age from 19 to 40 years old in 2007 only since fertility intentions and outcomes are greatly affected by women's reproductive years.

For the sampling stage, 26,000 (10%) of the enumeration districts of the South Korean Census in 2005 were selected. Within these regions, 1,700 primary sampling units were selected,

based on urban/rural residence, number of workers by industry, and household numbers according to accommodation type. For secondary sampling units, eligible households were selected according to household distributions by the number of household members, the age of household head, and the sex of household head, via probability proportional to size samplings. Households were selected through systematic random samplings. Also, if there was no eligible woman of ages between 19 and 64 in selected households, following households were surveyed instead.

## VARIABLE MEASUREMENT

The *dependent variable*, which combines fertility intentions and outcomes, is a three-tiered measure of women's fertility goal achievement concerning whether or not respondents meet their fertility intentions of having a second child. I have constructed this 'fertility goals' variable by combining women's responses about fertility intentions and their actual childbearing experiences during a period of time that encompassed three surveys (36 months in all). Three categories include 'met fertility goal,' 'unmet fertility goal,' and 'unplanned fertility.' In the context of lowest-low fertility, do the very low fertility outcomes actually match the desires of women with high human and social capital? Or, might institutional forces be at work to cause a different sort of mismatch between fertility intentions and outcomes?

### - *Micro-level gender equity*

As I discuss in the literature review section, I distinguish my measures of micro-level gender equity by focusing on different aspects of women's experiences and perceptions of the gender system. I will test attitudes toward marriage, women's household decision-making abilities,

women's absolute number of housework hours worked, and the degrees of their satisfaction with their husbands' housework participation as different dimensions of micro-level gender equity.

Attitudes toward marriage in the literature on low fertility have been included in the areas of studies that focus on individualism (i.e., the second demographic transition theory) and have been classified from family-oriented attitudes to individual-oriented attitudes. Also, one can expect that attitudes toward marriage are associated with the idea of micro-level gender equity. Individual-oriented attitudes over family-oriented attitudes can be assumed to reflect more egalitarian ideas of gender equity. I believe the following four items concern the importance of marriage as a significant marker for one's life course. These items include: "Everyone must get married," "(I) must marry someone with a similar family background (homogamy)," "It is good to marry early," and "It is good to have children early when married." All items state the meaning or significance of marriage and having children in different ways, and have different focuses. Constructing a composite measure may better reflect various aspects of marriage and may indicate current general perceptions about marriage. Responses to all four items are recoded to either 'agree' or 'disagree' with the statements. I then construct a composite variable. An alpha coefficient value (0.66) is acceptable for creating a summated scale. The summated scale has been divided by the number of items calculated. The final dichotomous variable distinguishes between traditional and egalitarian attitudes.

Another composite measure of micro-level gender equity is women's decision-making in households. Women's decision-making power is not confined to their reproductive right, but rather, includes diverse domains of family life. It covers children's education, getting a job (both husbands and respondents), a change in jobs (both husbands and respondents), investments and property management, management of living expenses, and leisure activities within the family.

Respondents were asked to answer whose opinion is mostly reflected in those decisions, by providing response categories ranging from ‘mostly my opinion,’ to ‘mostly the husband’s opinion,’ to ‘the couple’s opinion,’ and to ‘together with other family members’ opinions.’ I recoded each item as a dummy variable, coded 1 for ‘mostly my opinion’ and 0 for ‘other responses.’ A composite measure of these eight items indicates a Cronbach’s alpha of 0.77. The final variable is classified into three categories, including low, moderate, and high, based on the bottom 25 percent, the middle 50 percent, and the top 25 percent, respectively.

In addition to these two composite measures, I will include both objective and subjective aspects of the division of household work and childcare. The division of household labor between husbands and wives, measured by the relative shares for wives, has been used as a measure of gender equity in households (i.e., Oláh, 2003; Torr and Short 2004). I select the absolute number of housework hours for women as a measure of micro-level gender equity over the relative shares for wives for the following reason: the average of shares for my sample is 85 percent. Also, the means of housework hours (2.5 hours per week) for husbands do not have a significant difference, whether or not wives are employed ( $t=-.52$ ,  $p=.602$ ). Given the very small amount of housework time for husbands and its small variations, I believe that the actual amount of housework hours has the advantage of capturing women’s micro-level gender equity. I expect that women who spend more hours doing housework probably have greater domestic responsibilities, which will be associated with ‘unmet fertility goal’ rather than ‘met fertility goal.’ Last, wives’ satisfaction with husbands’ involvement is included as a subjective measure of the division of housework. Women’s micro-level gender equity can be different depending on their satisfaction and attitudes, regardless of the actual housework hours for husbands.

- *Family support*

My measure of family support refers to the availability of help with domestic works and of childcare provided by family members, including the respondent's parents, the respondent's parents-in-law, the respondent's children or extended family members. The variable is based on a combination of answers to three questions about the availability of domestic work and childcare: "Do you currently have any domestic helpers other than you and your husband? If yes, what is this person's relationship with you?" I selected relationship categories that can be categorized as aforementioned family members, and this excludes employed neighbors or domestic help, including babysitters. The second question is, "Does your father or mother look after your child(ren) for an hour or longer per week?" Finally, the third question is, "Does your father-in-law or mother-in-law look after your child(ren) for an hour or more per week?" I constructed a binary variable of family support that equals 1 if the respondents said yes to at least one of these three questions and 0 otherwise. I believe my measure is able to better capture the availability of family support than measures used in previous studies (i.e., whether the respondent's parents are alive (Del Boca 2002), or whether the respondent's mother is alive and lives in the same town (or municipality) (Hank and Kreyenfeld 2003; Rindfuss et al. 2007, respectively)).

- *Other variables*

Socio-demographic variables, such as respondents' age group, education, employment status, sibling size, and husbands' monthly income are included as controls in the analyses. Fertility is closely tied to the effect of age because reproductive age is time-limited (Morgan 1996). Age is operationalized as three dummy variables: less than 30, between 30 and 34, and 35 or above. I



see that ages younger than 30 are earlier ages for fertility in South Korea given the fact that in 2011 the average age of a first birth for women in that country was 30.25 (Statistic Korea 2012).

The effects of women's employment and education have been emphasized in theories of fertility transition, including Becker's neoclassical theory and the second demographic theory (Becker 1981; Lesthaeghe 2010; van de Kaa 2002). The direct and indirect cost of childbearing and childrearing are closely tied to the fertility decision. In some studies focused on the relationship between gender equity and fertility, employment was seen as a part of gender equality because it provides a source of economic independence so that it relates to the ability "to form and maintain an autonomous household" (Neyer et al. 2011: 9). Employment is operationalized as a dummy variable coded 1 for 'employed' and 0 for 'unemployed.' I measure education as a dummy variable coded 1 for 'bachelor's degree or higher', and 0 for 'below a bachelor's degree.' See Table 1 for an overview of the characteristics of the sample.

## PRELIMINARY RESULTS

### - *Fertility goals*

Of all married women considered in the analyses regardless of their current number of children, 32% reported that they intended to have a child in the near future and would achieve that status by the time of wave3 (Table 2). This compares to 54% who intended to have a child but did not achieve their fertility plan by the time of wave3. However, as discussed, I find important differences across women's parity. Of childless married women who reported that they intend to have a child, only 49% of them achieved their fertility goal, while a substantial proportion (31%) did not achieve their fertility goal by the time of wave3. Married women with one child indicate different outcomes. Here, 59% achieved their fertility goal, whereas 32% did

not achieve their fertility goal even though they intended to have a child. No more than 10% gave birth when they did not plan to have a child. Among women with two children or more (the majority of them have two children) only about 30% achieved their fertility goal, while 42% of them did not achieve their fertility goal even though they planned a birth.

### *Preliminary multivariate analysis*

Table 3 reports the logit likelihood of the fertility intention to have another child in the near future among married women of age 40 or younger with one child. I found some support for my hypotheses concerning the role of micro-level gender equity. There is indeed a significant negative effect for second-child fertility intentions. Women with a high level of women's decision-making ability in households are less likely to intend to have another child than women with a low level of decision-making ability.

With regard to the influence of family support on fertility intention, previous studies have shown its positive effect on fertility intentions (i.e., Bühler and Philipov 2005; Del Boca 2002; Philipov et al. 2006). However, the results show that the availability of informal childcare or help with other domestic responsibilities from family members is not positively associated with the likelihood of the fertility intentions of mothers of a child. The results also did not support the negative association between social capital and fertility intentions (Balbo and Mills 2011).

Looking at socio-demographic effects on fertility intentions, age is found to have a significant effect on fertility intentions, as expected. I find that the likelihood of having fertility intentions is much lower for women of ages between 35 and 40 than those of ages between 30 and 34. Other control variables, including respondent's education, and respondent's sibling size, were found to not be significantly associated with fertility intentions.

### *Planned multivariate analyses*

I plan to estimate how micro-level gender equity and family support predict the likelihood of reaching married women's fertility intentions to have a second child, controlling for socio-demographic variables within the three-year period. Using multinomial logistic regression, I expect to find that longer hours spent on housework will lower the likelihood of women meeting their fertility goals within three years. Also, I anticipate that married women with available family support are more likely to have a higher likelihood of realizing their fertility intentions, compared to those without available family support.

By comparison, I also plan to estimate the effects of micro-level gender equity and family support, using a different analytical method, the bivariate probit regression model. This analytical method is suggested from previous studies on the relationship between fertility intentions and actual fertility, examining the effectiveness of measures of fertility intentions as a predictor for demographic research (i.e., Balbo and Mills 2011; Philipov et al. 2006; Rindfuss et al. 2007). The model will be composed of a binary dependent variable (i.e., having a child or not) observed only for women who had fertility intentions during the preceding wave and with the same types of explanatory variables as described above. Comparing two models will enable me to explore whether and how micro-level gender equity and family support work differently or similarly for two different dependent variables. This study, in turn, will contribute to the literature by suggesting empirical support for the role of micro-level gender equity and family support in the institutional context of lowest fertility in East Asia.

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**Table 1 Descriptive statistics of independent variables for married women of age 40 or younger in South Korea**

Variable	Minimum	Maximum	Mean Or percent	SD
Age				
Less than 30			20	
30-34			33	
35-40			47	
Employment (employed)			29	
Education (college degree +)			32	
Attitudes toward marriage (egalitarian)			27	
Women's decision-making ability				
Low			39	
Medium			32	
High			29	
Husband's monthly income	20	2000	273.71	134.71
Ln husband's monthly income	3.00	.7.60	5.51	.45
Sibling size	1	13	4.00	1.58
Satisfaction with the husband's involvement in housework (satisfied)			30	
Wife's housework hours per week	0	72	16.23	13.60

NOTE: Percentages are weighted. Means are unweighted. N=674.

Source: Korean Longitudinal Survey of Women & Families, 2007(wave1)

**Table 2 – Fertility goal achievement by the number of children of the respondent at the time of wave1**

	Number of children at wave1			Total
	Childless	1 child	2 children or more	
Achieved fertility goal	.49	.59	.30	.32
Unmet fertility goal	.31	.32	.42	.54
Unplanned fertility	.21	.10	.28	.14
N	495	381	143	1,019

Note: Percentages are weighted. The number of cases is unweighted.

**Table 3 Preliminary logit regression of micro-level gender equity among married women of age 40 or younger with *one child***

Variable	Coef.	S.E.
Age (relative to 30-34)		
Less than 30	.420	0.27
35-40	-1.380***	0.27
Employment (employed)	-.335	0.28
Education (college degree +)	.327	0.26
Ln husband's income	-.150	0.27
Sibling size	-.102	0.08
Attitudes toward marriage (egalitarian)	-.110	0.25
Women's decision-making ability (relative to low)		
Medium	-.351	0.25
High	-.615*	0.29
Satisfaction with the husband's involvement in housework (satisfied)	-.378	0.25
Wife's housework hours per week	-.005	0.01
Family support	.299	0.28
Constant	1.878	1.52
F-test		4.90

Note: + p<0.1 \* p<0.05; \*\* p<0.01; \*\*\* p<0.001