

Research in Brief



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Fertility Intentions and Fertility Plans, and Their Policy Implications

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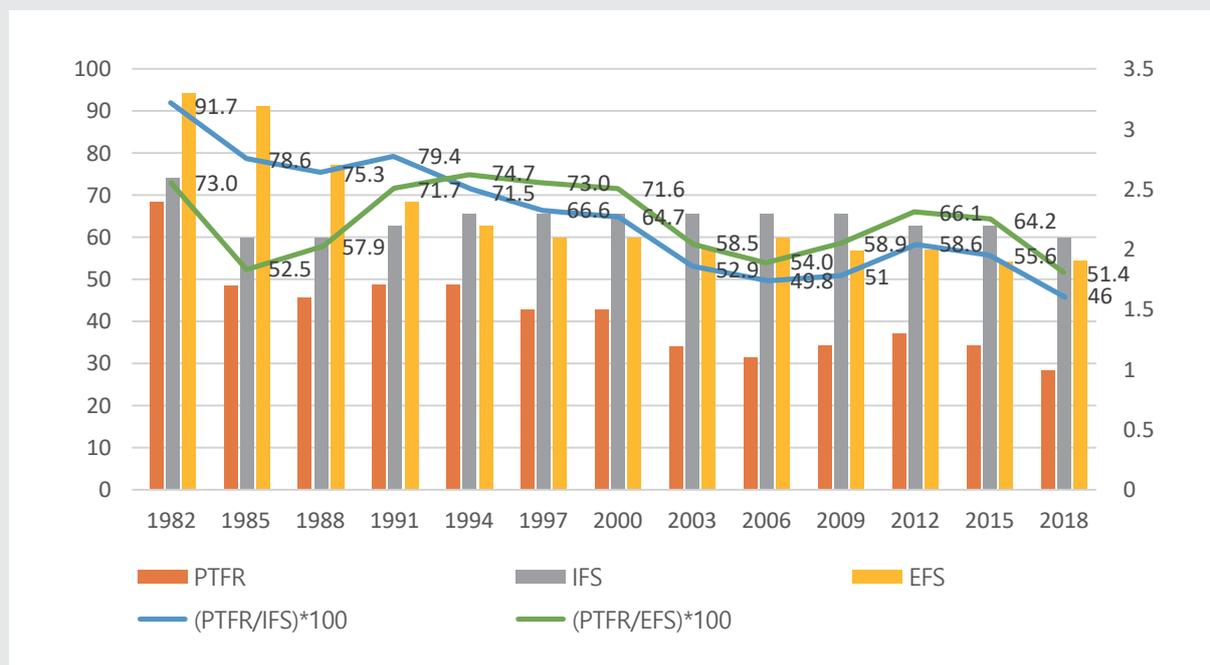
Introduction

Korea has recently shifted the focus of its population policy away from raising the total fertility rate to addressing the socio-structural factors of low fertility, toward a more encompassing goal of promoting the quality of life throughout the life course (Fourth Basic Plan for Low Fertility and Aging Society, December 2020).

The rationale behind such a shift in policy approach consists in the need for narrowing the gap between the desired fertility and the actual fertility, the idea that individuals' quality of life can improve by realizing in life their desired fertility levels.

Both the ideal number of children and the expected number of children have, since as early as 1982, declined to below the period total fertility rate (see Figure 1). With the shift in the focus of Korea's population policy to helping people realize their desired fertility, the need has grown for concrete research into fertility intentions and fertility planning and into the demographic and socioeconomic factors that are at play in the process of women forming fertility intentions and realizing them. Korea's policy on low fertility should be implemented, drawing on such research efforts, in such a way as to do away with factors that hamper people from realizing fertility intentions.

[Figure 1] Ratio of the ideal number of children (and expected number of children) to the period total fertility rate: 1982~2018



Note: Ideal number of children/expected number of children, as reported by married women 30~34

Source: The ideal number of children and the expected number of children as estimated in the National Survey on Fertility and Family Health and Welfare (1974~2018); the period total fertility rates are from the Korea Statistical Information Service; Y, Shin et al. Realization of Fertility Intentions and Fertility Forecasting. Korea Institute for Health and Social Affairs (2020)

This study discusses the mechanism by which childbearing intentions and plans come about, the extent to which fertility plans actually translate into childbirth, and the predictive validity of fertility intentions and fertility plans.¹⁾ This study used data collected from an online survey of married women aged 25~39 to test the predictive validity of the theory of planned behavior (TPB) and traits-desires-intentions-behavior (TDIB)—models that depict the process by which fertility intentions and fertility plans lead to childbearing. This study also used data from the 2nd-to-8th waves of the Korean Longitudinal Survey of Women and Families to identify to what extent fertility intentions are realized and what factors are at play in the process of women translating their fertility intentions into reality. In addition, the predictive validity of fertility intentions and fertility plans were tested by means of comparing the ideal number of children and expected number of children (as measured in the National Survey on Fertility and Family Health and Welfare for the years 1974~2018 and the Population Census for the years 2005, 2010, and 2015) with the completed family sizes of different cohorts (as measured in Statistics Korea’s Vital Statistics and Population Projections).

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1) Fertility projections are based mostly on the achieved fertility of past cohorts. In the case of Korea, the achieved fertility of recent birth cohorts tends to deviate from that older cohorts. For this reason, the validity of the achieved fertility estimates from older birth cohorts, as a means of forecasting future fertility, seems limited. This study examines the validity of fertility intentions and fertility as predictors of future fertility trends.



Factors affecting fertility intentions and fertility plans

With the advent of the second demographic transition came to the fore the view that fertility decisions come about in tandem with not only material factors but also individual aspirations for gender equality, autonomy, and self-actualization. In consequence, individual preferences have increasingly been looked on as playing a crucial role in fertility decision-making.

The TPB states that the intention to have—or not to have—a child is shaped by a combination of one’s “behavioral beliefs”, “normative beliefs” and “control beliefs.”²⁾ In the TDIB model, actual childbirth is a consequence of a process along which childbearing motives, combined with one’s individual characteristics, psychological attributes and life course developments, lead to the desire to have a child.³⁾ In this process, individuals take available options and resources into account as they form fertility intentions.

The survey questions concerning fertility intentions and childbearing plans were structured using the first wave Generations and Gender Survey (GGS)⁴⁾ and Miller’s Childbearing Questionnaire (CBQ)⁵⁾. This study employed a structural equation model to test the TPB and TDIB models.

Our analysis of the TPB model found the social pressure from parents, friends and relatives—a subjective norm—to be the strongest factor affecting fertility behaviors. A positive or negative attitude toward having a child was the second strongest factor, but with its effect estimated to be only half of the effect of the subjective norm. The perceived control over socioeconomic conditions and government policies is found to have the least effect on fertility behaviors.

In the TDIB framework, the factor affecting fertility behaviors most was fertility plans. Fertility intentions were the second strongest factor. A positive or negative attitude toward having a child was found to be a strong yet indirect, rather than direct, effect on fertility behaviors, which somewhat does not square with the results of existing studies that examine the effect of attitudes toward having children on fertility behaviors in Western societies.

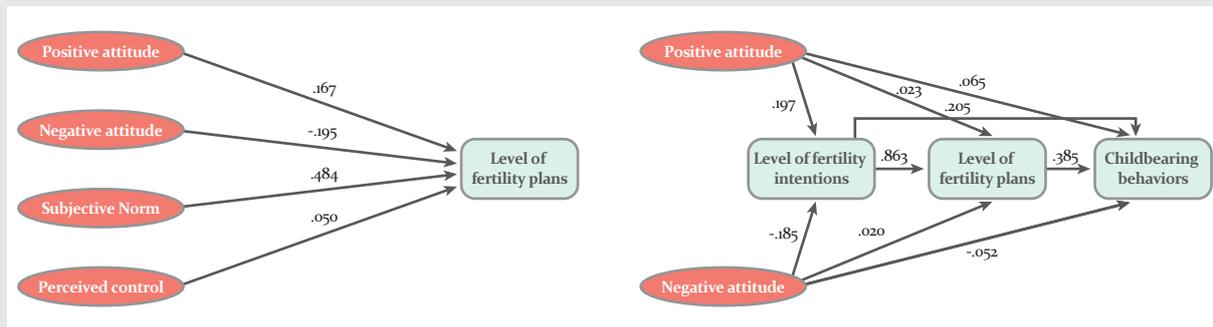
2) Ajzen, I. & Klobas, J. (2013). Fertility intentions: An approach based on the theory of planned behavior. *Demographic research*, 29. pp. 203–232.

3) Miller, W. B. (1994). Childbearing motivations, desires, and intentions: A theoretical framework. *Genetic, Social and General Psychology Monographs*, 120(1)., pp. 223–258).

4) Gender & Generation Programme Consortium Board (2003). *Generations and Gender Survey Core Questionnaire for Wave 1*.

5) Miller, W. B. (1995). Childbearing motivation and its measurement. *Journal of Biosocial Science*, 27(4)., pp. 473–487.

[Figure 2] Testing the TPB and TDIB models by using a structural equation approach



Note: Numbers above the paths are standardized coefficients

Source: Y, Shin et al. Realization of Fertility Intentions and Fertility Forecasting. Korea Institute for Health and Social Affairs (2020)

As mentioned earlier, this study analyzed the realization of fertility intentions in a group of married women aged 15 to 49 who in the baseline survey had reported to have plans to have a child within the “next two years.”⁶⁾

Some 30 percent (288 women) of a total of 959 women who intended to have a child within the “next two years” had a child within that two-year period, while the remaining 70 percent (671 women) did not. Among those who did not realize their fertility intentions, 29.4 percent (197 women) maintained their intention to have a child, 37.9 percent (254 women) forwent childbearing, and 22.9 percent (220 women) remained undetermined.

[Table 1] % of realized fertility intentions

Period	“Within 2-years” intenders	Realizer	Deferrer	Renouncer	Undecided
2008~2010	293(100.0)	94(32.1)	65(22.2)	78(26.6)	56(19.1)
2010~2012	197(100.0)	55(27.9)	43(21.8)	49(24.9)	50(25.4)
2012~2014	162(100.0)	52(32.1)	35(21.6)	43(26.5)	32(19.8)
2014~2016	115(100.0)	39(33.9)	25(22.6)	26(22.6)	24(20.9)
2016~2018	192(100.0)	48(25.0)	28(14.6)	58(30.2)	58(30.2)
All	959(100.0)	288(30.0)	197(20.5)	254(26.5)	220(22.9)

Source: Korean Longitudinal Survey of Women and Families, 2nd ~7th waves. Korean Women’s Development Institute; Y, Shin et al. Realization of Fertility Intentions and Fertility Forecasting. Korea Institute for Health and Social Affairs (2020)

6) It might be that a plan with a time frame is more definite than a plan without a time frame and that a plan for the near future is more realistic than a plan for the far future. In that respect, the Generations and Gender Survey asks participants about their plan to have a child within the “next 3 years.” Meanwhile, the Korean Longitudinal Survey of Women and Families, conducted every other year, allows to find out if a woman who were found in one wave of the survey as having a plan to have child actually had a child by the time of the next wave.

This study used multivariate logistic regression to test the effect of socioeconomic factors on women's plans to have a child within two years. With age, the likelihood of women realizing fertility intentions or postponing having a child declined and the likelihood of forgoing having a child increased. In short, the older the women become, the less likely they are to realize their fertility intentions.

Women in work as compared to non-working women were less likely to realize fertility intentions but more likely to postpone having a child. This is to say that being in work, although found to exert a negative effect on the realization of fertility intentions, influences, in a significant way, women with unrealized fertility intentions to postpone, rather than forgo, having a child.

Women with an educational level of college or higher were more likely to realize their fertility intentions and less likely to forgo having a child than women with a high school education or less. Apart from the general trend of women with high educational levels having a lower birth rate than women of low educational levels, this study suggests that women with a college education or more are more able than their less educated counterparts—presumably because they are better resourced—to realize fertility intentions.

Compared to women from low-income families, middle-income or lower-middle-income women were less likely to realize fertility intentions and more likely, in the case of those with unmet fertility intentions, to forgo having a child. Here, a U-shaped relationship emerged between income and childbearing.⁷⁾

The more recent the survey wave, the higher the likelihood was for women with fertility plans to forgo, rather than postpone, having a child. This suggests that Korea's increasingly aggravating trend of ultra-low fertility rates is due in large part to the increasing trends of women with fertility plans forgoing having a child.

Women who had a child before having plans for having another, compared to childless women, were more likely to realize childbearing and less likely to postpone, or remain undecided about, having a child. Women with a child were more explicit than childless women in choosing between realizing childbearing or giving up on it. It might be that the experience they had had of rearing their children allowed them to become better acquainted with the advantages and disadvantages of having children and more decisive when it comes to deciding whether to realize childbearing or give up on it. On the other hand, childless women, inexperienced with parenting and uncertain of what it would be like to have and raise a child, cannot but be more hesitant in choosing between having and giving up on having a child.

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7) The factors that affect burden of parenting may include "expected quality of children" as well as "economic ability". Middle-income and lower-middle income parents, as compared to their low-income counterparts, may hold higher expectations for the quality of their children. Their higher likelihood of giving up on having a child may be a result of their perceived inability to invest sufficiently in child quality.

[Table 2] The “within 2-years” realization of fertility plans, as measured by multivariate logistic regression⁸⁾

Variable		Realizer	Deferrer	Renouncer	Undecided
Constant		1.418 (0.581)	0.1634 (0.698)	-4.390 (0.699)	0.672 (0.652)
Age		-0.075*** (0.018)	-0.068*** (0.020)	0.093*** (0.019)	-0.031 (0.019)
No. of children	0	-	-	-	-
	1	0.329* (0.171)	-0.546*** (0.207)	1.212*** (0.216)	-0.591*** (0.194)
	2 or more	-0.126 (0.227)	-0.472* (0.255)	1.344*** (0.256)	-0.855*** (0.255)
Economically active	Yes	-	-	-	-
	No	-0.422** (0.167)	0.496** (0.197)	-0.082 (0.191)	-0.379** (0.193)
Educational level	Highschool or less	-	-	-	-
	College or more	0.413** (0.165)	0.241 (0.199)	-0.355* (0.185)	0.134 (0.187)
Household income	KRW0~25 million	-	-	-	-
	KRW25~36 million	-0.123 (0.196)	-0.574** (0.256)	0.517** (0.237)	-0.052 (0.239)
	KRW36~50 million	-0.377* (0.221)	0.146 (0.253)	-0.007 (0.260)	-0.189 (0.256)
	More than KRW50 million	-0.158 (0.238)	-0.297 (0.289)	0.097 (0.284)	0.146 (0.278)
Period	2008~2010	-	-	-	-
	2010~2012	-0.051 (0.210)	-0.100 (0.251)	-0.199 (0.246)	0.277 (0.244)
	2012~2014	0.185 (0.223)	0.003 (0.274)	0.124 (0.267)	-0.098 (0.277)
	2014~2016	0.296 (0.250)	0.010 (0.310)	-0.073 (0.312)	0.059 (0.311)
	2016~2018	-0.124 (0.237)	-0.840*** (0.299)	0.357 (0.273)	0.363 (0.267)

Notes: Figures are estimated coefficients; values in the brackets are standard deviations; *: p<0.1, **: p<0.05, ***: p<0.01

Source: Korean Longitudinal Survey of Women and Families, 2nd ~7th waves. Korean Women’s Development Institute; Y, Shin et al. Realization of Fertility Intentions and Fertility Forecasting. Korea Institute for Health and Social Affairs (2020)

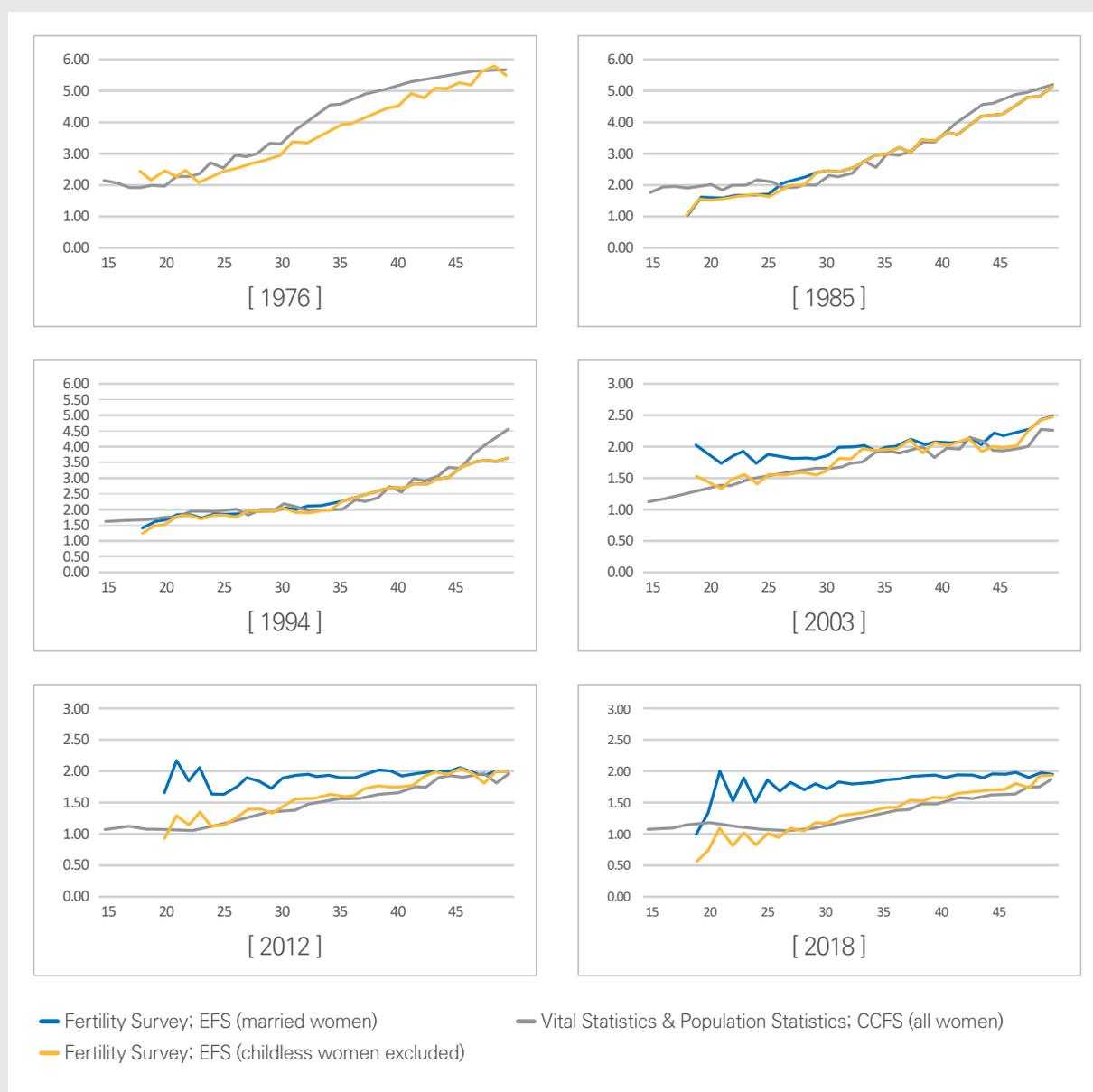
Evaluating the predictive validity of fertility intentions and fertility plans

As the childbearing behaviors of recent cohorts turned out to be at variance with those of older cohorts, it seems important to undertake work to forecast how Korea’s fertility trends will play out, based on such givens as the ideal and desired numbers of children as reported by the recent generation of women. In that regard, it is also part of this study to assess how valid fertility intentions and plans are as predictors of future fertility rates. In light of the trend of late of late marriage and late childbearing, this

8) In the “Realizer” model, among women who intended to have a child within the “next 2 years”, those who had a child within that two-year period were given the value of 1, and those who did not were given the value of 0; in the “Deferrer” model, those who did not realize their fertility intentions within 2 years but who still held fertility intentions were given the value of 1 and the other non-realizers were given the value of 0; in the “Renouncer” model, those who did not realize their fertility intentions within 2 years and who no longer held fertility intentions were given the value of 1; women who were given the value of in the “Undecided” model were those who did not realize their fertility intentions within 2 years and who were not sure or gave no answer when asked if they still intended to have a child.

study calculated the “effective” ideal number of children and the “effective” desired number of children by taking off the proportion of those who were found to be childless at the age of 50 from the women 15 to 49 years of age who had been examined in the Population Census and the National Survey on Fertility, Family Health and Welfare (Fertility Survey). The effective desired number of children as calculated in this study approximated to the cohort-specific completed family sizes as estimated in Statistics Korea’s Vital Statistics and Population Projections (see Figure 3).

[Figure 3] Comparison of the “effective” desired number of children and the cohort-specific completed family size, for years 1976~2018



Source: National Survey on Fertility and Family Health and Welfare (KIHASA) for the years 1974-2018; Korea Statistical Information Service



Concluding remarks

This study finds subjective norm—the social pressure one perceives as coming from significant others—to be the factor most influential in the process of one’s formation of fertility intentions and plans. If its fertility rate continues at the current levels, Korea may well become a society where having one or no child, instead of having two or more children, is taken for granted, in which case its trend of ultra-low fertility can become even more rigid.

The effects of the factors examined were found to vary by parity, which points to the need to take different policy measures for different parity groups. It would be important, for example, to support women with one child in a way to help them ease their burden of parenting, lest their experience of childrearing act negatively in the formation of fertility intentions. Policy efforts should be taken in such a way as to allow childless women to have children and raise them in security, without having to have fear of uncertainties associated with being a parent.

Despite all the efforts exerted over the years to raise its fertility rate, Korea needs to further improve its socioeconomic conditions and public arrangements to better help women realize their fertility plans. The findings of this study point to the need to bolster policy support especially for those from socioeconomically disadvantaged families, who were found to be more constrained than the rest in realizing desired fertility.

The ideal number of children and the desired number of children as measured in this study can be used for developing fertility scenarios for population projections. There is a need for developing a method of using appropriate weights in calculating the gap between the ideal of children and actual fertility so as to increase the accuracy of fertility forecasting. There is a need also to have in place survey data on marriage willingness and to develop an appropriate method for taking them into account, along with fertility intentions, in making population projections.