

Correlates of Contemporary Gender Preference for Children in South Korea

GIYEON SEO , TANYA KOROPECKYJ-COX 
AND SANGHAG KIM 

This study explores gender preference for children in South Korea, where a strong, traditional son preference has recently shifted to a greater preference for daughters or no preference. Using data from the 2008 Panel Study on Korean Children (PSKC; N = 1,836) and 2012 Korean General Social Survey (KGSS; N = 1,355), we examined social and attitudinal correlates of child gender preference, including kinship patterns, perceived prospects for the future, and attitudes about the value of children, including potentially gendered expectations. Logistic regressions of child gender preference showed that mothers receiving support from maternal grandparents reported lower son preference (PSKC). Attitudes about both the instrumental (social, economic) and emotional value of children were also related to son preference. In the KGSS, individuals who preferred sons reported more traditional gender attitudes, positive future prospects, and greater expectations of help in old age and were more likely to be men, older, rural, or Buddhist. There were few differences between those who favored a daughter compared to no preference. Overall, the decline in son preference appears to reflect shifts in intergenerational relations and societal changes that have redefined the meaning and value of children in the context of economic uncertainties, very low fertility, and population aging.

Introduction

The past half-century has seen increased global attention to gender equity as a component of economic development and human rights. Within this context, child gender preferences that have favored having and investing more resources in sons have been criticized as discriminatory and often harmful for girls' health, well-being, and opportunities. In parts of Asia and the Balkans, the stark effects of persistent, traditional gender ideologies have been visible in imbalanced child sex ratios, reflecting both prenatal and

Giyeon Seo and Tanya Koropeckyj-Cox, Department of Sociology and Criminology & Law, University of Florida, Gainesville, FL 32611, USA. E-mail: giyeonseo@ufl.edu. Sanghag Kim, Department of Sociology, Hanyang University, Seoul, 04763, Korea.

postnatal sex-selection (Chun and Das Gupta 2021). The convergence of low fertility and new technologies has resulted in imbalanced sex ratios at birth, leading several countries to ban prenatal sex selection and pursue legal reforms and public education campaigns to reduce the biases that favor boys and men (Das Gupta 2019).

Among countries with historical cultures of son preference, however, South Korea stands out as the only country that has not only reduced its sex ratios but shifted toward a preference for daughters (Chun 2019; Chun and Das Gupta 2021). The 1985 National Survey on Fertility and Family Health and Welfare reported that nearly half (47.7 percent) of Koreans agreed that “sons are necessary,” but this response fell to only 5.7 percent in 2015 (Korea Institute for Health and Social Affairs, 2015). In a more recent national survey, respondents were asked, “If you were to have only one child, would you prefer a boy or a girl?” (Korean General Social Survey, 2017). More than one-quarter of the sample (28.7 percent) said that they wanted a boy, whereas nearly half (47.5 percent) wanted a girl as their only child. This radical change of sex preference has helped to reduce South Korea’s imbalanced sex ratios at birth (Kim 2011)—from 116 boys per 100 girls in 1990 to a balanced sex ratio of 105 in 2016 (Korea National Statistical Office 2016).

Despite this shift, however, South Korea still lags behind other developed countries in measures of gender equality, with the highest gender wage gap and one of the highest employment gaps among The Organisation for Economic Co-operation and Development (OECD) countries; women make only 63 percent of men’s earnings, and only 56 percent of Korean women are employed (OECD 2017). Despite having had a woman president (2013–2017), only 15.6 percent of senior executive ranks in the Korean government in 2018 were occupied by women (Ministry of the Interior and Safety 2019), and women made up only 17 percent of the National Assembly and 3 percent of chief executive officers in South Korean firms (Ministry of Gender Equality and Family 2018). Previous studies have attributed son preference in Korea to gender inequality (Choi and Hwang 2020; Lee 2013), but its decline may reflect a more complicated landscape regarding gender norms and social change. The rapid shift from son preference to daughter preference, despite modest improvements in gender equality, has been similar to that of Japan, where Fuse (2013) has noted a daughter preference among Japanese women with traditional gender attitudes; these traditional women desired the qualities that daughters were expected to bring, particularly companionship over the life course. More recently, Chun and Das Gupta (2021) have identified demographic, socioeconomic, and cultural factors related to modernization (being younger, female, more highly educated, or urban) and the decline of Buddhism and traditional cultural ideas about gender as correlates of decreased son preference. They have argued that strongly gendered expectations of intergenerational supports, combined with persistent workplace inequities, have contributed to

a growing preference for daughters (Chun and Das Gupta 2021), though their analyses did not test this proposition directly.

The current research provides a closer examination of the decline in son preference (and rise in daughter preference) and factors related to more varied gender preferences in South Korea, including persistent son preference among some subpopulations. Moving beyond existing demographic, socioeconomic, and cultural explanations, we explore how child gender preferences are linked to intergenerational support patterns, perceptions of economic prospects, and various dimensions of the value of children (e.g., instrumental, social, emotional). Our analyses test whether daughter preference was related to mothers' closer relations and interdependence with their own parents as well as gendered expectations to provide companionship and elder care. Our findings show a significant link between maternal kin support and lower son preference, though higher endorsement of instrumental, social, and emotional value of children as well as more optimistic future prospects of society were all related to son preference. Our findings suggest that distinct changes in Korean family relations, in the context of economic uncertainty and very low fertility, have redefined expectations for future children, resulting in greater appreciation of daughters and diversity in child gender preferences.

Background

Traditional son preferences, gender discrimination, and economic development

Parental preferences regarding children's gender have been found to influence both fertility behaviors and the well-being of children. In some countries, preferences for sons (or a specific number of sons) have resulted in higher fertility levels and larger family sizes as couples continued to have children to achieve their preferences (Chowdhury and Bairagi 1990). In below-replacement fertility contexts, gender preferences may increase the likelihood of having more than one child, and in some extreme cases, have resulted in sex-selective abortions and skewed sex ratios at birth (Guilmoto 2012; Kim and Fong 2014). Several countries with strong son preference and controlled fertility, including India, China, and South Korea, have recorded pronounced deficits of daughters (Chun and Das Gupta 2021; Edlund 1999); in South Korea, imbalanced sex ratios at birth from the mid-1980s to 1990s were most pronounced among third and higher order births, reaching peaks of over 200 for third births and over 240 for fourth and higher order births in the early 1990s (Jiang et al. 2017). When times have been difficult, sons have received better treatment, further exacerbating gender imbalances (Choi and Hwang 2015). Boys are more likely to attend schools and have been better fed and clothed in places where son

preference and discrimination against girls have been prevalent (Arnold and Kuo 1984; Pande and Astone 2007). Thus, son preference has been tied to gender discrimination (Cain 1993; Vlassoff 1990) and strong patriarchal institutions and norms (Chung and Das Gupta 2007). Further, patrilineal systems have specifically favored sons, defining them as essential for the continuity of the lineage, inheritance, and traditional normative roles and rituals; in turn, sons have been responsible for supporting parents in old age, thus reinforcing their value both socially and economically.

The decline in child gender preferences across countries has been strongly associated with economic development and modernization (Bose 2012; Brockmann 2001; Chung and Das Gupta 2007), which has reduced the factors usually invoked to explain son preference in traditional societies (Abeykoon 1995; Larsen, Chung, and Das Gupta 1998). For example, greater educational and employment opportunities have improved women's economic and social status, leading to parents' indifference to child gender or favoring daughters (Lee 2013). On the other hand, some scholars have questioned the link between economic development and gender preference (Arnold and Kuo 1984; Chung and Das Gupta 2007), and empirical evidence has been mixed. Arnold and Kuo (1984) pointed to the strong influence of Confucian traditions in Asian countries and concluded that relative economic development was less important than culture and tradition in explaining son preference. Das Gupta and colleagues (2003) have also noted that son preference has persisted even amid sweeping economic and social changes in China, India, and South Korea. Similarly, Brockmann's (2001) historical analysis of daughter preference in East Germany has pointed to the type of welfare regime rather than modernization as a major predictor of gender preferences.

Importantly, preference for daughters in South Korea has increased even as economic growth has stalled and improvements in women's status have been modest (Kim and Ryu 2016). For example, according to the World Economic Forum's annual Gender Gap Index, South Korea was ranked 92nd in 2006 but dropped to 108th in 2020, with particularly low rankings for Economic Participation and Opportunity and Educational Attainment (ranking 127th and 101st, respectively; World Economic Forum 2020). Thus, the rising popularity of daughters, cannot be adequately explained by economic development or improvements in women's status, but must be examined within a broader context of changing kin relations and perceptions of children. Our analyses moved beyond factors related to modernization (e.g., age, education, urban residence) as well as traditional gender attitudes and religion (e.g., Buddhism) to examine other social factors related to child gender preferences, specifically, intergenerational kin support, perceptions of future prospects, and attitudes about the value of children, as discussed below.

Women's status, changing kinship systems, and child gender preference

Several studies of the transition of gender preference have emphasized the influence of patriarchal cultures and structures on the relative social and economic status of women (Bose 2012; Kim and Fong 2014). Patriarchal economic systems have long been identified as a major reason for son preference (Arnold and Zhaoxiang 1986): patriarchal systems have defined only men as "breadwinners," providing access to power and economic resources, and have assigned women to domestic and family care work, thus limiting women's social and economic prospects and independence. Furthermore, traditional patrilineal and patrilocal kinship systems, rooted in Confucian values, have meant that daughters were no longer regarded as members of their own families of origin once they married. These Confucian norms, closely tied with Buddhism in South Korea, provided a cultural foundation for traditional son preference (Arnold and Kuo 1984; Larsen, Chung, and Das Gupta 1998). In recent decades, however, social insurance and pensions have decreased elder parents' reliance on sons; at the same time, legal reforms have abolished male family headship and allowed for inheritance by daughters (Chun and Das Gupta 2021; Das Gupta 2019). Das Gupta (2019) has argued that these reforms, along with pervasive media campaigns against son preference, have been more effective than bans on sex selection in reducing South Korean sex ratios at birth.

As patrilineal kinship systems and patrilocal residence have weakened, child gender preferences have shifted away from sons toward increasingly favoring daughters (Chung and Das Gupta 2007; Den Boer and Hudson 2017). With the decline in patrilocality, persistent gender inequalities in the workplace and at home have resulted in a major shift in kinship systems that increasingly favor intergenerational ties with the wife's family. Even as women's educational and employment opportunities have expanded in recent decades, mothers are still expected to bear the majority of childrearing responsibilities and care of the home and family (Cho 2015), often quitting their jobs or reducing work hours. As a result, many women rely on their own parents to assist with childcare. Choi and Hwang (2020) have also noted that mothers with daughters tended to work more hours in the labor force compared to those with sons, further increasing the need for grandparents' assistance with childcare. Studies of relations between married couples and their parents have reported that wives' parents provide more economic and emotional support than the husbands' parents (Han and Yoon 2004), Koreans tend to feel a stronger emotional relationship with their maternal family (Choi and Choi 2012), and wives report more conflict with their parents-in-law (Lee 2011). For maternal grandparents, helping to nurture grandchildren can lead to satisfaction and rewards (Kim 2012) and more frequent contact and close relationships with their adult children (Wood and Liopsis 2007). Although caring for grandchildren may be

a source of stress and burden, grandparents have reported feeling less burdened when their roles involved helping rather than being primary caretakers (Roithmayr 2001). In sum, maternal kinship has increased in response to women's workplace opportunities and disproportionate caregiving expectations, whereas relations with paternal kin have weakened. The current study therefore examined how intergenerational kin support may be related to contemporary child gender preferences.

Changing perceptions of the value of children and expectations of future prospects

With economic development, the value of children for parents has shifted from economic relations to an increased emphasis on emotional connection and companionship (Zelizer 1985), potentially contributing to changes in child gender preferences. For example, decreased son preference in urban areas of China has been linked to changing expectations of children's contributions to eldercare (Loo et al. 2009), and filial piety has come to include emotional bonding, or "communicative intimacy" with both sons and daughters, which is increasingly emphasized in popular discourses that encourage emotional satisfaction in family relationships (Evans 2010).

Conceptually, the value of children has been described in terms of two main dimensions. The instrumental value refers to children as a means to a wide variety of utilitarian ends, including their potential contribution to family income and insurance of old-age support (Nauck 2005), whereas immanent values refer to ends that are desired purely for their own sake, particularly emotional satisfaction related to having and raising children (Friedman, Hechter, and Kanazawa 1994). The instrumental value of children has weakened with modernization due to the increased costs of children, prohibition of child labor, and smaller families (Zelizer 1985). Past research has suggested that people may now favor daughters because of their increased instrumental value, related to women's improved status (Lee 2013), but these analyses have overlooked the decline in the instrumental value of children more generally and their increased emotional value. The shift in child gender preferences in South Korea, therefore, may reflect this transition in the meanings and value of children away from economic considerations toward emotional ties, particularly for daughters or for all children regardless of gender.

Studies of the value of children have highlighted substantial differences in gender roles and expectations for sons and daughters (Amato, Rossi, and Rossi 1991; Kim and Fong 2014), although these observations have not been connected explicitly with the shift in child gender preferences. Sons have been traditionally expected to provide economic and social value (i.e., instrumental value), whereas daughters have been regarded as a source of emotional support and companionship, especially when they

are young and living with their parents. Rising daughter preference in South Korea, therefore, may not signal their increased instrumental value. Rather, it may reflect the general decline in children's instrumental value, and a greater appreciation of daughters' emotional value. Childbearing decisions are increasingly guided by psychological and emotional considerations, including intimacy and connection (Giddens 2005). Children also provide a source of social capital that binds generations together and encourages closer relationships and exchanges of support (Astone et al. 1999; Schoen et al. 1997). As South Korean women increasingly maintain close relationships with their families of origin after they are married, their stronger family ties and exchanges may reinforce expectations for daughters to provide companionship and emotional security to their aging parents (Choi and Hwang 2015).

Modernity has also brought greater insecurity in many areas of social life (Giddens 2016). In the late twentieth century, South Korea's rapid economic growth contributed to a belief in upward mobility for the next generation and continued endorsement of traditional expectations to support one's parents economically in old age, though pensions and social insurance have helped to reduce these pressures. The recent weakening of the Korean economy, however, has made it difficult for current cohorts of young adults to succeed or expect to be richer than their parents. The IMF crisis in 1997 and global financial crisis in 2008 undermined expectations for children's economic futures in the face of economic instability, high unemployment, and housing shortages (Hwang 2000; Lee, Kim, and Choi 2016). This has been reflected in public discourse that has been critical of the class structure and pessimistic about the future. Koreans' perceptions of social justice and prospects for upward mobility have declined, while political distrust has grown (B. Lee 2017). These changes have been evident in the annual KGSS, which has asked about perceptions of children's prospects: "When your children reach the age you are now, do you think their standard of living will be much better, somewhat better, about the same, somewhat worse, or much worse than yours?" In 2009, about half (48 percent) answered that they expected that their children would do "much better" or "somewhat better," but this declined to only 32 percent in 2015. Thus, parents are unlikely to regard their children as a source of future economic support, though their emotional significance may be heightened. Close family ties, especially with daughters, and greater investments in grandchildren may, in turn, represent a strategy for managing risks, uncertainties, and greater longevity in postindustrial societies (Friedman, Hechter, and Kreager 2008).

In sum, both economic development and current uncertainties in South Korea have decreased children's instrumental value and increased their immanent value. Daughters may be increasingly valued for emotional support, regardless of women's relative status and economic opportunities. Concerns about future economic prospects and aging may further reinforce

the closer ties between parents and daughters. At the same time, economic inequalities and cultural variations have resulted in diverse views and child gender preferences, including persistent son preferences among those who are rural or more traditional (Chun and Das Gupta 2021) and daughter preference or no preference among others. The current study explored this diversity in preferences and examined possible explanations.

Research questions and hypotheses

This study used nationally representative survey data from South Korea to test hypotheses about the impact of gendered family relations, perceptions of future prospects for society, and attitudes about the value of children on child gender preference. Specifically, our research questions and hypotheses are outlined below:

1. To what extent is childcare support from paternal or maternal grandparents related to gender preference for children? We expected that stronger ties with maternal grandparents would be related to preferring daughters (or having no preference) in order to continue these emotional connections into the next generation. Stronger ties with paternal grandparents, on the other hand, would reflect more traditional patrilocal and patrilineal norms favoring sons.
2. How are perceptions of the future prospects of society related to the value of children and gender preference? We expected that optimism about future prospects would be related to greater instrumental value of children. Furthermore, those who reported higher instrumental value of children and more positive perceptions of future prospects would express a preference for sons, whereas lower perceived prospects would be linked with a preference for daughters or no preference.
3. How are attitudes about the value of children related to gender preferences for children? Given the persistent gender inequalities in South Korea, we expected that higher assessments of instrumental (e.g., economic, social esteem) value of children would be linked with son preference. Conversely, an emphasis on children's emotional value would be related to preferring a daughter (or having no preference).

Building on prior literature, particularly Chun and Das Gupta's (2021) recent analyses, we controlled for demographic (age in both surveys; gender and marital status in KGSS) characteristics that have been linked with child gender preferences. We also controlled for gender inequality (PSKC), gender attitudes (KGSS), and religion (both surveys) as more traditional cultural beliefs are also related to son preference (e.g., Chun and Das Gupta 2021).

Method

Data

This study utilized data from two nationally representative surveys that asked about gender preferences for children and offered complementary analyses to test our hypotheses. We used 2008 data from the Panel Study on Korean Children (PSKC; <https://panel.kicce.re.kr/engpskc/index.do>) to examine whether gendered family relations were linked to child gender preferences. PSKC, a longitudinal survey of a representative sample of 2,150 mothers with children aged 2–4, asked each respondent about her perceptions of unequal parenting and whether she received childcare support from her own family or her husband's as well as questions about economic hopes for her child and the value of children. Listwise deletion of cases with missing data on the dependent variable (73 cases) or main predictors resulted in a final sample of 1,855. We then analyzed data from the 2012 Korean General Social Survey (KGSS) to further examine gender preferences in the broader population and how they were related to perceived future prospects of society and attitudes about the value of children. This representative survey of 1,396 Korean adults, based on multistage area probability sampling, yielded a final sample of 1,355 after dropping cases with missing data on the main study variables.

Table 1 summarizes sample characteristics and distributions of key variables in the two datasets. KGSS is a representative survey of adults aged 18 and older, whereas PSKC included only married mothers with babies born in 2008, resulting in a younger sample of women only.

Measures

Dependent variable: Son preference. The PSKC measured mothers' gender preference for children by asking, "What was the desired sex of the child when you were pregnant?" Respondents could select one of the following options: son, daughter, or no preference. In the KGSS, gender preference was measured with the question, "If you were to have only one child, would you prefer a boy or a girl?" This question assumed a situation in which a respondent were to "have only one child" in order to exclude the influences of the actual number and sex composition of children. Respondents could select one of the following options: son, daughter, or no preference. The PSKC showed a stronger daughter preference (39.3 percent) than son preference (31.3 percent), with 29.4 percent reporting no preference. In the KGSS, an even larger proportion (43.3 percent) reported a daughter preference, whereas 35.7 percent reported a son preference and 21.0 percent reported no preference. Our analyses examined the correlates of all three responses in both datasets. We found no meaningful differences, however,

TABLE 1 Descriptive statistics of variables

	PSKC. (<i>n</i> = 1,836)		KGSS (<i>n</i> = 1,355)	
	M	SD	M	SD
Age (years)	31.27	3.75	50.32	18.11
Sex (1 = female)	1.0	0	0.55	0.50
Education (1 = bachelor's degree or more)	0.39	0.49	0.28	0.40
Marital experience (1 = ever married)	1.0	0	0.79	0.40
Monthly household income (KRW)	320.43	141.90	338.30	357.52
Working status (1 = working)	0.30	0.46	0.55	0.50
Unequal parenting (1 = most equal, 5 = most unequal)	2.42	0.81		
Traditional gender role (1 = more equal, 5 = traditional)			3.14	0.75
Perceived future prospects (1 = negative, 5 = positive)			3.31	0.78
<i>Value of children</i>				
Adult children are a help to elderly parents ^a	2.73	0.89	3.54	1.17
Future economic hopes for a child ^b	2.93	0.59		
Social value of children ^a	2.93	0.88		
Having children increases social standing ^a			3.17	1.06
Emotional value of children ^a	4.46	0.56		

/...

TABLE 1 (Continued)

	PSKC (<i>n</i> = 1,836)		KGSS (<i>n</i> = 1,355)	
	Percentage	N	Percentage	N
<i>Population size</i>				
Rural area	20.04	368	27.01	366
Town	40.90	751	26.49	359
City	39.05	717	46.49	630
<i>Religion</i>				
Buddhist	16.34	300	29.45	399
Christian	25.16	462	20.30	275
Catholic	10.08	185	9.15	124
No religion	48.42	889	41.11	557
<i>Aid from grandparents</i>				
From father's side	4.96	91		
From mother's side	5.83	107		
No aid from grandparents	89.22	1,638		
<i>Child gender preference</i>				
Daughter	39.32	722	43.32	587
Son	31.26	574	35.72	484
No preference	29.41	540	20.96	284

^a Responses: 1 = Strongly disagree, 5 = Strongly agree.

^b Responses: 1 = Do not care, 4 = Care very much.

between the predictors of daughter preference compared to no preference, so our tables report the predictors of son preference compared to the other two groups combined. (More detailed tables are available upon request from the authors.)

Independent variables. Aid from grandparents. The PSKC asked whether the respondent received aid with childcare during the daytime from a paternal grandparent, from a maternal grandparent, or did not receive aid from either set of grandparents. Among the study sample, 91 respondents (5.0 percent) reported getting help from the father's side 107 (5.8 percent) from the mother's side, and 1,638 (89.2 percent) reported receiving no help from grandparents.

Perceived future prospects for society. The KGSS included two questions on perceived future prospects for society, which asked about respondents' subjective expectations for the future of the economy and politics, respectively. Using a five-point Likert scale, respondents were asked, "Do you think the political/economic conditions in South Korea will be much better, somewhat better, about the same, somewhat worse, or much worse?" The correlation between the two questions was 0.43 ($p < 0.01$). We computed the standardized mean score of these two questions, with higher values indicating more positive perceptions of future prospects.

Attitudes about the value of children. The surveys included questions on several dimensions of attitudes about the value of children and expectations for the child's future. PSKC distinguished two main groups of measures—instrumental and emotional aspects of the value of children. We analyzed these measures separately to capture the conceptually different dimensions of the value of children, measured as the extent of agreement with normative statements. (1) Expectations of help in old age were measured with one item, "Adult children are a help for elderly parents." (2) Future economic hopes were measured with the average score of three items: "I want my child to be rich in the future"; "I want my child to gain fame in the future"; and "I want my child to achieve high social status in the future" (Cronbach's $\alpha = 0.77$). (3) The social value of children was measured by averaging three items: "A married couple must have children"; "Children are necessary to carry the family line"; and "Having children is an obligation to society" (Cronbach's $\alpha = 0.69$). (4) Lastly, the emotional value of children was measured as the average of three items: "Being a parent is valuable in one's life"; "Children help to ensure the stability of the couple"; and "People with children are less lonely in old age" (Cronbach's $\alpha = 0.62$). Responses were measured using five-point Likert scales asking, "How much do you agree with the statement that. ..." Responses ranged from 1 (very much disagree) to 5 (very much agree), except for the questions regarding future economic hopes for a child, which used a four-point scale (from 1, do not care, to 4, very much care). Higher scores represented more

endorsement of each dimension. Based on gendered norms about children, we expected that social value and economic hopes would be more strongly related to son preference, whereas expectations of help and emotional value would be linked to daughter preference.

KGSS included two questions on attitudes about the value of children. Parental expectation of children's support was measured with the question, "To what extent do you agree or disagree that adult children are an important source of help for elderly parents?" The social value of parenthood was measured with the question, "To what extent do you agree or disagree that having children increases people's social standing in society?" Responses used five-point Likert scales, ranging from 1 (very much agree) to 5 (very much disagree); higher values indicated stronger endorsement of the value of children. Although these items were correlated ($r = 0.33$; $p < 0.01$), we analyzed them separately as they refer to conceptually different aspects of the value of children that may be related to child gender preferences: expectations of help for elderly parents may be more relevant for daughter preference, whereas social esteem from parenthood would be linked with son preference.

Gender inequality: Experiences or attitudes. Based on prior research on traditional gender ideologies and gender preferences for children (Chun and Das Gupta 2021), our models controlled for measures of gender inequality. In the PSKC, mothers were asked about their husbands' involvement in parenting, indicating experiences of gender inequality at home. The survey included the following four items: "My husband buys necessary items for the baby"; "My husband pays attention to the habit or condition of the baby"; "My husband feeds or washes the baby"; and "My husband plays with the baby." These items were measured using a five-point Likert scale of frequency, ranging from 1 (never) to 5 (always). The Cronbach's α for these four items was 0.769. A scale of "Unequal parenting" was constructed using the mean of the items' standardized scores, which were reverse-coded so that higher values denoted more unequal parenting roles.

KGSS measured attitudes about gender inequality with five questions that asked, to what extent do you agree or disagree with the following: "A working mother can establish just as warm and secure relationship with her children as a mother who does not work"; "A pre-school child is likely to suffer if his or her mother works"; "All in all, family life suffers when the woman has a full-time job"; "A job is all right, but what most women really want is a home and children"; and "A man's job is to earn money; a woman's job is to look after the home and family." Responses used a five-point Likert scale, ranging from 1 (very much agree) to 5 (very much disagree). The Cronbach's α for these five items was 0.603. The "Gender role attitudes" scale was constructed by taking the mean of the standardized scores for the five items, with higher values indicating more traditional (less egalitarian) gender attitudes.

Sociodemographic and cultural control variables. Our analyses controlled for demographic and socioeconomic factors identified as important in prior studies of child gender preference in South Korea (Chun and Das Gupta 2021), including age, gender (KGSS only), education (1 = college degree or more, compared to no degree or missing), work status (1 = working), marital status (1 = married; KGSS only), and household income (log of monthly household income). Years of age were used in the PSKC since the sample consisted of relatively young mothers (mean = 31.27, SD = 3.75). For the KGSS, we created a categorical age measure (18–39, 40–59, and 60 or older as a reference) as older adults were expected to have more traditional attitudes about son preference. We also included dummy variables for the type of area (rural, town, or city) and religion (Buddhist, Christian, Catholic, or no religion); prior research has shown that rural residents and Buddhists were more likely to express a traditional son preference (Chun and Das Gupta 2021).

Analyses. We used logistic regression models to predict respondents' son preference—both multinomial logistic regressions of all three gender preference options and binary logistic regressions of son preference compared to others. For ease and clarity of presentation, we report the binary logistic regression results, but discuss the multinomial results where they provide insight into the response patterns. Analyses of the PSKC regressed child gender preference on the value of children measures and support from husband's or own parents, controlling for other factors. With the KGSS, we used linear regression models to examine correlates of the value of children, including perceived future prospects for society. We then used logistic regression models of son preference regressed on perceived future prospects and value of children, controlling for other factors. We computed Sobel's test to assess whether future prospects indirectly affected the sex preference through its relation to the instrumental value of children. We also tested interactions of gender and age category with other correlates in the KGSS.

Results

Table 2 presents results of logistic regression models estimating mothers' preference for a son in the PSKC. Mothers who received support from their own family were less than half as likely to report a son preference compared to a daughter or no preference (Odd ratio = 0.430, $p < 0.01$), holding other factors constant; this difference remained consistent across the models and in multinomial logit models of son preference compared to daughter preference or compared to no preference. Unequal parenting and expectations of help from children were not statistically related to child gender preference (in binary or multinomial models). Each of the other measures

TABLE 2 Results of binomial logistic regression models of son preference compared to daughter or no preference (PSKC, N = 1,836)

	Model 1		Model 2		Model 3		Model 4	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Age	0.000	0.014	-0.001	0.014	-0.001	0.014	-0.001	0.014
University (0 = none)	-0.121	0.110	-0.141	0.110	-0.114	0.111	-0.125	0.110
Monthly household income (log)	-0.002	0.015	-0.003	0.015	-0.001	0.015	0.000	0.015
Currently working (0 = not working)	0.039	0.131	0.046	0.131	0.047	0.131	0.014	0.131
<i>Population size (0 = rural)</i>								
Town	-0.045	0.138	-0.040	0.139	-0.049	0.139	-0.066	0.139
City	-0.108	0.140	-0.110	0.141	-0.112	0.141	-0.113	0.141
<i>Religion (0 = Buddhist)</i>								
Christian	-0.453**	0.160	-0.428**	0.160	-0.471**	0.160	-0.463**	0.160
Catholic	-0.382	0.206	-0.366	0.206	-0.347	0.207	-0.392	0.206
No religion	-0.249	0.141	-0.243	0.141	-0.233	0.141	-0.237	0.141
Unequal parenting	0.028	0.063	0.021	0.063	0.045	0.064	0.060	0.065
<i>Aid from grandparents (0 = none)</i>								
From father's side	-0.063	0.255	-0.084	0.255	-0.077	0.256	-0.035	0.255
From mother's side	-0.844**	0.283	-0.839**	0.284	-0.859**	0.284	-0.829**	0.283
Child as help to aging parents	0.045	0.051						
Economic hopes for the child			0.203**	0.062				
Social values for the child					0.259***	0.066		
Emotional values for the child							-0.189**	0.071
Constant	-0.443	0.486	-0.383	0.486	-0.475	0.486	-0.490	0.487
-2log Likelihood	-1127.998*		-1123.007***		-1120.585***		-1124.754**	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

of value of children was statistically significant and positive; higher ratings of instrumental (economic hopes and social value) and emotional value of children were related to greater odds of son preference. Specifically, controlling for other variables, an increase of one point on the assessment of economic hopes raised the log-odds of son preference by 20 percent, whereas a unit increase in social value raised the log-odds by 26 percent compared to daughter or no preference. A one-unit increase in ratings of emotional value also raised the log-odds of son preference by 19 percent. Each measure was strongly related to son preference in multinomial logit models when compared to either daughter preference or no preference, indicating that the main distinction was between those with a son preference and everyone else. Religion was also significantly related to son preference in the binary logistic models: mothers who described themselves as Christian were 36 percent less likely than Buddhists to report a son preference. Multinomial logistic results showed a significant difference among religious groups in son compared to daughter preference—Catholics and Christians were about 40 percent less likely than Buddhists to prefer a son. Mothers with a college degree were more likely than others to report no gender preference, and those with higher incomes were more likely to report no preference compared to daughter preference.

Table 3 shows the results of regression analyses predicting attitudes about the value of children in the KGSS for a representative sample of adults. More positive prospects for the future were significantly related to both attitudes about help in old age and increased social standing after controlling other factors. Attitudes about help in old age were also negatively related to middle age (compared to being over 60) and living in a town compared to a rural area. Seeing children as a benefit for social standing was higher among older respondents (over 60) compared to others, those with less education, currently working, Buddhist versus Catholic, and those reporting more traditional gender beliefs.

Lastly, Table 4 presents results of logistic regression models of son preference with the KGSS. Individuals who preferred sons reported significantly more positive future prospects, and higher endorsement of children's value as a help in old age as well as more traditional gender role attitudes (all significant at the 0.05 level or lower) but not as a benefit for social standing, compared with those who reported a daughter or no preference. In multinomial logit models of gender preference, traditional gender role attitudes and more positive future prospects were both significantly related to son preference compared to daughter and no preference. However, children's value as a help in old age was significantly related to son preference only when compared to daughter preference but not compared to no preference. Son preference was also related to being older, living in a rural area, or being Buddhist compared to Christian or no religion. Gender was not significant in the binary logistic model, but in multinomial logit models men

TABLE 3 Results of linear regression analysis predicting value of children (KGSS, N = 1,355)

	Model 1		Model 2	
	Adult children as help in old age Coefficient	SE	Children increase social standing Coefficient	SE
<i>Age group (0 = 60–95)</i>				
18–39	0.052	0.084	-0.499***	0.081
40–59	-0.171*	0.075	-0.437***	0.073
Female (0 = male)	-0.099	0.055	-0.066	0.054
University degree (0 = no degree)	-0.075	0.068	-0.157*	0.066
Monthly household income (log)	-0.034	0.026	-0.047	0.025
Currently working (0 = not working)	-0.112	0.060	0.129*	0.058
<i>Population size (0 = rural)</i>				
Town	-0.177*	0.077	-0.039	0.075
City	-0.078	0.071	0.052	0.069
<i>Religion (0 = Buddhist)</i>				
Christian	0.119	0.077	-0.024	0.074
Catholic	-0.197	0.101	-0.223*	0.098
No religion	-0.006	0.066	-0.098	0.063
Traditional gender role stereotypes	0.069	0.045	0.129**	0.044
Positive prospects for the future	0.125***	0.032	0.102**	0.031
Constant	0.442**	0.128	0.545***	0.124
F	6.15***		14.10***	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

TABLE 4 Results of logistic regressions predicting son preference compared to daughter or no preference (KGSS, N = 1,355)

	Model 1		Model 2	
	Coefficient	SE	Coefficient	SE
<i>Age group (ref = 60-95)</i>				
18-39	-0.709***	0.187	-0.642**	0.189
40-59	-0.667***	0.163	-0.638***	0.165
Female (0 = male)	-0.209	0.126	-0.229	0.126
University degree (0 = no degree)	0.212	0.160	0.224	0.160
Monthly household income (log)	-0.032	0.056	-0.031	0.056
Currently working (0 = not working)	-0.217	0.137	-0.246	0.137
<i>Population size (0 = rural)</i>				
Town	-0.425*	0.171	-0.446**	0.157
City	-0.466**	0.157	-0.484**	0.150
<i>Religion (0 = Buddhist)</i>				
Christian	-0.404*	0.172	-0.382*	0.171
Catholic	-0.425	0.229	-0.424	0.228
No religion	-0.508**	0.147	-0.497**	0.147
Traditional gender role stereotypes	0.374***	0.104	0.370***	0.104
Positive prospects for the future	0.219**	0.073	0.225**	0.073
Adult children as help in old age	0.145*	0.063		
Children increase social standing				
Constant	0.811**	0.282	0.121	0.064
-2log likelihood	-810.073***		0.802***	0.283
			-810.967***	

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

were less likely than women to report a daughter preference compared to either son or no preference, after controlling other factors. Finally, we found that perceived prospects for the future were linked to gender preference for children through the mediated effect on value of children; Sobel's test (Sobel 1982) of this mediated effect was significant (2.23) at the 95 percent of significance level. In other words, higher perceived future prospects were linked to greater instrumental value of children, and in turn greater likelihood of son preference. We tested interactions between gender and the other variables, and none was statistically significant. We did find one statistically significant interaction with age. Both young adults (18–39) and the middle-aged reported lower son preference than the oldest group. As perceptions of economic prospects increased, the log-odds of son preference increased for those aged 40–59 and 60+, but positive economic prospects further decreased son preference for those aged 18–39, underscoring the broader shift away from son preference among younger adults.

Discussion

This study analyzed factors related to gender preferences for children in South Korea to better understand the recent rapid decline of son preference and increased preference for daughters. Moving beyond explanations based on economic development and gender inequality, we considered the influence of changing intergenerational relations, perceived prospects for the future, and attitudes about the value of children. We expected that stronger ties between parents and their daughters, greater uncertainty about the future, and gendered notions of the value of children would explain current gender preferences for children. We found that childcare support from maternal grandparents was related to a stronger preference for daughters or no preference. On the other hand, higher economic hopes and endorsement of children's social, instrumental, or emotional value were all related to son preference. These results suggest that attitudes about children's value are still linked with traditional cultural norms among some Koreans, whereas others show a move away from parent-focused assessments of children's value, but not necessarily a shift to gendered notions of daughters' emotional or care value.

The strong connections between instrumental value and son preference contradict earlier studies that have attributed greater daughter preference to their increased instrumental value (Brockmann 2001; Choi and Hwang 2020; Edlund and Lee 2013; Lee 2013). For example, Brockmann (2001) had argued that high female labor force participation and growing burdens of aging would increase the value of daughters and expectations for both economic contributions and care. In South Korea, Lee (2013) has connected women's improved labor market status with the decline in sex ratios at birth, and Edlund and Lee (2013) have linked declining son

preference to the decreased utility value of sons compared to daughters resulting changes from in labor and marriage markets. Despite gender-based affirmative action programs that were enacted in 2006, the large gender wage gap and sturdy glass ceiling in South Korea (J. Lee 2017) further argue against an increased instrumental value of daughters. Instead, women's challenges in the labor market and a variety of legal reforms appear to have contributed to a shift in kinship patterns that favor closer ties between parents and their daughters, which in turn have contributed to the shift away from son preference.

South Korea is now a trendsetter in reversing rising child sex ratios (Chung and Das Gupta 2007), and our results support the connection between rising daughter preference and the weakening of the traditional patrilineal, and patrilocal kinship system. The past two decades have seen legal changes in the family registry system, "Hojuje" (abolished in 2005), which historically only recognized men as heads of families and considered female family members as belonging to male household heads. The legal force of these norms has diminished, and the Korean family has transitioned from a patrilineal to a bilateral family structure, with lower expectations of children's (especially sons') economic support for aging parents (Hong and Kim 2005). Policy initiatives to reduce traditional residence rules and increase the flexibility of kinship systems have been central to reducing skewed sex ratios. Das Gupta and colleagues (2003) have argued that patterns of son preference across Asian countries are based on traditional kinship systems in which parents historically have benefited little from daughters; legal reforms and campaigns to change the culture of filial expectations and differential treatment may be similarly effective in other settings to reduce imbalanced sex ratios (Das Gupta 2019; Den Boer and Hudson 2017).

Furthermore, the perceived instrumental value of children has declined, regardless of their gender (Heckman and Walker 1990; Kwon and Kim 2004; Lee and Lee 2004). Our findings suggest that this decrease may stem from pessimism about the future of Korean society. People may be less likely to consider their children (particularly sons) as instrumental assets when their future standard of living is uncertain, and they may be more concerned about having and raising sons in an uncertain economic environment where the pressures on them to succeed would be high. However, son preference appears persistent among those who emphasize instrumental value and those who are older, less educated, or more rural. On the other hand, we did not find evidence linking daughter preference with gendered expectations of their increased emotional value or expectations of care for older parents. We suspect that with some of the lowest fertility rates in the world (Total fertility rate of 0.98 in 2018), Koreans' perceptions of children's value (instrumental, social, or emotional) have been undermined in general, particularly among those most affected by modernization and cultural change.

This study highlights the role of changing gender patterns in inter-generational relations. Although women's economic activity has expanded, they are still responsible for childcare and family, regardless of their economic activity, whereas Korean husbands spend much less time on childcare compared to husbands in Western countries (Cho 2015). South Korean working conditions and culture make it difficult for fathers to spend time at home or contribute to childcare as they are expected to work long hours and socialize after work, which potentially alienates men from their families. At the same time, the heavy expectations of mothers and challenges of combining work and family have led to greater involvement of maternal grandparents in childcare and closer ties with them. Thus, the rise in daughter preference in South Korea may reflect unintended effects of persistent gendered expectations and inequalities for mothers.

Previous studies have shown that son preference has been linked to family structure and processes (Das Gupta et al. 2003; Lavelly, Li, and Li 2001; Pande and Astone 2007), but this has been seldom discussed concerning the recent rise of daughter preference in South Korea. For example, research in India, where son preference has been quite high, has shown that shifts in exogamous or endogamous marriage patterns have played a key role in child gender preference. Pande and Astone (2007) have reported significantly higher son preference in areas of northern India, where marriage is exogamous, and a woman typically becomes a member of her husband's family with less interaction with her natal kin after marriage. The rise of family systems that favor close ties with maternal kin in both South Korea and other parts of India suggests that expectations toward family integration are a significant factor in explaining gender preference in a society. Similarly, Den Boer and Hudson (2017) have argued that the divergence between South Korea's decreased sex ratios compared with increases in Vietnam reflect Korean family law reforms, which attacked the legal foundations of patrilineality (Den Boer and Hudson 2017).

Our results also confirmed that perceptions of the future are linked to attitudes about children's value and, in turn, gender preferences. Currently, Koreans tend to perceive the prospects of the future society negatively (Lee 2017), and socioeconomic inequalities have become severe (S-J. Yoon 2018). The sense of hopelessness, concerns about diminishing prospects for social mobility, and mistrust in politics are regarded as major social problems (Lee and Lee 2016). Childbearing and parenthood may represent a form of future human capital (Schultz 1973) and strategy for reducing uncertainties (Friedman, Hechter, and Kanazawa 1994); in circumstances of stable employment and career opportunities, a child may provide instrumental value through their potential to provide wealth and insurance for aging parents. Under uncertainty, however, it is harder for parents to anticipate the utilitarian value of their children. Our results suggest that the rise of daughter preference may reflect Koreans' pessimism regarding future prospects

for society, leading to very low fertility and prompting greater investment in the immanent value of children and particularly daughters (Arnold and Kuo 1984).

This study is an example of the impact of macrosocial transitions on personal preferences. Prospects for upward mobility are known to significantly affect individual perceptions and attitudes (Kelley and Kelley 2009), and perceived prospects for society's future are related to trust in the potential for social mobility (Gavira 2008; Lei and Tam 2012; Lee and Lee 2016). The correlation of future prospects and instrumental value of children may reflect expectations of social mobility, which in turn may encourage or discourage childbearing (Graham and Picon 2009; Stevens 1981). Our study suggests that through the value of children, perceived future prospects may also affect gender preference and, by extension, future sex ratios, if these preferences shape fertility behavior (i.e., sex selection) in an environment of low fertility.

In traditional patrilineal societies, the value of sons as a source of old-age security has been a prime motivation for son preferences (Kagitcibasi 1982), but this has become less important with the growth of pensions and other social insurance programs. Nonetheless, our findings show that Korean parents still have higher expectations of instrumental value for sons than daughters. In an unpublished qualitative study, Chun (2019) has reported that 88 percent of respondents who expressed a daughter preference identified emotional and psychological values as the main reasons—daughters are more agreeable and more enjoyable to raise and can become lifelong companions. These emotional expectations for daughters, clearly distinct from instrumental values, were also given as reasons among people who preferred daughters back in the 1970s (Chun 2019). Our study suggests that increased daughter preference in South Korea is not related to instrumental value of children, but may be more connected with women's kinship and family care in the context of economic uncertainty and untenable work–family conflicts.

This study has several limitations. First, the lack of support for our hypotheses linking daughter preference with their greater emotional value may be an artifact of limitations in existing measures of the value of children. The PSKC questions about the emotional value of children relied on normative statements, such as, "People with children will be less lonely when they get old" and "I wish my child will be willing to help others." However, children's immanent value may not be adequately captured with these survey items; normative statements regarding children's emotional value still imply traditional obligations toward parents or society which are increasingly criticized and replaced with valuing children for their own sake. Future surveys should consider including more nuanced and child-focused (rather than parent-focused) measures of children's immanent and

emotional value, especially as trends in gender preferences and very low fertility are likely to persist in the future.

Second, this study measured future prospects for society (with regard to politics and the economy) as an indicator of prospects for upward mobility, based on previous work that linked subjective perceptions of social mobility and optimistic prospects for society (Gavira 2008; Lei and Tam 2012). However, perceived prospects of society can be affected by individual factors. Future research on the relationship between societal prospects and gender preference should examine a variety of other, more objective economic and social measures of societal conditions, such as the inequality index, redistribution policy, or employment rates.

Finally, it is notable that only about 11 percent of mothers in the PSKC reported receiving any help from grandparents (from either side), indicating that many mothers bore the childcare responsibilities on their own. Only 5.8 percent of respondents were getting aid from maternal grandparents. Since the PSKC was limited to mothers who had recently given birth, the relatively low percentage receiving aid from grandparents may reflect the specific timing of maternity leave and very early motherhood. Less than 30 percent of respondents reported being in the labor force, but nearly all expected to return as their children grew older (97 percent of re-interviewed mothers indicated that they planned to go back to work). According to the Korean Women's Development Institute (2008), 53.4 percent of Korean mothers were receiving help from maternal grandparents when they utilized kin-provided childcare aid, while 36.9 percent relied on paternal grandparents, which has been interpreted as evidence of the bilateralization of Korean kinship (Lee and Bauer 2013). Thus, further research is needed on mothers of preschool and older children to better understand kinship patterns, childcare, and their relation to child gender preferences.

Son preference, which had been linked to skewed sex ratios, is rapidly changing to a daughter preference or no preference, contributing to a more balanced sex ratio at birth (Korea National Statistical Office 2016). In an environment of persistent below-replacement fertility levels, changes in gender preferences for children may be just one component of a broader ambivalence or pessimism about childbearing; with few economic incentives or supports for parents, preferences and decisions about fertility may rely more strongly on intangible, immanent considerations about kinship and the future.

In conclusion, our findings indicate that increased daughter preference in South Korea reflects the stronger relationships between parents and their married daughters compared to the past. This expansion of maternal kinship has arisen in part as an unintended consequence of the one-sided burdens on mothers with little institutional or government support. For grandparents who maintain close ties with their daughters and provide childcare assistance, their closer ties may create an important source of social capital

and companionship in an uncertain economic environment. The emergence of female-centered kinship may therefore provide a dependable resource to support families, working mothers, and aging parents, although it also raises concerns about rising inequalities and the precariousness of these arrangements for individual families and society as a whole (Oh 2018). Despite some gains in women's opportunities and status, South Korean families appear to be undergoing the early consequences of the gender revolution, as described by Goldscheider, Bernhardt, and Lappegård (2015) with increased opportunities in the public sphere but few substantive changes at home. It is too soon to know whether changing gender relations and more egalitarian attitudes about dual-earner families and shared childcare (S-Y. Yoon 2020) may eventually lead to the expansion of institutional supports, men's greater involvement in family life, and the diminution of child gender preferences or even increased fertility in the future.

Data Availability Statement

The data that support the findings of this study are openly available in the Panel Study on Korean Children (at http://www.welfarestate.re.kr/beluxe_aHXN48/3129) and Korean General Social Survey (KGSS, at <http://kgss.skku.edu/>).

Notes

This work was supported by the research fund of Hanyang University (HY-2017) to Sanghag Kim. An earlier version of this paper was presented at the National Council on Family Relations Annual Meeting in November 2019 in Fort Worth, Texas, USA. Thanks also to the Department of Sociology and Criminology & Law, University of Florida, for support.

1 For the KGSS, missing cases were included in the reference categories (4 for education, 15 for religion), and missing household income was imputed using the mean ($n = 4$). For the PSKC, missing cases for dummy variables were included in the reference category (19 for education, 3 for working status, and 31 for religion), and missing data for household income ($n = 131$) were imputed using mean income.

References

- Abeykoon, A.T. 1995. "Sex Preference in South Asia: Sri Lanka an Outlier." *Asia-Pacific Population Journal /United Nations* 10(3): 5–16.
- Amato, Paul R., Alice Rossi, and Peter Rossi. 1991. "Of Human Bonding: Parent-Child Relations across the Life Course." *Journal of Marriage and the Family* 53(3): 823–824.
- Arnold, Fred and Eddie C.Y. Kuo. 1984. "The Value of Daughters and Sons: A Comparative Study of the Gender Preferences of Parents." *Journal of Comparative Family Studies* 15(2): 299–318.
- Arnold, Fred and Liu Zhaoxiang. 1986. "Sex Preference, Fertility, and Family Planning in China." *Population and Development Review* 12(2): 221–246.
- Astone, Nan Marie, Constance A. Nathanson, Robert Schoen, and Young J. Kim. 1999. "Family Demography Social Theory, and Investment in Social Capital." *Population and Development Review* 25(1): 1–31.

- Bose, Sunita. 2012. "A Contextual Analysis of Gender Disparity in Education in India: The Relative Effects of Son Preference, Women's Status, and Community." *Sociological Perspectives* 55(1): 67–91.
- Brockmann, Hilke. 2001. "Girls Preferred? Changing Patterns of Sex Preferences in the Two German States." *European Sociological Review* 17(2): 189–202.
- Cain, Mead. 1993. "Patriarchal Structure and Demographic Change," In *Woman's Position and Demographic Change*, edited by Solvi Sogner Nora Federici, and Karen O. Mason, 44–60. Oxford: Clarendon Press.
- Cho, Sungho. 2015. "An International Comparative Study of Division of Housework and Childcare within Couples." *The Journal of Women and Economics* 12(1): 163–187 (in Korean)
- Choi, Eleanor Jawon, and Jisoo Hwang. 2015. "Child Gender and Parental Inputs: No More Son Preference in Korea?" *American Economic Review* 105(5): 639–643.
- Choi, Eleanor Jawon, and Jisoo Hwang. 2020. "Transition of Son Preference: Evidence from South Korea." *Demography* 57(2): 1–26.
- Choi, Seulki, and Saeun Choi. 2012. "A Study on Intergenerational Affective Solidarity in Korean Families." *Survey Research* 13(1): 89–112. (in Korean)
- Chowdhury, M.K. , and R. Bairagi. 1990. "Son Preference and Fertility in Bangladesh." *Population and Development Review* 16(4): 749–757.
- Chun, Heeran. 2019. "South Korea Case Study Report on the 'Success Story' of Sex Ratio at Birth Transition." Technical Report. UNFPA Global Programme to Prevent Son Preference and the Undervaluing of Girls: Improving the sex ratio at birth in select countries in Asia and the Caucasus
- Chun, Heeran, and Monica Das Gupta. 2021. "'Not a Bowl of Rice, but Tender Loving Care': From Aborting Girls to Preferring Daughters in South Korea." *Asian Population Studies*. In press.
- Chung, Woojin and Monica Das Gupta. 2007. "The Decline of Son Preference in South Korea: The Roles of Development and Public Policy." *Population and Development Review* 33(4): 757–783.
- Das Gupta, Monica. 2019. "Is Banning Sex-Selection the Best Approach for Reducing Prenatal Discrimination?" *Asian Population Studies* 15(3): 319–336.
- Das Gupta, Monica, Jiang Zhenghua, Li Bohua, Xie Zhenming, Woojin Chung, and Bae Hwa-Ok. 2003. "Why is Son Preference so Persistent in East and South Asia? A Cross-Country Study of China, India and the Republic of Korea." *The Journal of Development Studies* 40(2): 153–187.
- Den Boer, Andrea, and Valerie Hudson. 2017. "Patrilineality, Son Preference, and Sex Selection in South Korea and Vietnam." *Population and Development Review* 43(1): 119–147.
- Edlund, Lena. 1999. "Son Preference, Sex Ratios, and Marriage Patterns." *Journal of Political Economy* 7(6): 1275–1304.
- Edlund, Lena and Chulhee Lee. 2013. "Son Preference, Sex Selection and Economic Development: The Case of South Korea." Working Paper No. w18679. Cambridge, MA: National Bureau of Economic Research.
- Evans, Harriet. 2010. "The Gender of Communication: Changing Expectations of Mothers and Daughters in urban China." *The China Quarterly* 204: 980–1000.
- Friedman, Debra, Michael Hechter, and Satoshi Kanazawa. 1994. "A Theory of the Value of Children." *Demography* 31(3): 375–401.
- Friedman, Debra, Michael Hechter, and Derek Kreager. 2008. "A Theory of the Value of Grandchildren." *Rationality and Society* 20(1): 31–63.
- Fuse, Kana. 2013. "Daughter Preference in Japan: A Reflection of Gender Role Attitudes?" *Demographic Research* 28(36): 1021–1052.
- Gavira, Alejandro. 2008. "Social Mobility and Preferences for Redistribution in Latin America." *Economía* 8(1): 1–42.
- Giddens, Anthony. 2005. "The Global Revolution in Family and Personal Life." In *Family in Transition*, 15th ed., edited by Arlene S. Skolnick and Jerome H. Skolnick, 26–31. Boston: Pearson.
- Giddens, Anthony. 2016. "Modernity and Self-Identity." In Wesley Longhofer and Daniel Winchester (eds.), *Social Theory Re-Wired: New Connections to Classical and Contemporary Perspectives*, 2nd edition, edited by Wesley Longhofer and Daniel Winchester, Chapter 40. Milton Park, Oxfordshire: Routledge.

- Goldscheider, Frances, Eva Bernhardt, and Trude Lappegård. 2015. "The Gender Revolution: A Framework for Understanding Changing Family and Demographic Behavior." *Population and Development Review* 41(2): 207–239.
- Graham, Carol and Mario Picon. 2009. "Who Trusts the System in Latin America: Some Insights from Happiness Economics." Paper presented to Conference on Social Exclusion, April. Notre Dame University.
- Guilmoto, Christophe Z. 2012. "Son Preference, Sex Selection, and Kinship in Vietnam." *Population and Development Review* 38(1): 31–54.
- Han, Gyounghee and Sung-eun Yoon. 2004. "The Bilateralization of the Kinship Relations in Korean Families: Focused on the Intergenerational Exchange." *Korea Journal of Population Studies* 27(2): 177–202 (in Korean)
- Heckman, James J. and James R. Walker. 1990. "The Relationship between Wages and Income and the Timing and Spacing of Births: Evidence from Swedish Longitudinal Data." *Econometrica* 58(6): 1411–1441.
- Hong, Sung-Dae and Chul-Ju Kim. 2005. "The Study on Transformation of Family Structure and Orientation of Family Welfare in Korea." *The Review of Korean Studies* 8(4): 187–208.
- Hwang, Kyung-Sook. 2000. "Korean Society's Changes after IMF Crisis." *Theory and Research in Citizenship Education* 30: 355–378. (in Korean)
- Jiang, Quanbao, Qun Yu, Shucaï Yang, and Jesús J. Sánchez-Barricarte. 2017 "Changes in Sex Ratio at Birth in China: A Decomposition by Birth Order." *Journal of Biosocial Science* 49(6): 826–841.
- Kagitcibasi, Cigdem. 1982. "Old-Age Security Value of Children: Cross-National Socioeconomic Evidence." *Journal of Cross-Cultural Psychology* 13: 29–42.
- Kelley, Sarah. M.C., and Claire G.E. Kelley. 2009. "Subjective Social Mobility Data from 30 Nations." In *Charting the Globe: The International Social Survey Programme 1984–2009*, edited by Roger Jowell and Tom Smith. London: Routledge.
- Kim, Doo-Sub. 2011. "Recent Changes in Sex Ratio at Birth and Simulations on Sex-Selective Reproductive Behavior: With a Special Focus on Youngnam Region." *Korea Journal of Population Studies* 34(1): 159–178.
- Kim, Eun-Jeong. 2012. "Caregiving Reward of Grandmothers Raising Infant Grandchildren and Factors Influencing Their Rewards." *Journal of the Korean Gerontological Society* 32(3): 851–867. (in Korean)
- Kim, Jibum, Jeong-han Kang, Seok-ho Kim, Changhwan Kim, Wonho Park, Yun-Suk Lee, Seulgi Choi, and Sori Kim. 2017. "Korean General Social Survey 2003–2016." Seoul, Korea: Sungkyunkwan University (in Korean). http://kgss.skku.edu/?page_id=39
- Kim, Sung Won, and Vanessa L. Fong. 2014. "A Longitudinal Study of Son and Daughter Preference among Chinese Only-Children from Adolescence to Adulthood." *The China Journal* 71: 1–24.
- Kim, Youngmi, and Yunkyû Ryu. 2016. "A Comparative Analysis on the Structural Determinants of Male Gender Role Attitudes across 26 Countries." *Social Science Research Review* 32(2): 271–299 (in Korean)
- Korea Institute for Health and Social Affairs. 2015. "South Korea National Fertility and Family Health Survey." Seoul, Korea: Korea Institute for Health and Social Affairs.
- Korea National Statistical Office. 2016. "Population Movements Survey." Seoul, Korea: National Statistical Office.
- Korean Women's Development Institute. 2008. "Actual Conditions and Supporting Schemes for Home Based Child Carers." Research Report. Seoul, Korea: Korean Women's Development Institute.
- Kwon, Youngeun and Uichol Kim. 2004. "The value of children and birth rate," *Children's Education* 13(1): 211–226. (in Korean)
- Larsen, Ulla, Woojin Chung, and Monica Das Gupta. 1998. "Fertility and Son Preference in Korea." *Population Studies* 52(3): 317–325.
- Lavelly, William, Jianke Li, and Jianghong Li. 2001. "Sex Preference for Children in a Meifu Li Community in Hainan, China." *Population Studies* 55(3): 319–329.
- Lee, Byoungsoon. 2017. "Causal Analysis of Public Perception on Opportunity Inequality." *Korea Social Policy Review* 24(2): 157–179 (in Korean).

- Lee, Chulhee. 2013. "The Economic Transition and Son-Preference: The Performance of Korean Women in Labor Market and the Sex Ratio." *Korean Applied Economics* 15(1): 219–246 (in Korean).
- Lee, Hayoung and Sooyoung Lee. 2016. "A Study on the Effect of Social Stratification on Perception of Hope: Focus on the Mediating Effects of the Prospect of Upward Mobility and Public Trust in Government." *Korean Policy Studies Review* 25(3): 325–354 (in Korean).
- Lee, Jaerim, and Jean W. Bauer. 2013. "Motivations for Providing and Utilizing Child Care by Grandmothers in South Korea." *Journal of Marriage and Family* 75(2): 381–402.
- Lee, Juhee. 2017. "How to Break the Glass ceiling: Gender-Based Affirmative Action." *Gender Review Solution for Gender Discrimination in Labor Market* 26–33 (in Korean).
- Lee, Wangwon, Moonjo Kim, and Yool Choi. 2016. "Dynamics of Subjective Class Identification and Upward Mobility Consciousness in Korea-Time Trends and Age-Period-Cohort Effects-." In *Conference on Sociology*, 103–124. Seoul: Korean Sociological Association (in Korean).
- Lee, Yeobong. 2011. "Intergenerational Caregiving and Conflict between Daughters/Daughters-in-Law and Their Elderly Parents/Parents-in-Law." *Family and Culture* 23(1): 41–76 (in Korean).
- Lee, Yongbok, and Sohee Lee. 2004. "The Impact of Childcare Services on the Birth Intent of Married Women." *Korean Family Social Welfare Studies* 9(2): 99–133 (in Korean).
- Lei, Jin, and Tony Tam. 2012. "Subjective Social Status, Perceived Social Mobility and Health in China." In Annual Meeting Program of Population Association of America. San Francisco: PAA.
- Loo, Kek Khee, Xiyang Luo, Hong Su, Angela Presson, and Yan Li. 2009. "Dreams of Tigers and Flowers: Child Gender Predictions and Preference in an Urban Mainland Chinese Sample during Pregnancy." *Women and Health* 49(1): 50–65.
- Ministry of Gender Equality and Family. 2018. "Electronic index of government" http://www.mogef.go.kr/io/stt/io_stt_f001.do (in Korean).
- Ministry of the Interior and Safety. 2019. "Personnel Statistics of Local Government Officials." Seoul, Korea: Ministry of the Interior and Safety (in Korean).
- Nauck, Bernhard. 2005. "Changing Value of Children: An Action Theory of Fertility Behavior and Intergenerational Relationships in Cross-Cultural Comparison." In *Culture and Human Development: The Importance of Cross-Cultural Research for the Social Sciences*, edited by Wolfgang Friedlmeier, Pradeep Chakkarath, and Beate Schwarz, 183–202. Hove: Psychology Press / Taylor & Francis.
- OECD. 2017. *Gender Wage Gap (Indicator)*. Paris: OECD.
- Oh, Eunsil. 2018. "Who Deserves to Work? How Women Develop Expectations of Child Care Support in Korea." *Gender and Society* 32(4): 493–515.
- Pande, Rohini P. and Nan Marie Astone. 2007. "Explaining Son Preference in Rural INDIA: The Independent Role of Structural versus Individual Factors." *Population Research and Policy Review* 26(1): 1–29.
- Roithmayr, Stephen. 2001. *Emotional Distress of Grandmothers Raising Grandchildren*. PhD Dissertation. New York University.
- Schoen, Robert, Young J. Kim, Constance A. Nathanson, Jason Fields, and Nan Marie Astone. 1997. "Why Do Americans Want Children?" *Population and Development Review* 23(2): 333–358.
- Schultz, Theodore W. 1973. "The Value of Children: An Economic Perspective." *Journal of Political Economy* 81(2, Part 2): S2–13.
- Sobel, Michael E. 1982. "Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models." *Sociological Methodology* 13: 290–312.
- Stevens, Gillian. 1981. "Social Mobility and Fertility: Two Effects in One." *American Sociological Review* 46(5): 573–585.
- Vlassoff, Carol. 1990. "The Value of Sons in an Indian Village: How Widows See It." *Population Studies* 44(1): 5–20.
- Wood, Suzanne and Poppy Liossis. 2007. "Potentially Stressful Life Events and Emotional Closeness between Grandparents and Adult Grandchildren." *Journal of Family Issues* 28(3): 380–398.
- World Economic Forum. 2020. "Global Gender Gap Report 2020." Cologny, Switzerland: WEF.

- Yoon, Soo-Yeon. 2020. "Integrating Men's Gender Roles and Fertility Attitudes into the Study of Low Fertility in South Korea." In *Korean Families Yesterday and Today*, edited by Hyunjoon Park and Hyeyoung Woo. Ann Arbor: University of Michigan Press.
- Yoon, Sung-joo. 2018. "A Dynamic Study on Income Mobility and Poverty." *Korean Journal of Public Finance* 11(1): 21-48 (in Korean).
- Zelizer, Viviana A. Rotman. 1985. *Pricing the Priceless Child: The Changing Social Value of Children*. Princeton, NJ: Princeton University Press.