Sibling Structure, Birth Order, and Upward Intergenerational Support in East Asia [1]

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Abstract

Objectives

Fertility declines in East Asia have increased the proportion of only children and those with senior birth order, but their impact on intergenerational support behaviors and attitudes remains unclear. The caregiving constraint perspective suggests that individuals without siblings may be more likely to provide care and support strong public assistance due to caregiving stress. Conversely, social exchange theory and Confucian norms predict that only children and first-born might experience a heightened sense of personal obligation to provide care.

Methods

Using data from the 2016 East Asian Social Survey, we examine how individuals' frequency of support to parents and attitudes towards older adult care vary based on sibling structure and birth order. We control for variables including age, gender, education, marital status, parental status, place of residence, and parents' health status.

Results

Our findings indicate that upward intergenerational support varies depending on sibling structure, though its significance varies by the type of support and societal context. Contrary to Confucian norms, first-born sons do not necessarily provide more support to parents compared to later-born siblings. Notably, Taiwan emerges as a major outlier, with distinct patterns in the relationship between sibling structure, birth order, and intergenerational support compared to other East Asian societies.

Discussion

The results highlight sibling structure as a key factor influencing intergenerational support behaviors and attitudes in East Asia, with notable differences across societies. Future research could further investigate the specific cultural and societal mechanisms underlying these patterns, particularly as sibling structures rapidly evolve in this region.

Keywords

Intergenerational relations, family structure, caregiving, gender, East Asia

Introduction

East Asia is undergoing significant demographic transitions, characterized by rapid aging and declining birth rates. This demographic shift has led to an increased proportion of only children and children with fewer siblings (Jones, 2013; Präg et al., 2020; Uchikoshi et al., 2023; Wen, 2023). According to the East Asian Social Survey, the proportion of only children among those aged 20 to 60 has risen from 5.9% to 8.8% in Japan, from 2.9% to 5.9% in South Korea (hereafter Korea), and from 1.5% to 3.0% in Taiwan between 2006 and 2016. In mainland China (hereafter China), as a result of the "one-child" policy, the proportion of only children has surged from 6.0% to 14.3% (authors' own calculation). Given that family members have historically played a significant role in providing old age support in East Asia (Chung et al., 2021; Raymo et al., 2015), understanding how the changing sibling structure affects support for older adults is becoming increasingly important in this new demographic context.

Ample research has found that having a large sibship size reduces one's probability of coresidence with parents, as well as the amount and frequency of contact, and the provision of care and financial support (Chu et al., 2011; Deindl & Brandt, 2011; Guo et al., 2016; Rainer & Siedler, 2012; Yasuda et al., 2011). This pattern arises because the presence of more siblings likely leads to a division of responsibilities, including time transfers and caregiving, among a greater number of potential providers. As fertility rates decline and the duration of shared life between children and parents extends, there are growing concerns that individuals with fewer siblings may face higher caregiving demands for their parents (Alburez-Gutierrez et al., 2021). Conversely, there are also concerns that the older generation might not receive adequate support from family members (Feng et al., 2024). Empirical research from the perspective of care recipients has indeed found a positive correlation between the number of children and the amount of help received (K.-L. Chou, 2010; Spitze & Logan, 1990). However, a few studies also indicated a ceiling effect, suggesting that beyond a certain number of children or family members, additional individuals may not significantly increase the level of care provided (Hou et al., 2022; Zimmer & Kwong, 2003).

With a few exceptions, research directly comparing the patterns of upward intergenerational support between only children and those with siblings is limited. This likely reflects the fact that having only one child was not as prevalent in the past as it is now (Chanfreau & Goisis, 2024a; Präg et al., 2020). Yet, as this demographic group increases in prevalence, it is important to move beyond the simple consideration of sibship size and focus on examining sibship structure. Using three British cohorts, Chanfreau and Goisis (2024b) found that having no siblings is associated with greater care-giving demands, and the care gap by sibling status widen with age. Yet, among those who provided care, the intensity does not vary depending on sibling status. Similarly, Rainer and Siedler (2012) found that children with siblings less frequently provide help to parents across ten European countries. Importantly, they found that this negative relationship is stronger in countries where public provision of care for older adults is strong than in countries where adult children have legal obligations to provide financial support or care for older adults. In addition to directly comparing differences in geographic proximity to parents and help transfer based on sibship structure, their study aligns with a series of studies highlighting the importance of institutional context and cross-regional differences in intergenerational relationships (Attias-Donfut et al., 2005; Haberkern & Szydlik, 2010; Kalmijn & Saraceno, 2008).

Even less research has focused on the differences in expectations and attitudes toward upward intergenerational support based on sibship structure. Understanding opinions on support for older adults is crucial, as these attitudes significantly influence and are shaped by social policy (Lin & Yi, 2019; Patterson & Reyes, 2022). Previous research has documented substantial cross-cultural variation in norms and expectations regarding care for older adults. For example, in northern Europe and social democratic countries, there is a prevailing belief that the state should primarily be responsible for elder care, whereas in Mediterranean countries, the family is viewed as the primary source of responsibility (Haberkern & Szydlik, 2010). Although only children occupy a unique structural position that may lead to greater involvement in co-residence and support for their parents, understanding of how they perceive and experience their own role as primary caregivers remains limited. From a social exchange theory's perspective, it is reasonable to

anticipate that only children may feel a heightened obligation to provide support to their parents, given that they are likely to receive more resources from their parents compared to individuals with siblings. Furthermore, social psychology research indicates that only children often develop stronger relationships with their parents (Falbo, 2012; Liu & Jiang, 2021)(siblings conflicts, resource dilute). Consequently, it is also plausible that only children may be more inclined to provide care, even though they face higher demands than children with siblings. Using data from one metropolitan area in upstate New York, Spitze and Logan (1991) found that although only children have more contact and help parents more than others, sibling structure is unrelated to feelings of closeness or attitudes toward filial responsibility. One study, based on a survey of 351 first-year university students in one South China city, reported no difference in the intention to take care of their own parents in the future between only children and children with siblings (Warmenhoven et al., 2018). However, research focusing on East Asia with more representative samples remains limited.

Another ramification of declining fertility on sibling structure is the increased proportion of first-born sons (Uchikoshi et al., 2023; Wen, 2023). Assigning care responsibilities within a family based on one's position in the kinship network is a well-established practice (Grigoryeva, 2017; Riley, 1983; Spitze & Logan, 1990). In the East Asian context, the oldest sons hold unique significance because, under the influence of Confucianism, they are expected to carry the family name, inherit the lineage, and, more importantly, live with and care for their parents in the future. The extent to which Confucian values and the associated filial piety are preserved and practiced by families in contemporary East Asia is hotly debated (Ikels, 2004; Lin & Yi, 2013; Maeda, 2004; Park, 2015, 2021; Taniguchi & Kaufman, 2017; Yeh et al., 2013; Zhan et al., 2008). Many studies document a declining trend in intergenerational coresidence in this region, suggesting that practical and economic factors have begun to outweigh cultural norms in explaining intergenerational coresidence and support (Chen, 2005; Chu et al., 2011; Takagi et al., 2007). Other studies find that multigenerational living arrangements fulfill a cultural ideal, providing benefits to the psychological well-being of older adults even when economic and social support

factors are controlled for (Silverstein, Cong, & Li, 2006). Some argue that lack of a strong safety net and government's endorsement reinforce the practice of filial piety (R. J.-A. Chou, 2011; Lee et al., 1994; Park, 2015; Silverstein, Cong, & Li, 2006; Whyte, 1997), one of the core component of Confucianism. In terms of birth order, researchers continue to find that it affects individuals' caregiving behaviors and expectations in many ways. For example, D. Kim and Lim-Soh (2024) found that first-born sons receive the largest share of inheritances among siblings, regardless of whether they were the primary caregivers before the parent's death. Uchikoshi et al. (2023) found that, in Japan, marriage propensities are lower for pairings involving individuals whose sibship position indicates a higher potential for caregiving obligations, such as first-born sons, only children, or daughters without brothers. It is worth noting that China shows an opposite pattern, where only children have a higher incentive to marry other only children (Wen, 2023), and couples without siblings report better subjective physical health compared to their counterparts with siblings (Wang et al., 2024). Wen (2023) suggests that being an only child has become a marker of privilege, as it signals more parent-child support and better inheritance prospects. These findings highlight that birth order still play an important role in considering intergenerational support in East Asia and variation within East Asia should be noted.

Despite the cultural significance of the first-born son, gender is a crucial factor that can outweigh the influence of birth order in determining care for older parents in need, as care work is highly gendered. According to Confucian cultural norms, daughters typically occupy a peripheral position in terms of responsibility toward their parents compared to sons. Daughters are expected to live with and take care of their in-laws after marriage. However, recent empirical evidence from East Asia indicates an increase in the involvement of daughters in providing support to their parents (Chitose, 2018; Hu, 2017; D. Kim et al., 2024; K. Kim et al., 2015; Lei, 2013). Some studies have found that daughters now provide as much, if not more, support than sons (Hu, 2017; D. Kim et al., 2024; Silverstein, Gans, & Yang, 2006; Xie & Zhu, 2009). The gender of the children influences the type of support they provide to their parents. In Taiwan, sons primarily provide financial and physical assistance, while daughters are more likely to offer emotional

support (Lin & Yi, 2011, 2019). Lei (2013) found that in rural China, sons provide more financial support to parents, while in urban China, daughters offer more instructional and emotional support. Yet, the literature generally lacks information on how the availability of siblings and birth order interact with gender to affect the type of support provided to parents. One notable exception is D. Kim et al. (2024), who found that, in Korea, first-born sons primarily provide financial support to parents, but only among non-childless families. In contrast, childless first-born daughters reported higher levels of support, particularly time-based support, compared to other siblings.

In this study, we aim to address these gaps by examining how upward intergenerational support patterns vary by sibling structure in East Asia. We first analyze the impact of sibling availability on the frequency of caregiving and financial support provided to parents. Additionally, we explore the complex interplay between birth order and gender in shaping these support patterns, with a particular focus on whether first-born sons assume more caregiving responsibilities, as prescribed by Confucian norms. Finally, moving beyond the analysis of the actual caregiving behaviors, we explore whether individuals' attitudes towards providing support to older adults vary based on their sibling structure. Long missing in previous research, we believe that public opinion is as important, if not more so, in revealing the underlying attitudes and societal norms that shape intergenerational support practices. Taken together, our study provides valuable insights into how rapid changes in sibling structure—an often overlooked factor—affect caregiving responsibilities and expectations. These insights can guide more effective policy interventions to address the evolving needs of older adults. In the following section, we describe our data, measures, and analytical approach.

Data and Method

We utilize data from the 2016 Family Modules of the East Asian Social Survey (EASS), one of the few internationally coordinated social survey data collection effort with East Asian focus. The EASS employs multistage probability sampling to ensure national representation. The EASS questionnaires are incorporated into pre-existing general social surveys in the four participating

East Asian societies:China (Chinese General Social Survey), Japan (Japanese General Social Survey), Korea (Korean General Social Survey), and Taiwan (Taiwanese Social Change Survey). The data is distributed by the East Asian Social Survey Data Archive (EASSDA).

The surveys were conducted in Korea and Taiwan in 2016, while China carried out its survey in 2017. Japan conducted its survey over two years, in 2017 and 2018. In Japan, the survey targeted individuals aged 20 to 89, whereas the other surveys included individuals aged 18 and older. The response rates for the 2016 EASS were 68.9% in China, 55.6% for 2017 and 54.3% for 2018 in Japan, 46.9% in Korea, and 49.7% in Taiwan. The 2016 EASS includes rich information related to family behaviors, covering topics such as living arrangements, family interactions and support, family values, and other sociodemographic characteristics.

Measure

Dependent variables

We rely on multiple variables to assess both the frequency of actual support provided to parents and attitudes toward caregiving responsibilities for older adults. Specifically, we use two variables to measure the intensity of support: one for care work and one for financial support. Both variables originally have five categories: very frequently, often, sometimes, seldom, and not at all. For our analysis, we collapsed these into three levels: frequently (combining very frequently and often), sometimes, and seldom/never (combining seldom and not at all).

To assess attitudes towards elder care responsibility, we used two questions asking whether individuals believed the government or individuals and families should be responsible for (1) care provision and (2) living standards of older adults. It is important to note that the original wordings of the questions vary slightly across the surveys. For China and Japan, the question on care provision pertains specifically to "medical and nursing care for older adults." In Taiwan, the question addresses "care for older adults who need assistance." For Korea, the question asks who "should primarily provide care for older adults."

The question on living standards is similar across the surveys. For China and Japan, it asks who should be responsible for the "living expenses of the older adults." For Taiwan, it inquires

about who should be responsible for providing "reasonable living standards for older adults." There is no comparable question for Korea.

China and Taiwan used the same response categories for both questions: "fall entirely on the government," "mostly on the government," "equally between the government and individuals/families," "mostly on individuals/families," or "entirely on individuals/families." For analysis, we combined them into three categories: government responsibility, shared responsibility (half-and-half), and individuals/families responsibility.

The response options differed in the Japanese survey, which asked respondents to select a number on a scale from 1 to 5, where 1 represented individuals and families, and 5 represented the government. We condensed this 1 to 5 scale into a three-level ordinal variable for analysis.

The Korean survey used another different set of response categories for the question regarding who "should primarily provide care for older adults". Respondents could select from the following categories: (1) government, (2) private companies/for-profit organizations, (3) non-profit organizations/charities/cooperatives, (4) religious organizations, (5) family, relatives or friends, and (6) unable to choose. For the purposes of analysis, we retained the categories for government and family, relatives or friends and combined the remaining four categories into a single group.[2]

Independent variables and controls

The main variable of interest is sibling structure. We created a categorical variable to classify individuals as only children, those with one sibling, or those with more than one sibling. Additionally, to examine any interaction between sex and birth order, we constructed a related variable indicating birth order and gender among those with at least one sibling: first-born sons, first-born daughters, second-born or later-born sons, and second-born or later-born daughters.

We controlled for respondents' age, sex (0 = male; 1 = female), educational level (1 = below high school; 2 = high school or equivalent; 3 = above high school), marital status (0 = not currently married; 1 = married), whether they have at least one child (0 = no; 1 = yes), area of

[2] This question is sourced from the 2016 Korean General Social Survey, as it is not included in the 2016 EASS.

residence (0 = other; 1 = a big city), and whether at least one parent is in poor health (0 = no; 1 = yes). We omitted the control variable of sex in the regression analysis involving the gendered birth order variable.

Analytic plan

We used ordered logistic regression due to the ordinal nature of our dependent variables. Ordered logistic regression is well-suited for modeling relationships with ordinal dependent variables, as it preserves the order of response categories and provides accurate estimates (Long & Freese, 2006). For analyzing attitudes toward the responsibility for older adults care provision in Korea, we employed multinomial logistic regression, as the dependent variable consists of categorical outcomes that are not ordered.

In our first set of regression analyses, we focus on testing whether upward intergenerational support behaviors and attitudes vary depending on the sibling structure. The sample is limited to individuals above age 20 with at least one parent alive. In our second set of regression analyses, we examine the effects of birth order and gender on upward intergenerational support behaviors and attitudes. For this analysis, we further restrict the sample to individuals with at least one sibling.

As robustness checks, we employed multinomial logistic regression on the reconstructed three-level dependent variables in all societies. We also applied ordered logistic regression and ordinary least squares regression to the original dependent variable. Additionally, we tested various sample selection criteria, including limiting the age range to 30-60 years and selecting only married individuals. These adjustments, however, did not alter our main findings and conclusions.

Results

Descriptive results

Table 1 presents descriptive statistics for the 2016 EASS sample. Japan stands out from other societies in that individuals are less involved in providing care (53% seldom/never) or financial support (72% seldom/never) and are more likely to believe in government's responsbility for

providing care (63%) and ensuring living standard of the elderly (18%). In contrast, in China, only about one-third of the children seldom or never provide care or financial support to their parents. Except in Japan, the majority believe that the responsibility for providing care and ensuring living standards for older adults should either fall on individuals and families or be shared with the government. However, the most popular response regarding the responsibility of care provision is the government in the Korean sample as well. These differences may reflect the varying levels of development and availability of social safety nets. Not surprisingly, China has the highest proportion of only children among the four societies, due to long-term family planning policies. China also has the highest proportion of married individuals and those with children, but the lowest average educational attainment, according to the 2016 East Asian Social Survey.

Sibling structure and intergenerational transfer

The first set of regressions examines how sibling structure relates to care intensity for parents, while the second set explores its association with financial support intensity. The main variable of interest is sibling structure, divided into three categories: 'only child,' 'one sibling,' and 'more than one sibling,' where the category 'more than one sibling' is used as the reference category.

The regressions account for demographics and the socioeconomic backgrounds of both adult children and their parents, but Figure 1 focuses on the marginal effects of the key variable: sibling structure. According to Panel A in Figure 1, sibling structure is closely linked to the frequency of care provided to parents in China and Japan. These estimates are not only statistically significant but also quantitatively important, as indicated by the size of the marginal effects. For example, compared to those with more than one siblings, only children in China are 6 percentage points more likely to frequently care for their parents and 6 percentage points less likely to seldom provide care. Compared to those with more than one sibling, individuals with one sibling in China are 5 percentage points more likely to frequently care for their parents and 5 percentage points less likely to seldom provide care. However, sibling structure does not show a significant association with the intensity of care provided to parents in Taiwan and Korea. In a separate unreported analysis, we redefined the reference category to include individuals with one sibling.

The results indicated that there were no significant differences between only children and those with one sibling regarding the frequency of care provided in China. In other words, these results suggest that having more than one sibling significantly decreases the likelihood of often providing care to parents.

Panel B in Figure 1 examines the association between sibling structure and the frequency of financial support provided to parents. We find no evidence linking sibling structure to the intensity of financial support provided to parents across all four societies examined.

Our results so far show that, accounting for socioeconomic backgrounds of both children and parents, only children more frequently provide care to their parents in China and Japan, but such pattern was not found in Korea and Taiwan. Looking at the actual care alone may not provide the full picture. Only children may be in a structural position to face higher caregiving demands from their parents. In the subsequent set of regressions, we go beyond the immediate caregiving behaviors by examining how sibling structure influences attitudes regarding whether the primary responsibility for caregiving should rest on the government or on individuals and families.

Panel A in Figure 2 displays the marginal effects from ordered logistic regressions analyzing attitudes toward care responsibility for older adults. We find that attitudes toward care responsibility vary by sibling structure, but cross-regional differences also exist. The results are not only statistically significant, but also quantitatively important. Compared to children with more than one siblings, being an only child increases the probability of supporting government in providing care to older adults by roughly 9.7 percentage points in China, 11.4 percentage points in Japan, and 17.7 percentage points in Korea. Similarly, compared to children with multiple siblings, only children are less likely to support individuals or families being responsible for providing care to older adults, with reductions of 10.6 percentage points in China, 4 percentage points in Japan, and 6.2 percentage points in Korea. However, the effect is not statistically significant in Korea.

Taiwan exhibits a different pattern regarding the relationship between sibling structure and caregiving attitudes. Being only children significantly reduces the likelihood of supporting

government-provided care for older adults by 4.9 percentage points and increases the likelihood of supporting care provided by individuals and families by 15.7 percentage points compared to children with more than one sibling. Finally, we found no evidence that attitudes regarding support for older adults differ between children with only one sibling and those with more than one sibling in Taiwan.

Next, we investigate whether the sibling structure is associated with the attitudes towards who should be responsible for ensuring reasonable living standards of older adults. Panel B in Figure 2 shows the results. Again, we found that only children are more likely to support the role of government compared to children with more than one sibling in China and Japan, whereas in Taiwan, only children are more likely to favor support provided by individuals and families. Korea is not included because the relevant question was not asked in the survey.

Birth order, gender, and intergenerational transfer

In the East Asian context, the first-born son holds significant cultural and familial responsibilities. Traditionally, the first-born son is expected to live with his parents and assume the responsibility of providing both care and financial support as they age. The following analysis explores the relationship between birth order and the gender of children and the extent to which they provide care and financial support.

We restricted our sample to individuals with at least one sibling. We included four mutually exclusive dummy variables: first-born son (1st son), first-born daughter (1st daughter), second- and later-born sons (2nd+ son), and second- and later-born daughters (2nd+ daughter), with the first-born son as the reference category. Panel A in Figure 3 presents marginal effects of birth order and gender on care work provided to parents.

In contrast to the cultural expectation of the first-born son playing the primary caregiving role, we find that first-born sons do not necessarily provide more care to parents. In China, first-born sons appear to provide less care to parents compared to their siblings. Specifically, the probabilities of frequently providing care work to parents are 6.1 percentage points higher for first-born daughters, 6.5 percentage points higher for second- and later-born sons, and 5.9

percentage points higher for second- and later-born daughters, compared to first-born sons.

Similarly, in Japan and Korea, first-born daughter and later-born daughter appear to provide more care work to parents compared to first-born sons. The probabilities of frequently providing caregiving to parents are 5.2 percentage points higher for first-born daughters and 3.4 percentage points higher for second- and later-born daughters in Japan. In Korea, these probabilities are 11.6 percentage points higher for first-born daughters and 8.3 percentage points higher for second- and later-born daughters. However, the caregiving frequency of second- and later-born sons is not statistically different from that of first-born sons in Japan and Korea.

Different from the patterns found in China, Japan, and Korea, daughters in Taiwan, regardless of the order of birth, provide less care to parents compared to first-born sons. For instance, first-born daughters exhibit a 5.8 percentage point lower likelihood of frequently providing care to parents, and second- and later-born daughters show a 5.5 percentage point lower likelihood compared to first-born sons. In contrast, there is no statistically significant difference between second- and later-born sons and first-born sons in terms of caregiving intensity provided to parents.

Panel B in Figure 3 presents the marginal effects of birth order and gender on financial support for parents. We observe cross-regional differences and a pattern distinct from that of caregiving. In China and Korea, second- and later-born sons are more likely to provide financial support compared to first-born sons, whereas female siblings do not show statistically significant differences in financial support when compared to first-born sons. For instance, second- and later-born sons are 10.1 percentage points more likely to frequently provide financial support to parents in China and 12.1 percentage points more likely in Korea. In Japan, the frequency of providing financial support does not significantly vary by birth order and gender.

Interestingly, we found that younger female siblings in Taiwan are significantly less likely to provide financial support to parents compared to first-born sons, with a difference of 6.9 percentage points. Although first-born daughters also seem to provide financial support less frequently than first-born sons, this difference is not statistically significant.

We also investigated whether attitudes towards responsibility for older adult care and ensuring reasonable living standards for them vary depending on birth order and gender. However, no evidence of such variation was found.

In unreported regression analysis, we limited our sample to individuals who are currently married. We found that in Korea, after excluding those who were not married, the positive effect of being an only child on caregiving frequency became statistically significant. Other previous findings remained consistent with the initial analytic sample.

Discussion and Conclusion

The decline in fertility has profoundly changed the sibling structure in East Asia, increasing the proportion of only children or children with only one sibling. In a region where family caregiving traditionally plays a pivotal role in the care of older adults, understanding how the changing sibling structure affects upward intergenerational transfers is of significant interest to policymakers. This study addresses this gap by investigating not only how the availability of siblings and birth order affect the actual support provided to parents, but also how these factors influence children's attitudes towards caregiving across four East Asian societies.

This study yields three significant findings. First, our findings reveal that caregiving behaviors in China and Japan are influenced by sibling structure, whereas no such effect is observed in Taiwan and Korea. Specifically, in the relevant contexts, only children are more likely to provide care to their parents compared to those with siblings. However, the frequency of financial support provided by only children does not differ significantly from that provided by individuals with siblings. Second, our research extends beyond the actual caregiving behaviors to examine caregiving attitudes. Attitudes towards caregiving are crucial as they can shape policy development and societal norms regarding elder care. We found that, with the exception of Taiwan, only children are more inclined to believe that the government should assume a greater role in supporting older adults. This insight is essential for understanding the broader context of intergenerational support in East Asia.

Second, we examine how children's birth order and gender influence the support provided to

parents. Although East Asian cultures often place substantial expectations on first-born sons to assume primary caregiving responsibilities, our study reveals that first-born sons do not necessarily provide more frequent care than other children. In contrast, our findings indicate that younger sons in Korea provide financial support more frequently than their older brothers, and in China, they provide both caregiving and financial support more often. Furthermore, daughters, irrespective of their birth order, are more likely to offer care to their parents in China, Korea, and Japan.

Third, we identified substantial cross-regional differences, with Taiwan as a major outlier. In Taiwan, first-born sons do provide care more frequently than their later-born siblings, and only children are more inclined to believe that families and individuals should bear this responsibility compared to children with siblings.

The distinct intergenerational support patterns in Taiwan may be attributed to the high coresidence rate of sons with parents. In Taiwan, the traditional practice of sons living with their parents is more prevalent compared to other East Asian societies, which likely influences the caregiving behaviors and expectations. Specifically, 42.8% of married men in the Taiwanese sample coreside with at least one parent, more than double the percentage in China (21.9%) and Japan (22.31%), and more than triple the percentage in Korea (8.8%). In addition, 37.8% of married women in Taiwan coreside with at least one in-law, compared to 21.2% in China, 16.9% in Japan, and 8.6% in Korea (authors' own calculations from EASS 2016). This higher prevalence of co-residence with parents or in-laws in Taiwan may explain why daughters in Taiwan, unlike in the other three contexts, provide care or financial support to their own parents less frequently compared to their male siblings. These findings align with qualitative observations in contemporary Taiwan, which indicate that enduring traditional norms of filial piety continue to shape the relationships between husbands, daughters-in-law, and mothers-in-law. These norms often reinforce the expectation for daughters-in-law to prioritize their in-laws over their own parents, with such pressures sometimes originating from the daughters' natal families (Kung, 2019).

Our study contributes to the literature by demonstrating the complexities and cross-regional variations in intergenerational relationships within East Asia. The findings underscore the importance of incorporating both sibling structure and regional contexts into the formulation of policies related to older adult care. Further research is needed to explore the long-term implications of these upward support patterns, particularly in the context of the region's rapidly aging population and decreasing number of siblings.

Our study has several limitations. First, we do not consider the upward intergenerational support to the parents-in-law. The observed pattern, where first-born sons do not provide care more frequently than other siblings, particularly female siblings, in China, Japan, and Korea, may reflect that the wives of first-born sons are compensating for care responsibilities on behalf of their husbands. Second, as noted earlier, the wordings of the care attitude questions differs slightly across the four societies. In Taiwan, the question specifies responsibility for older adults who *need* assistance, while in China and Japan, the question encompasses both nursing care and *medical* care for older adults. In Korea, care was broadly mentioned. These wording differences may cause only children in China, Japan, and Korea to call for strong public support for older adults' care. Third, our analyses are based on cross-sectional data, which do not account for changes in care demands from parents and respondents' circumstances over time. Individuals may adjust their behaviors or attitudes in response to evolving situations and life events (Chen, 2005). Future research exploring the role of sibling structure in intergenerational relations could enhance our understanding by adopting a life course perspective.

Table and Figure

Table 1

Summary statistics by country

	China		Japan		Taiwan		Korea	
Variables	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Care work								
Seldom/never	33%	0.47	53%	0.50	45%	0.50	35%	0.48
Sometimes	32%	0.47	30%	0.46	26%	0.44	37%	0.48
Frequently	35%	0.48	17%	0.38	29%	0.46	28%	0.45
Financial support								
Seldom/never	32%	0.47	72%	0.45	49%	0.50	37%	0.48
Sometimes	35%	0.48	18%	0.38	22%	0.41	35%	0.48
Frequently	33%	0.47	10%	0.30	30%	0.46	28%	0.45
Care provision for older adults								
Govt. responsibility	23%	0.42	63%	0.48	10%	0.29	49%	0.50
Shared responsibility	45%	0.50	27%	0.45	67%	0.47	28%	0.45
Individuals/families responsibility	32%	0.47	10%	0.30	23%	0.42	23%	0.42
Living standards of older adults								
Govt. responsibility	12%	0.32	52%	0.50	15%	0.36	-	-
Shared responsibility	32%	0.47	30%	0.46	60%	0.49	-	-
Individuals/families responsibility	56%	0.50	18%	0.38	25%	0.43	-	-
Sibling structure								
Only children	18%	0.38	8%	0.28	3%	0.18	7%	0.26
Only one sibling	27%	0.45	47%	0.50	22%	0.42	36%	0.48
More than one	55%	0.50	45%	0.50	74%	0.44	57%	0.50
Education								
Below HS	48%	0.50	4%	0.20	13%	0.34	4%	0.20
HS or equiv.	20%	0.40	51%	0.50	28%	0.45	24%	0.43
Above HS	32%	0.47	45%	0.50	59%	0.49	71%	0.45
Demographics								
Female	54%	0.50	52%	0.50	47%	0.50	53%	0.50
Age	40.36	12.24	44.26	12.75	38.81	12.00	39.10	12.11
Has child	80%	0.40	68%	0.47	54%	0.50	59%	0.49
Married	77%	0.42	69%	0.46	53%	0.50	57%	0.50
Big city	41%	0.49	6%	0.24	25%	0.43	32%	0.47
Poor health of parents	36%	0.48	31%	0.46	36%	0.48	45%	0.50
N	2,063		1,533		1,314		621	

[a] Note: Individuals over 20 with at least one living parent.

[b] Source: 2016 East Asian Social Survey

Figure 1

Marginal effects of sibling structure on support frequency (reference = children with more than one sibling)

Figure 2

Marginal effects of sibling structure on support attitudes (reference = children with more than one sibling)

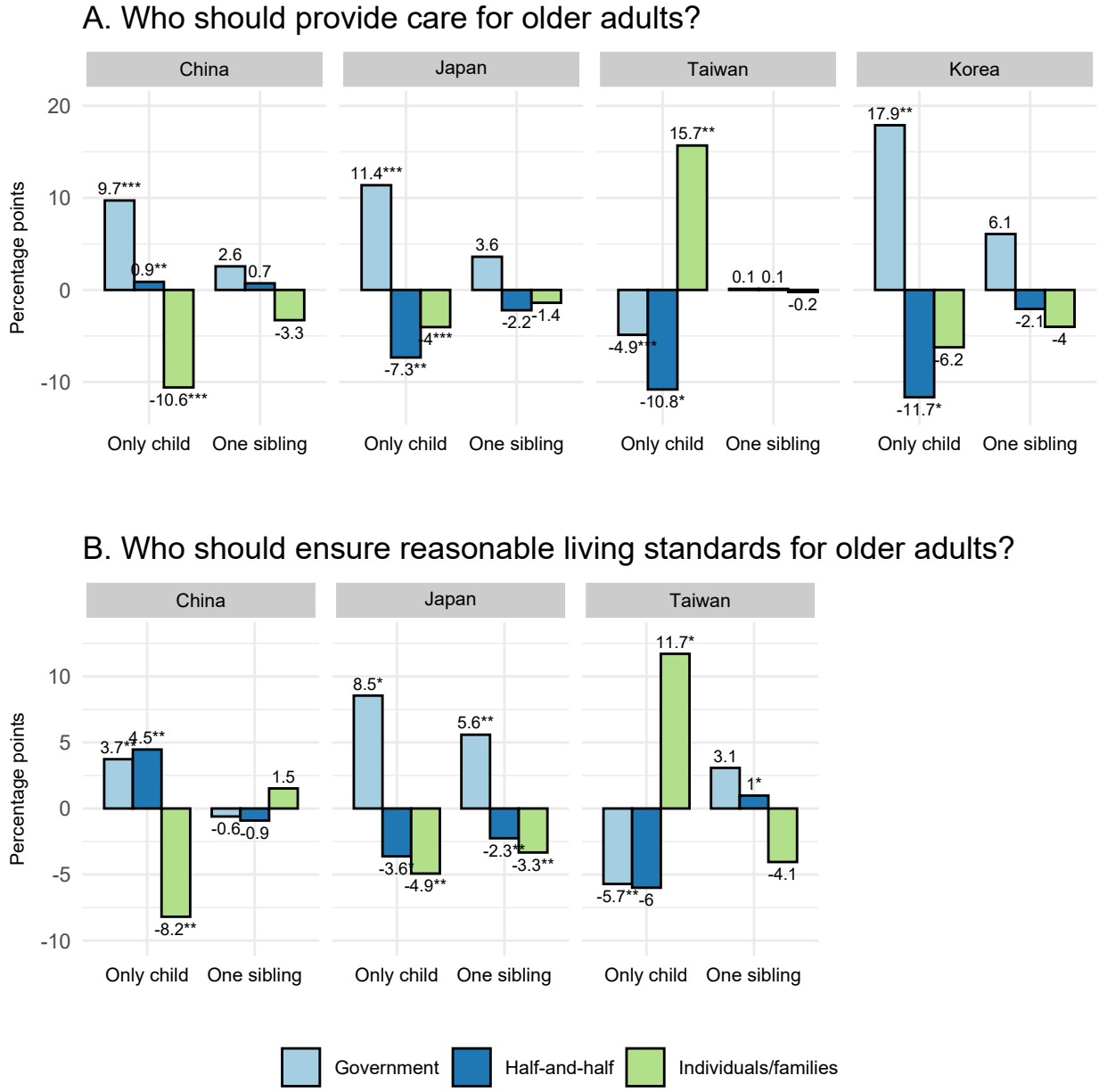
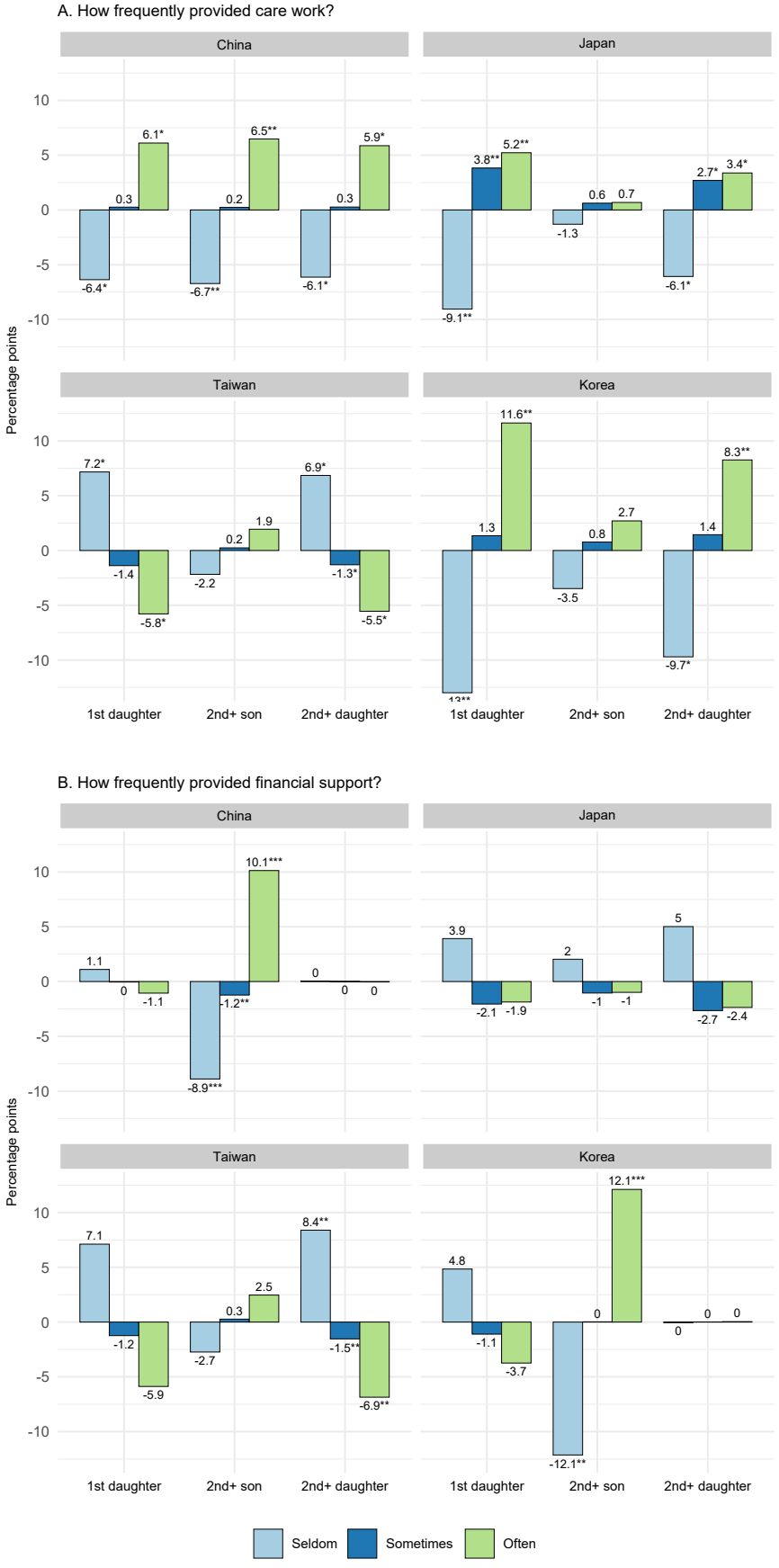


Figure 3

Marginal effects of birth order and gender on support frequency (reference = first-born sons)



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