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CORESIDING WITH PARENTS, SON PREFERENCE, AND WOMEN'S DESIRE FOR ADDITIONAL CHILDREN IN VIETNAM

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ABSTRACT

Due to strong filial piety, parents(-in-law) play an important role in their adult daughters' fertility decisions in Vietnam; women feel pressured to fulfil their duties to produce a male descendant for the family. However, rapid urbanisation and industrialisation mean that multigenerational households are becoming less common, despite having been the standard household structure for centuries. Based on the 2020–21 Vietnam Multiple Indicator Cluster Survey, we investigate if women who coreside with the parental generation are more likely to desire additional children. In an industrialised economy, grandparents may be an important source of childcare while simultaneously exerting pressure on their adult children to have additional children. Further, we explore the association of the sex of previous child(ren) to capture the pressure associated with son preference. Multivariate regressions reveal an association between coresiding with parents and the desire for a second child, regardless of the sex of the first child. Among women with two children, third-child desires do not appear to be associated with coresiding with parents but are substantially related to having two daughters. Given the strong two-child norm in Vietnam and previous policies implying negative consequences for parents with three or more children, few women show a desire for a third child. Those women who report a desire for a third child mostly have two daughters, reflecting societal norms about the need for a male heir.

KEYWORDS

Coresiding with parents, Desire for additional children, Son preference, Vietnam Multiple Indicator Cluster Survey

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1 INTRODUCTION

Vietnam has one of the most rapidly ageing populations in the world (General Statistics Office, 2021b; United Nations Population Fund, 2011). Longer lifespans are not the only reason the country's median age is quickly increasing, but also its sustained low total fertility rate (TFR) near 2.0 since 2000 (The World Bank, 2023). Vietnam has also witnessed high economic growth (Glinskaya et al., 2021), while maintaining traditional cultural values associated with Confucianism (Nguyen, 2016; Tho, 2016). Closeness, living together, responsibility, interdependence, sacrifice, and harmony among family members are emphasised in Confucian cultures (Kim et al., 2015). One of the central tenets of Confucianism is filial piety (Park & Chesla, 2007): Across Asia, parent–child ties are valued above all others, even more than husband-and-wife relationships (Huang, 2005). Traditionally, Vietnamese parents have the power to decide and arrange three important events in their children's lives: career, marriage, and children (Leung & Boehnlein, 1996). In other words, parents influence children to (1) continue the family business, (2) accept the marriage arranged by their parents, and (3) bear children in accordance with their parents' ideal timing, quantity, and sex distribution (Jayakody & Huy, 2007). As a result, fertility is considered one of the life events at the discretion of parents and the head of the Vietnamese family. Despite these strong cultural norms, young couples—especially in industrialised, urban areas—are increasingly living independent of their parents(-in-law) (Esteve & Liu, 2014).

After marriage, women in Vietnam often join their husband's family. Although women traditionally belong to the husband's family after marriage, women still maintain a close relationship with their parents' families, especially in big cities like Ha Noi and Ho Chi Minh. Recent amendments to the legal system have also given Vietnamese women more rights, such as inheriting property from their parents, being the head of a household, or co-owning a property of high value, like real estate, with the husband (Bélanger, 2000).

Although Vietnam has maintained a low TFR for the past two decades, the traditional preference for sons created a legacy deeply ingrained in the subconscious minds of families (Guilmoto, 2012; Nguyen & Sukontamarn, 2021). Vietnam recorded a sex ratio of 114.8 boys per 100 girls in 2018, much higher than the global average close to 105 (General Statistics Office, 2021a; Tafuro & Guilmoto, 2020). Sex-selective abortions of female foetuses and the neglect of daughters (reflected in higher mortality among girls than among boys) became important strategies for parents in Asian countries to achieve their desired sex composition of children while simultaneously limiting their family size (Bélanger, 2002; Larsen et al., 1998). In Vietnam, sons are highly valued for social, symbolic, and economic reasons (Bélanger, 2002) and are necessary to continue the family line, pass on material wealth, and perform ancestor cult rituals (McLeod & Nguyen, 2001). Therein, women with daughters experience social pressure to have additional children and to give birth to a boy (Kim & Lee, 2020).

Apart from social pressure regarding the number of children and the birth of a male heir, living with the parental generation may increase the desire for an additional child through grandparents providing informal childcare and domestic labour (Tanskanen & Rotkirch, 2014; Yoon, 2017). Grandparents can provide flexible, trustworthy childcare that enables the mothers' engagement in the labour force while contributing to household resources. Nevertheless, there may be a practical limit to the desire for additional children beyond two after Vietnam implemented a fertility policy encouraging couples to have only one or two children in 1988 (Council of Ministers, 1989).

Previous studies on the determinants of fertility in Vietnam examine the sex of living children (Nguyen et al., 2020), the socioeconomic characteristics of women (Nguyen & Sukontamarn, 2021), and population policies (Ngo, 2020). However, in the Vietnamese context, no studies have examined the role that living with parents might play in women's fertility desires. Based on the 2020–21 Vietnam Multiple Indicator Cluster Survey, we explore if women are more likely to desire an additional child if they live with their parents and how far this is further related to the sex composition of previous children. Therefore, we aim to answer the question "how does coresiding with parents(-in-law) associate with the desire to have a second or third child and how is this influenced by the sex composition of previous children?"

2 BACKGROUND

2.1 EMPIRICAL BACKGROUND

Women desire additional children for many reasons including maternal instinct, future economic support, continuing the family line, or social duty (Chen, 2015; Park & Cho, 2011). First birth desires are especially associated with longing to become a parent, while higher-order births are more associated with social norms and external pressures (Wesolowski, 2015). In many societies outside of Vietnam, there is social pressure to have a second child after having the first (Balbo & Mills, 2011). This social pressure is stronger from partners and kin than other social referents (Stulp & Barrett, 2021). Higher parity desires follow the birth of the first child, while the characteristics of the first child influence the desire for additional children. In societies with strong filial piety, son preference, or lower levels of gender equality, women—particularly those with no sons—may have a higher intention for additional children (Jiang et al., 2016). This social pressure may be explicit through demanding that women uphold their familial responsibilities, or implicit through the societal preference for male heirs (den Boer & Hudson, 2017). In situations where women have little power within the household, they may not be able to challenge their partner or family's wishes for more children (Testa et al., 2014).

Multigenerational households may positively influence women's fertility desires through the ability to combine work and family. Grandparents can provide informal childcare. The provision of grandparental childcare is common globally, with variations across countries and societies (Hank & Buber, 2009; Park et al., 2008; Yu & Kuo, 2017). This access to informal childcare from the grandparents makes it easier for women with children in the household to balance family and work commitments (Kuhnt & Trappe, 2016). Grandparents are often preferred over formal childcare options since they have more flexible schedules, are perceived to be more trustworthy, save the family considerable economic resources, and have an intimate relationship with the children (Hayslip et al., 2017). Additionally, the ability to work and increase household resources may indirectly encourage the desire for additional children (Bao et al., 2017). This is particularly linked to women's ability to increase their labour force participation after childbirth (Aassve et al., 2012; Waynforth, 2012). On the other hand, intergenerational care work may reduce fertility intentions, as the costs of caring for an older relative reduce resources for children (Harknett et al., 2014). Evidence from the Chinese context shows that the provision of grandparental childcare is related to an increase in women's intentions to have a second child, regardless of coresidential status (Ji et al., 2015). Although China shares Confucian family values with Vietnam, the lasting effects of its one-child policy may create different desires for additional children than in Vietnam.

2.2 VIETNAMESE FAMILY CONTEXT: A BRIEF OVERVIEW

Confucian philosophy came to Vietnam over two millennia ago through Chinese dominance (Whitmore, 2023). As a result, filial devotion, which includes respecting elders and following parents, is regarded as lifestyle guidance and a measure of human life ethics (Huy, 1998). Parents traditionally have the authority to make and even impose many fundamental choices on their children's lives, such as schooling, career, marriage, and having children (Leung & Boehnlein, 1996). Marriage and having children are identified as two major aspects influenced and controlled by parental decisions. Parents and elders often seek husbands or wives for their offspring through local matchmakers or on their own (Nguyen & Belk, 2012). When both sides' parents have found a family that is compatible with their economic circumstances and family background, a matchmaker from the groom's family will be sent to the bride's family to discuss the wedding, including negotiating the groom's dowry (money, gold, or valuable materials) to the bride's family house (Teerawichitchainan & Knodel, 2012). Hence, marriage is frequently discussed, calculated, and organised by parents, while children frequently follow the customary rules of Vietnamese culture. Although arranged marriages were common in the past and still exist in some regions, they are less common in Vietnamese families now.

Multigenerational households were previously standard throughout Vietnam and are still prevalent in rural Vietnamese culture. These expanded households predominantly follow the paternal line, with most women moving into their in-laws' homes. Wives are not permitted to move back to their parents' family home after marriage unless the husband's family approves (Thi, 1996). As a consequence, when couples have a son, the future household size expands after marriage. Women living with the parental generation also face a dual burden of taking care of their children and parents(-in-law) (Knodel & Nguyen, 2015). However, the number of these multigenerational households is declining (Trinh et al., 2017), which is tied to economic development, industrialisation, and urbanisation. Young people are increasingly relocating to industrialised areas for education and employment; for children from rural areas, this increases the distance to the familial home. Furthermore, the changes in living situations and distance from the parental generation relax the stringent rules on the relationship between parents and children. Additionally, some individuals are born into predominantly urban households where the parental generation was never present. Despite changes in the Vietnamese household structure, the culture of son preference, inheritance, and family name preservation remains.

Vietnam is regarded as a country with a strong gender hierarchy since Vietnamese families give rights and responsibilities to fathers, sons, and husbands (Huong, 2010). Only sons are allowed to enter the family genealogy, while daughters are expected to follow the husband's family and take care of them after marriage. The proverb "Nhất nam viết hữu, thập nữ viết vô" [To have one boy is to have an heir, whereas to have ten girls is to have no descendants] reflects the social values sons hold in Vietnamese society (McLeod & Nguyen, 2001). Because children take their father's surname, this also contributes to son preference through the desire to keep the family name alive (Pham & Dang, 2016). Additionally, birth outside of marriage is stigmatised in Vietnamese culture. Hence, there is cultural shame in carrying the mother's surname due to its association with wedlock. Second, sons generally inherit the family's main assets. They continue living with their parents and generally take on care responsibilities as their parents age. Meanwhile, daughters usually live with their husbands' families after marriage and continue to live with their eldest son when they are widowed (Rydstrøm, 2002). The proverb "Tai gia tong phụ, xuất giá tong phu, phu từ tong tứ" [At home, obey your father. Married, obey your husband. Widowed, obey your son] has affirmed that according to Vietnamese tradition, women have the responsibility and obligation to subordinate these three men in their lives. This means that for Vietnamese women, gaining property rights as part of the husband's family requires them to give birth to at least one son (Guilmoto, 2012). Thus, the desire to have a son also influences women's future material well-being.

The TFR of Vietnam dropped from around 6.0 in the 1960s and early 1970s and has remained stable since 2000, hovering near 2.0 (The World Bank, 2023). The country's age-specific fertility rates are distributed in an inverted U-shape: They are low at ages 15 to 19 years, increase substantially between the ages of 20 and 24 years, peak at the ages of 25 to 29 years, decline thereafter, and decrease sharply between the ages of 40 to 44 years. During the last two decades, the peaks in age-specific fertility rates of Vietnamese women shifted from the early twenties (20–24) to the late twenties (25–29), and fertility rates substantially decreased for women aged 40 years and above (Central Population and Housing Census, 2020). In 2020, the mean age at first marriage was 23 years for brides and 28 years for grooms (General Statistics Office, 2021b). The mean age at first birth was slightly above 25 years and remained rather stable throughout the last decades. By contrast, the mean age at second birth has increased from 27 to 29 years since the late 1980s, whereas the mean age remained around age 33 for third and later births (General Statistics Office & United Nations Population Fund, 2016). Regarding age at childbearing, the Vietnamese government notably adopted policies to promote marriage before the age of 30 for both women and men and to encourage women to have a second child before the age of 35 years to ensure population quality, manage regional fertility disparities, and adjust fertility rates to suit particular regions and target groups by 2030 (Prime Minister, 2020). Accordingly, in 21 provinces/cities with low fertility, women who have two children before the age of 35 will receive a cash reward or award (Ministry of Health, 2021).

There are significant differences in TFR across Vietnamese regions, which are linked to geographical, economic, historical, cultural, and ethnic factors (Bélanger, 2000). For example, in 2021, the TFR was much lower in the Southeast (1.61) and in the Mekong River Delta (1.82) regions than in the Northern Midlands and Mountain (2.43) and the Red River Delta (2.37) regions (General Statistics Office, 2021a). The contrast between regions is most visible between the north and the south, in the sense that enterprise competitiveness and economic growth are more prominent in southern provinces/cities than in northern provinces/cities (Tran et al., 2009). As a result, the urge to have more children is probably influenced by economic opportunities. Similar to TFR, coresidence with parents and living arrangements among family members also differ between regions in the south and north of Vietnam. For example, the proportion of households with five or more people in 2021 accounted for 18.3% in the Southeast region, compared to 31.3% in the Northern Midlands and Mountain area (General Statistics Office, 2021a). In

terms of living arrangements, research shows that couples from the south and the centre have greater flexibility in deciding whether to live with paternal or maternal relatives, but couples from the north have a strong preference for coresiding with paternal kin (Bélanger, 2000). This north–south split is also reflected in the composition of households with parents coresiding with adult sons (Knodel et al., 2000).

Vietnam enacted a two-child policy in 1988 that applies to all families except ethnic minorities, with the explicit goal of maintaining national population growth at two per cent (Council of Ministers, 1989). Thereafter, couples working for government or state organisations and in certain professions such as teachers, civil servants, public employees, or public workers with more than two children were fined or fired. State employees also risked forfeiting promotions if they broke the two-child norm. This policy has been linked to a decrease in fertility (Ngo, 2020). The policy of dismissing and penalising couples with more than two children was repealed in 2014, after being in effect for nearly 30 years. Despite the policy reversal, the two-child norm is now standard in Vietnam and it is rare for families to have more than two children.

Grandparents in Vietnam—especially grandmothers—are often obligated to take care of their grandchildren, regardless of whether they live together with the grandchildren or not (Knodel & Nguyen, 2015). Grandparents play an important role in the grandchild's life, from conception to adulthood, such as taking care of the mother during pregnancy, naming the baby, decisions regarding nutrition and health, or educating the child. When women marry and become pregnant but do not coreside with their parents(in-law), they typically seek their mothers' support. This involves returning to the biological parents' house until the newborn is about one year old, or biological mothers move to the couple's house or apartment for support during pregnancy and maternity leave. If they coreside with the husband's parents, the biological mother may also provide support by joining the household for a short period following childbirth (Dang et al., 2022). This grandparental support is currently less common in urban areas, partly because of the smaller apartment or house sizes that young couples live in.

After six months of maternity leave, mothers usually return to work and the child will be cared for informally by grandparents or students, or formally via nurseries or "independent children's groups." Vietnam has a system of public and private kindergartens for children aged three to six years and most children attend public kindergarten before entering primary school (Ministry of Education and Training, 2020). Informal childcare likely plays a role in Vietnam, as it has one of the highest rates of female labour force participation in Asia (International Labour Organization, 2018). In general, grandparental childcare is taken for granted and when parents are away for work, most children will stay with their paternal grandparents (Hirschman & Minh, 2002). According to social attitudes, kindergartens cannot take care of children better than grandparents.

Given previous studies on sex preferences and the Vietnamese family background, we assume that women perceive social pressure to have a male descendent, which is further intensified by coresidential parents(in-law). We hypothesise that women with one child who coreside with parents(in-law) will be more likely to desire an additional child than those who do not coreside with parents(in-law) (H1). Moreover, we hypothesise that women with one daughter are more likely to desire a second child than those with one son (H2). We hypothesise that coresidence with parents is not related to further childbearing desires among women with two children due to the lasting effects of the two-child policy (H3), but we hypothesise that women with two daughters have a greater tendency to desire a third child than those with two sons or with one son and one daughter (H4).

3 DATA, VARIABLES AND ANALYTIC STRATEGY

This study uses nationally representative data from the 2020–21 Vietnam Multiple Indicator Cluster Survey (MICS). The General Statistics Office of Vietnam collects the data with technical and financial support from the United Nations Children's Fund (UNICEF). MICS is a primary data source for more than 30 Sustainable Development Goals (SDGs) and focuses on collecting data on key indicators about the well-being of children and women and helps shape policies that improve their lives. Since the 1990s, MICS has surveyed over 100 countries and first started collecting data about Vietnam in 1996. The latest round took place in 2021 when face-to-face interviews were carried out with all women aged 15 to 49 years in the selected households. Moreover, the program includes a household questionnaire that captures information on each household member's health, resources, and education. The 2020–21 Vietnam MICS surveyed a large sample of households from all six economic regions of the country, as well as from two major cities (Ha Noi and Ho Chi Minh City) (General Statistics Office and UNICEF, 2021).

To study the relationship between women's fertility desires and coresidence, we merged the MICS data on females with the household data. We restricted the dataset to 5,460 women in prime fertility ages (15 to 44 years) with one or two children. Respondents aged 45 to 49 years (861 observations) were excluded, as Vietnamese women tend to end childbearing around their mid-40s—only 1.1% of respondents in this age group intended an additional child (Central Population and Housing Census, 2020).

Our dependent variable was women's desire to have an additional child, based on the question, "would you like to have another child, or would you prefer to not have any more children?" The responses were (1) yes, (2) no, (3) cannot get pregnant, or (4) undecided. We focused on married women and therefore excluded 52 women living in a nonmarital union and 345 women not living in a union from our sample. Finally, respondents not able to conceive (25 cases), undecided about further childbearing (580 cases), or not answering the question about further childbearing desires (56 cases) were also dropped. Thus, our analytic sample included 4,401 women (1,266 with one child and 3,135 with two children). We dichotomised our dependent variable into desiring (1) and not desiring (0) additional children. In addition, we coded women who were pregnant at the time of the interview as "yes," since we regarded their pregnancy as a direct proxy for their positive fertility desires.

Our two main explanatory variables were (1) *coresidence with parents* and (2) *sex of child(ren)*. For the first variable, we examined the household composition to deduce if women lived with their parents or their parents-in-law. We created a binary variable that distinguished between women who were coresidential or non-coresidential (although they may have resided with other relatives like spouse's siblings, siblings, grandparents, aunts, or other relatives). Although some women only coresided with one parent, we used "coresiding with parents" instead of "coresiding with parent(s)" for readability purposes. Importantly, the Vietnamese cultural context did not allow for distinguishing between living with parents and parents-in-law. For *sex of child(ren)*, we distinguished between having one son and having one daughter for women with one child. For women with two children, we distinguished between having (1) two sons, (2) two daughters, as well as (3) one son and one daughter.

We included several socio-demographic characteristics as control variables: age (15–24, 25–34, 35–44 years), level of education (low, medium, high), economic region of residence (Southeast, Red River Delta, Northern Midlands and mountain area, North central and central coastal area, Central highlands, Mekong River Delta), urbanicity (rural, urban), and age of the youngest child (age in years, included as a continuous variable). In Vietnam, primary and lower secondary education are universal and we distinguished the following three groups: (1) "low" includes lower secondary education or less, (2) "medium" includes upper secondary education and vocational training, and (3) "high" comprises university degrees.

For our analytical strategy, we first described fertility desires, differentiating by coresidence and sex of the child(ren). Second, we applied logistic regression models to identify the factors associated with desiring another child. Positive coefficients indicated higher proportions of women desiring an additional child in a specific group compared to the reference group. Negative coefficients indicated lower proportions for desiring another child. Moreover, we provided stepwise hierarchical models to determine how the various control variables contribute to model fit, and if and how the association between childbearing desires and coresidence with parents changes when adding the various control variables.

The mean age of the women in our sample was 33 years, while the mean age of the youngest child was 6.4 years (Table 1). Six out of ten women coresided with parents. Almost 50% were low educated, whereas 28.6% had medium and 25.4% had high levels of education. Approximately two-thirds lived in rural areas. Vietnam's four economic regions—Southeast, Red River Delta, North Central and the Central Coastal area as well as the Mekong River Delta—each comprised about 20% of respondents, while about 14.5% came from the Northern Midland and Mountain area and 5.5% from the Central Highlands. We observed a skewed sex ratio among women with one child (55.7% had a son and only 44.3% had a daughter). This skewed ratio was more pronounced among women with two children: 53.6% with one son and one daughter, 29.0% with two sons, and 17.5% with two daughters. These values were low given that random chance suggests that two daughters should comprise close to one quarter of women with two children.

Women coresiding with parents differed somewhat from non-coresidential women. Coresidential women were older (approximately 34 years compared to 31 years), lower-educated, and lived in the Southeast of the country. When comparing women with one to two children, we found that coresiding with parents was less frequent among those with one child than two children (44.6% and 66.1%, respectively). As expected, women with one child were younger than those with two children (29 and 35 years, respectively). We observed educational differences and urban–rural differences in the sense that women with two children tended to be both lower-educated than women with one child and lived in rural regions rather than urban ones. Finally, coresidence with parents was more common among older cohorts, i.e., women aged 35 to 44 years, and among low-educated women (Table A1). Further, regional differences indicated that coresidence was not geographically evenly distributed, with higher shares of coresidence found in Central Highlands (69.1%) and the Southeast (66.5%), and lower shares in North Central and the Central Coastal area (54.5%). Moreover, women in urban areas reported coresidence with parents more frequently than those in rural areas (62.5% and 58.1%, respectively).

| | One child | Two children | Coresidential | Non- coresidential | Total |
|---|------------|--------------|---------------|-----------------------|------------|
| Fertility desire | | | | | |
| Yes | 78.5 | 11.3 | 24.9 | 41.2 | 31.5 |
| No | 21.5 | 88.7 | 75.1 | 58.8 | 68.5 |
| Coresidence with parents | | | | | |
| Coresidential | 44.6 | 66.2 | | | 59.7 |
| Non-coresidential | 55.4 | 33.8 | | | 40.3 |
| Sex of child | | | | | |
| One son | 55.7 | | 56.4 | 55.0 | 55.7 |
| One Daughter | 44.3 | | 43.6 | 45.0 | 44.3 |
| Sex of children | | | | | |
| Two sons | | 28.7 | 29.3 | 27.6 | 28.7 |
| Two daughters | | 17.5 | 16.7 | 19.1 | 17.5 |
| One son, one daughter | | 53.7 | 54.0 | 53.3 | 53.7 |
| Age | | | | | |
| 15–24 | 24.1 | 4.5 | 5.6 | 17.5 | 10.4 |
| 25–34 | 55.7 | 41.9 | 43.6 | 49.6 | 46.0 |
| 35–44 | 20.2 | 53.6 | 50.7 | 33.0 | 43.6 |
| Mean age | 29.2 years | 34.7 years | 34.3 years | 31.2 years | 33.1 years |
| Education | | - | | - | |
| Low | 36.6 | 49.7 | 48.2 | 42.1 | 45.7 |
| Medium | 31.4 | 27.6 | 27.0 | 31.2 | 28.7 |
| High | 32.1 | 22.8 | 24.8 | 26.7 | 25.6 |
| Economic region | | | | | |
| Southeast | 23.3 | 17.4 | 21.3 | 15.9 | 19.2 |
| Red River Delta | 17.4 | 23.8 | 21.6 | 22.3 | 21.9 |
| Northern Midlands and Mountain Area | 10.5 | 15.8 | 13.9 | 14.6 | 14.2 |
| North Central and Central Coastal Area | 22.4 | 18.9 | 18.2 | 22.4 | 20.0 |
| Central Highlands | 5.3 | 5.6 | 6.4 | 4.2 | 5.5 |
| Mekong River Delta | 21.0 | 18.5 | 18.5 | 20.4 | 19.3 |
| Urbanicity | | | | | |
| Rural | 61.0 | 65.1 | 62.2 | 66.4 | 63.9 |
| Urban | 39.0 | 34.9 | 37.8 | 33.6 | 36.1 |
| Mean age of youngest child | 4.9 years | 7.0 years | 7.0 years | 5.5 years | 6.4 years |
| Number of observations | 1,265 | 3,136 | 2,508 | 1,893 | 4,401 |

TABLE 1: SAMPLE CHARACTERISTICS BY PARITY AND CO-RESIDENCE WITH PARENTS IN PERCENT

Source: MICS Vietnam 2020-21, weighted data

4 RESULTS

Our descriptive results show that a substantial share of women with one child desired a second child (78.5%), whereas third-child desires were rare among women with two children (11.3%) (Table 1). Further, we found remarkable differences by age. Among women with one child, most of those aged 15 to 34 years desired another child, which was less often the case at ages 35 to 44 years (Figure 1). Age variation was similar for women with two children, although at a much lower level in relative terms (Desire for another child at 15 to 24 years: 31.5%; 25 to 34 years: 19.6%; 35 to 44 years: 3.1%).

Within the three broad age groups, coresidential women with one child tended to be more likely to desire another child than non-coresidential women with one child. This difference amounted to 3.3 percentage points in the 25–34-year age group and less than two percentage points at younger and older ages (Figure 1). By contrast, further childbearing desires were more commonly reported by younger non-coresidential women with two children. Although the percentages converged as women age.

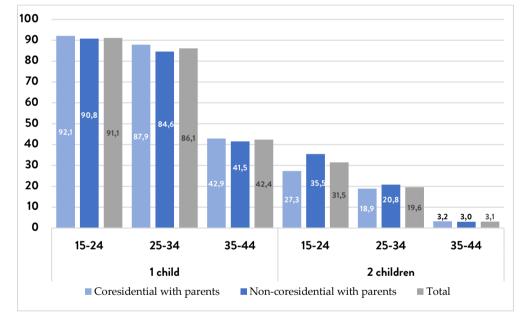


FIGURE 1: DESIRE FOR AN ADDITIONAL CHILD, BY AGE, CO-RESIDENCE WITH PARENTS, AND NUMBER OF CHILDREN

Source: MICS Vietnam 2020-21, weighted data

We found that approximately the same share of women with one boy or one girl desired a second child (Table 2). These results suggest that for women with one child, the child's sex is not related to further childbearing desires. Conversely, the children's sex composition was associated with third-child desires among women with two children: 24.6% of these respondents with two daughters reported desiring a third child, compared to 8.0% of women with two sons, and 8.8% of women with a son and a daughter.

TABLE 2: DESIRE FOR AN ADDITIONAL CHILD, BY NUMBER OF CHILDREN AND SEX OF CHILD(REN), IN PERCENT

| | Desire an additional child | | | |
|-----------------------|----------------------------|--|--|--|
| One child | | | | |
| One son | 78.8 | | | |
| One daughter | 78.1 | | | |
| Total | 78.5 | | | |
| Two children | | | | |
| Two sons | 8.0 | | | |
| Two daughters | 24.6 | | | |
| One son, one daughter | 8.8 | | | |
| Total | 11.3 | | | |

Source: MICS Vietnam 2020-21, weighted data

Our multivariate analyses revealed a positive association between coresiding with parents and desiring an additional child for women with one child. The estimated coefficient was 0.324+ (Table 3), indicating that married women who had one child and were coresiding with parents desired a second child more often than those non-coresiding with parents. This result supports our hypothesis (H1) that coresiding with parents is associated with the desire for a second child. When considering the role played by the child's sex, we found that having one daughter instead of one son was not associated with a higher likelihood of desiring a second child. The coefficient was small in size and not statistically significant, indicating that the sex of the first child did not influence the desire for a second child in a multivariate context, leading to a rejection of hypothesis H2.

| | One child | Two children |
|---|-----------|--------------|
| Coresidence with parents (ref.=Non-coresidential) | | |
| Coresidential | 0.324+ | -0.050 |
| Sex of child (ref.=One son) | | |
| One daughter | -0.011 | |
| Sex of children (ref.=Two sons) | | |
| Two daughters | | 1.514*** |
| One son, one daughter | | 0.154 |
| Age (ref.= 25–34) | | |
| 15–24 | 0.306 | 0.839** |
| 35–44 | -1.284*** | -1.792*** |
| Education (ref.=Low) | | |
| Medium | 0.416+ | 0.221 |
| High | 0.504+ | -0.110 |
| Economic region (ref.=Southeast) | | |
| Red River Delta | 0.476 | 0.592* |
| Northern Midlands and Mountain Area | 0.799* | -0.212 |
| North Central and Central Coastal Area | 0.853** | 0.985*** |
| Central Highlands | 0.035 | 0.429 |
| Mekong River Delta | -0.358 | -0.788* |
| Urbanicity (ref.=Rural) | | |
| Urban | -0.486* | -0.304 |
| Age of youngest child | -0.095*** | -0.038 |
| McFadden's Pseudo-R ² | 0.2311 | 0.2127 |
| Number of observations | 1,265 | 3,136 |

TABLE 3: ESTIMATED COEFFICIENTS FOR THE DESIRE FOR AN ADDITIONAL CHILD, BY PARITY

Significance levels: + p<0.10; * p<0.05; ** p<0.01; *** p<0.001.

Source: MICS Vietnam 2020-21, weighted data

For women with two children, we observed no relationship between coresiding with parents and the desire for a third child (Table 3), supporting hypothesis H3. On the other hand, the sex of children had a varying relationship with the desire for a third child. The estimated coefficient for having two daughters was large and highly statistically significant (1.514***), indicating that women with two daughters more often desired a third child than women with two sons. This was, however, not the case for women with a son and a daughter. Although the estimated coefficient was large for these women, its statistical significance was beyond the standard p-value of 0.05. This supports our hypothesis that third-child desires are largely related to the need to produce a male heir (H4).

Regarding our control variables, age played a strong role in further childbearing desires. The estimated coefficients for the 35 to 44-year age group were negative, large in size, and highly statistically significant, indicating that few women over 34 desired further children. Education was associated with desiring a second child, wherein women with medium and high education desired a second child more often than low-educated women. However, among women with two children, education was not related to further childbearing plans. We found that women living in less economically developed regions of Vietnam (Northern Midlands and Mountain and North Central and Central Coastal areas) were more likely to desire a second child than those living in the Southeast. Further, our results provided some evidence of a north–south split, where women in the Mekong River Delta were the least likely to desire both a second and third child. Nevertheless, the estimated coefficient was only statistically significant in the analyses of women with two children, whereas it failed statistical significance in analyses of

women with one child (-0.788* and -0.358, respectively). Further, urbanicity was associated with desiring a second child, with women in urban areas being less likely to desire additional children than their rural counterparts. Again, this relation was only statistically significant in the model for women with one child. Finally, the age of the youngest child was negatively associated with additional childbearing desires among women with one child, indicating that the older the first child, the less likely women were to desire a second child. By contrast, the age of the youngest child was not significantly associated with further childbearing plans for women with two children. Overall, our multivariate results suggest that socio-demographic characteristics like education, urbanicity, or the age of the youngest child are related to the desire for a second child, but play a minor role in desiring a third child.

The stepwise inclusion of variables provided further insights into the socio-demographic dimensions of childbearing desires. The basic model included the women's age since our descriptive analyses revealed large differences by age (Figure 1). Among women with one child, the differentiation in the three broad age groups explained 16.6% of the variance in childbearing desires (Table 4, model 1). Upon including coresidence with parents, the estimated coefficient was 0.185 (Table 4, model 2), thus positive but not statistically significant, which implies that coresidency was not relevant for further family plans. After adding the child's sex, the corresponding coefficient was comparably small (0.044), failed statistical significance, and only marginally improved the model fit (McFadden's Pseudo R² increased from 0.1670 to 0.1671 in models 2 and 3, respectively). At this point, the results hinted towards a small tendency of women with one daughter to desire a second child more often than compared to those with a son. Including education revealed a strong association with childbearing desires that was related to a substantial increase in model fit (from 0.1671 to 0.1825 in models 3 and 4, respectively). Moreover, the estimated coefficient for the 35 to 44-year age group decreased from -2.166*** to -1.978***, reflecting an association between age and education. The model fit further improved (to 0.2074, model 5) after including the economic region, while the coefficients for coresidence and education changed. On the one hand, the estimated coresidence coefficient increased in size and amounted to 0.282, albeit still not statistically significant. On the other hand, the education coefficients decreased in size and also somewhat in their level of statistical significance, indicating that region, coresidence, and education were linked. Including urbanicity was related to some changes in the coefficients for the economic regions and education (Table 4, model 6). Finally, including the age of the child was relevant in several ways. First, the estimated coefficient was highly statistically significant, which also reflected the increase in model fit from 0.2140 to 0.2311. Second, the estimated coefficients for age of the woman somewhat decreased in size concerning statistical significance, reflecting that the age of the woman and the age of her child were related. Third, and more importantly in the context of our main explanatory variable, we found that the estimated coefficient for coresidence with parents-which stepwise increased in the models-was statistically significant (0.324+). Although the size and the level of statistical significance was not as high as with the variables like the woman's age, age of the youngest child, education, or urbanicity, our analyses revealed that coresidence with parents was associated with women's further childbearing desires when they had one child. Fourth, the estimated coefficient for having a daughter was positive in models 1 to 6. Likewise, even if the coefficient failed statistical significance, they implied a tendency towards the more frequent desire for a second child if the first was a daughter. Overall, women's age, their economic region of residence, the age of their youngest child, and women's education were the most relevant sociodemographic characteristics related to the desire for a second child, which we deduced from the model fit measure, McFadden's Pseudo R².

The stepwise analyses for women with two children revealed that aside from the woman's age, the sex of her children was the most important variable for desiring a third child. The initial model only included women's age and the model fit accounted for 12.2% of the variance (Table 5, model 1). Model fit did not increase after including coresidence with parents (Table 5, model 2), but increased substantially to 0.1670 upon including the sex of the children (Table 5, model 3). Similar to the analyses of women with one child, education and economic region were related to the desire for another child among women with two children, and regional differences seemed especially substantial (model fit increased from 0.1703 to 0.2094 in models 4 and 5 when accounting for the women's economic region of residence). Urban–rural differences explained the variation in desire for a third child to a lesser extent (model fit increased from 0.2094 to 0.2112), whereas the age of the first child was critical to the childbearing desires of women with one child, and the age of the youngest child played a minor role in the desire for a third child (model fit increases from 0.2122 to 0.2127). In both stepwise model setups, the estimated coefficients for coresidence with parents changed. They increased among women with one child and decreased among those with two children. These observations indicate that coresidence with parents was related to the explanatory variables included in our model. In general, the model fit was similar to our analyses for women with one and two children. The included explanatory variables accounted for 23.1% and 21.27% of the respective variance in childbearing desires.

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Age (ref.= 25–34) | | | | | | | |
| 15–24 | 0.504+ | 0.544+ | 0.544+ | 0.751* | 0.646* | 0.595* | 0.306 |
| 35–44 | -2.133*** | -2.164*** | -2.166*** | -1.978*** | -1.924*** | -1.866*** | -1.284*** |
| Coresidence with parents (ref.=Non-coresidential) | | | | | | | |
| Coresidential | | 0.185 | 0.185 | 0.227 | 0.282 | 0.289 | 0.324+ |
| Sex of child (ref.=One son) | | | | | | | |
| One daughter | | | 0.044 | 0.024 | 0.031 | 0.027 | -0.011 |
| Education (ref.=Low) | | | | | | | |
| Medium | | | | 0.584* | 0.475* | 0.569* | 0.416+ |
| High | | | | 0.819*** | 0.585* | 0.729** | 0.504+ |
| Economic region (ref.=Southeast) | | | | | | | |
| Red River Delta | | | | | 0.462 | 0.378 | 0.476 |
| Northern Midlands and Mountain area | | | | | 0.873** | 0.650* | 0.799* |
| North Central and Central Coastal area | | | | | 0.878** | 0.740* | 0.853** |
| Central Highlands | | | | | 0.095 | -0.013 | 0.035 |
| Mekong River Delta | | | | | -0.322 | -0.478+ | -0.358 |
| Urbanicity (ref.=Rural) | | | | | | | |
| Urban | | | | | | -0.514* | -0.486* |
| Age of youngest child | | | | | | | -0.095*** |
| McFadden's Pseudo-R ² | 0.1660 | 0.1670 | 0.1671 | 0.1825 | 0.2074 | 0.2140 | 0.2311 |
| Number of observations | 1,265 | 1,265 | 1,265 | 1,265 | 1,265 | 1,265 | 1,265 |

TABLE 4: ESTIMATED COEFFICIENTS FOR THE DESIRE FOR A SECOND CHILD, STEPWISE MODELS, WOMEN WITH ONE CHILD

Significance levels: + p<0.10; * p<0.05; ** p<0.01; *** p<0.001. Source: MICS Vietnam 2020-21, weighted data

| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 | Model 6 | Model 7 |
|---|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Age (ref.= 25–34) | | | | | | | |
| 15–24 | 0.632* | 0.616* | 0.699** | 0.740** | 0.964*** | 0.950*** | 0.839** |
| 35–44 | -2.023*** | -2.013*** | -2.051*** | -2.009*** | -2.035*** | -2.004*** | -1.792*** |
| Coresidence with parents (ref.=Non-coresidential) | | | | | | | |
| Coresidential | | -0.117 | -0.085 | -0.069 | -0.081 | -0.070 | -0.050 |
| Sex of children (ref.=Two sons) | | | | | | | |
| Two daughters | | | 1.406*** | 1.412*** | 1.510*** | 1.539*** | 1.514*** |
| One son, one daughter | | | 0.092 | 0.101 | 0.156 | 0.161 | 0.154 |
| Education (ref.=Low) | | | | | | | |
| Medium | | | | 0.374* | 0.236 | 0.280 | 0.221 |
| High | | | | 0.149 | -0.121 | -0.016 | -0.110 |
| Economic region (ref.=Southeast) | | | | | | | |
| Red River Delta | | | | | 0.654* | 0.562* | 0.592* |
| Northern Midlands and Mountain area | | | | | -0.123 | -0.242 | -0.212 |
| North Central and Central Coastal area | | | | | 1.081*** | 0.986*** | 0.985*** |
| Central Highlands | | | | | 0.529+ | 0.425 | 0.429 |
| Mekong River Delta | | | | | -0.688+ | -0.797* | -0.788* |
| Urbanicity (ref.=Rural) | | | | | | | |
| Urban | | | | | | -0.299 | -0.304 |
| Age of youngest child | | | | | | | -0.038 |
| McFadden's Pseudo-R ² | 0.1218 | 0.1222 | 0.1670 | 0.1703 | 0.2094 | 0.2112 | 0.2127 |
| Number of observations | 3,136 | 3,136 | 3,136 | 3,136 | 3,136 | 3,136 | 3,136 |

TABLE 5: ESTIMATED COEFFICIENTS FOR THE DESIRE FOR A THIRD CHILD, STEPWISE MODELS, WOMEN WITH TWO CHILDREN

Significance levels: + p<0.10; * p<0.05; ** p<0.01; *** p<0.001. Source: MICS Vietnam 2020-21, weighted data

5 DISCUSSION

In Vietnam, where the traditional values of filial piety are deeply rooted in its culture, parents play an important role in their adult children's lives—including their fertility decisions (Leung & Boehnlein, 1996). Although the coresidence of a married son and his parents is a widespread living arrangement (Bélanger, 2000), the composition of Vietnamese households is changing and fewer adult children live in multigenerational households. The increased geographical distance between parents and their adult children might be linked to less parental influence on adult children's lives, including family formation and fertility desires.

We find that coresiding with parents is associated with the further childbearing desires of women with one child. On the one hand, the association between coresidence with parents and a more frequent desire for a second child could be related to the availability of grandparental childcare (Tanskanen & Rotkirch, 2014; Yoon, 2017). On the other hand, given the cultural background of Vietnamese society, it might also be interpreted as perceived pressure from the coresiding parents to have two children. Among women with two children, third-child desires do not appear to be associated with coresiding with parents. However, women who live with their parents may somehow vary from those that do not coreside with parents or parents-in-law. Women coresiding with parents tend to have less to say in the household and experience more pressure exerted by the parental generation to have additional children. Parents in the household may also positively encourage the desire for additional children. In the context of the globally highest rates of female labour force participation (ILO, 2021), balancing work and family is difficult for mothers in Vietnam. Women coresiding with parents may have a local, trustworthy, flexible source of childcare that lowers the cost of additional children.

Previous literature from China did not find any positive influence of coresidence with parents on second-child desires (Ji et al., 2015). However, in the Vietnamese context, we find evidence that coresiding with the parental generation is associated with second-child desires, above and beyond son preference. These contrasting findings may be linked to the differences in the policy legacies of these two Confucian countries. Vietnam's TFR has remained close to 2.0 for more than twenty years, whereas China's TFR has hovered around 1.6 since the beginning of the millennium, thus well below the rates observed in Vietnam since 2000 (The World Bank, 2023).

Our observation that almost eight out of ten women with one child-but only roughly one in ten women with two childrendesire further children reflects the strong two-child norm in Vietnam, which is linked to previous policies that implied negative consequences for parents with three or more children (Council of Ministers, 1989). It also reflects our finding that the sex of the first child is not crucial for desiring a second child, implying that women aspire to give birth to a male descendant on the one hand, and to have both a boy and a girl on the other hand. We, however, do not find any evidence of mixed-sex preferences among women with two children. The negative consequences of breaking the two-child norm may be stronger than any positive desire to have mixed-sex children. Nevertheless, our results support the idea that families in Vietnam are inclined to break the two-child norm to have a male descendant. Among women with two children, the sex of the children is crucial for further childbearing desires. Those who desire a third child are frequently women with two daughters, which is in line with the country's strong gender hierarchy (Huong, 2010) and indicates societal norms about the need for a male heir. Further, the skewed sex ratio observed in our data, which is large among women with two children, is in line with practices of sex-selective abortions in Asian countries (Bélanger, 2002; Larsen et al., 1998). In line with previous studies on fertility desire in Asia (Das Gupta et al., 2003), we find that son preference continues to be the driving mechanism for the desire for additional children. Finally, we do not find any evidence of mixed-sex preferences among women with two same-sex children. The negative consequences of breaking the two-child norm may be stronger than any positive desire to have mixed-sex children.

As expected, age is crucial for further childbearing in Vietnam. Childbearing desires are low from the mid-thirties onwards. Thus, childbearing desires are higher for women in their twenties and early thirties, which is in line with age-specific fertility rates in Vietnam (Central Population and Housing Census, 2020). Our results for regional differences correspond with previous literature on large variations across regions and the pronounced differences between northern and southern regions (e.g., Bélanger, 2000).

Our study is not without limitations. Information on grandparental involvement in childrearing was not available. We are limited in knowing the reason for the decision to coreside with their parents(-in-law). While multigenerational households were previously standard, and still are in rural areas, some modern families may coreside for economic reasons. It is plausible that these households have significantly different rationales for (not) desiring additional children than families coresiding for normative reasons. On the other hand, more family-oriented women may select partnerships where they will coreside with the husband's family. It is not possible to parse the self-selection effect into multigenerational households with the available data. Moreover, the childbearing desires of the partner and the parents(-in-law) are unavailable. Finally, given the disparities in the sex composition of children, we do not know what potential role sex-specific abortion plays on fertility desires. Despite these limitations, our study contributes to the literature by highlighting the intersection between coresiding with parents and women's desires for additional children.

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APPENDIX

| | Coresidential | Non-coresidential |
|--|---------------|-------------------|
| Age | | |
| 15–24 | 32.2 | 67.8 |
| 25–34 | 56.6 | 43.4 |
| 35-44 | 69.5 | 30.5 |
| Education | | |
| Low | 62.9 | 37.1 |
| Medium | 56.2 | 43.8 |
| High | 57.8 | 42.2 |
| Economic region | | |
| Southeast | 66.5 | 33.5 |
| Red River Delta | 59.0 | 41.0 |
| Northern Midlands and Mountain area | 58.6 | 41.4 |
| North Central and Central Coastal area | 54.5 | 45.5 |
| Central Highlands | 69.1 | 30.9 |
| Mekong River Delta | 57.3 | 42.7 |
| Urbanicity | | |
| Rural | 58.1 | 41.9 |
| Urban | 62.5 | 37.5 |
| All | 59.7 | 40.3 |

Source: MICS Vietnam 2020-21, weighted data



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