

The Interplay of Multidimensional Gender Ideologies and Child-Rearing Purposes in Shaping Ideal Fertility Numbers in China

Xiaoxian Qiu¹ and Natalie Nistche²

Theoretical Focus

Background

China's total fertility rate dropped to 1.3 in the 2020 census, having fluctuated between 1.5 and 1.8 over the past decade, marking its entry into the ranks of low-fertility countries (Chen, 2021). Research on fertility trends and influences has become crucial. Studies have examined fertility behaviors and intentions through demographic and socioeconomic factors (Jin, 2016; Zheng, 2014) or macro factors like provinces and regions (Yu et al., 2021). These studies primarily support the first demographic transition and the low fertility trap theory, showing that higher economic status and regional development correlate with lower fertility intentions (Jin, 2016; Yu et al., 2021). However, Ji and Zheng (2018) suggest focusing on the second demographic transition theory, particularly through a gender lens. Recent research shows traditional gender norms positively impact fertility intentions, with views like prioritizing family over career for women (Hu & Lin, 2020; Li et al., 2024). The influence of gender ideologies varies, as women with egalitarian views exhibit stronger fertility intentions than men, while non-egalitarian women show weaker intentions compared to men with similar views (Jiang, 2022). This supports the second demographic transition theory, suggesting that as gender equality progresses, individuals prioritize self-fulfillment over fertility (Lesthaeghe, 2010).

Multidimensional Gender Ideology and Ideal Number of Children

Existing literature often averages gender ideologies to distinguish between egalitarian and non-egalitarian dimensions, then explores fertility attitudes accordingly. However, due to political shifts such as the Cultural Revolution and the Reform and Opening-Up, gender ideologies in China have become more complex (Qian & Li, 2020). A multidimensional approach captures perspectives beyond egalitarianism (Grunow et al., 2018; Scarborough et al., 2019), and recent studies confirm the existence of other ideological clusters (Koo, 2020; Yang, 2023). From 2010 to 2017, gender essentialism dominated, split into egalitarian essentialism (supporting women's labor rights and caregiving roles) and familial essentialism (emphasizing women's roles in family and marriage), while male supremacism remained accepted by the largest groups (Yang, 2023).

This study examines fertility attitudes based on gender ideology clusters, shedding light on the views of groups with previously overlooked perspectives at the micro level. Women with conflicting public and private sphere views are especially important, as they balance career and family choices. Nordic country analysis shows that groups with such contradictions have higher first-child intentions than egalitarian groups, akin to non-egalitarian groups (Begall & Hiekel, 2024). The study uses the ideal

¹ Centre of Social Research Methods, Australian National University

² School of Demography, Australian National University

number of children, which better reflects social norms and future fertility trends compared to fertility intentions (Zheng, 2014; Trent, 1980).

The Relationship Between Gender Ideology Child-Rearing Purpose

The extended focus of the study is the intersection between gender ideologies and child-rearing purposes within the context of Chinese culture. Whether the widespread non-egalitarian gender ideologies have changed in contemporary China has been a key concern of previous research (Yang et al., 2014; Koo et al., 2020). These non-egalitarian gender ideologies, which emphasize women's reproductive function and reject their participation in the public sphere, are supported by the patriarchal system. Patriarchal system demands the continuation of the male lineage and surname (Hu & Scott, 2014). On one hand, the patriarchal system emphasizes that women's purpose is to marry and continue the lineage; on the other hand, it devalues women's roles outside this system. As reflected in the Chinese saying, "a married daughter is like water thrown away". This suggests that daughters have no value to their birth family, influencing women's self-perception and fertility attitudes.

Since the 21st century, Chinese people have still cited child-rearing purposes rooted in women's familial roles, such as "to carry on the family line" and "to have someone to rely on in old age" (Feng, 2018; Sheng & Li, 2023). Women embedded in traditional gender cultures tend to have more children, particularly sons, to solidify their family status and demonstrate the value of reproduction (Ji & Zheng, 2018). This reflects how the patriarchal system, which assigns women status based on their reproductive function, links gender ideologies, child-rearing purposes, and actual fertility behaviors. In Taiwan, where the idea of continuing the male lineage is also present, related research shows that younger generations with more traditional gender ideologies are more likely to emphasize all aspects of child-rearing purposes, including both emotional and instrumental reasons (Chen & Yi, 2021). Based on gender ideologies, another extended focus of this study is how child-rearing purposes and gender ideologies cluster together, as this can help explain how contemporary gender ideologies relate to child-rearing purposes.

Ideal Number of Children and Multidimensional Gender Ideology and Child-rearing Purpose

Cross-cultural research suggests that psychological factors have become central to understanding when and why people have their first child, as well as their ideal number of children (Nauck, 2010). Besides cultural ideological factors like gender ideologies, child-rearing purposes are the initial drivers of fertility behavior, with subsequent impacts through the transmission mechanism of behavior (Miller, 1995). Individualistic fertility motivations lead to lower fertility intentions and later marriages, resulting in fewer children; conversely, family-oriented fertility motivations encourage higher fertility intentions and earlier marriages, leading to more children (Chen & Hu, 2020).

This study intends to further explore the relationship between these psychological factors and the ideal number of children based on the clustering of gender ideologies and child-rearing purposes. The second demographic transition (SDT) explains that the rise of individualism has driven shifts in women's social roles and family perspectives. Specifically, in terms of family relationships, the focus

has shifted from "children first" to "spouses first," with fewer children ensuring that each child receives sufficient resources (Lesthaeghe, 2010). In line with SDT, Chinese residents' traditional and economic fertility motivations have gradually weakened, shifting toward emotional motivations, while gender ideologies have generally shifted towards egalitarianism (Jia, 2009; Jiang, 2022). However, in the Chinese context, raising children remains the primary function of the family, and phenomena such as out-of-wedlock births and voluntary childlessness remain relatively rare (Yu & Xie, 2019). Therefore, studying the intersection of SDT-related psychological factors and fertility attitudes can verify and supplement evidence of SDT in China. Gender revolution theory suggests that equitable gender attitudes, along with a satisfying division of labor in the private sphere, can increase fertility rates (Goldscheider, 2015). As previously mentioned, this study also examines whether child-rearing purposes play a role similar to that of satisfaction with the division of labor in the private sphere, particularly in the relationship between attitudes and fertility intentions, beyond the non-egalitarian clusters.

Data

This study uses data from the China Family Panel Studies (CFPS) conducted in 2010, 2012, 2014, 2018, and 2020, which focus on social, economic, and demographic changes. The survey was carried out by Peking University using probability sampling, with administrative divisions and socioeconomic levels as the primary stratification variables, covering 25 provinces/municipalities/autonomous regions in China. Ideal fertility numbers were available only in 2014 and 2018, while gender ideologies were available in 2014 and 2020. After listwise deletion of missing values based on the scope of these key variables, the analysis samples for 2014, 2018, and 2020 consisted of 38387, 36754, and 32749 respondents, respectively.

The dependent variable is measured by ideal fertility number, based on the 2014 question "If the policy allows, how many children would you like to have?" and the 2018 question "What's your ideal number of children?" Responses ranged from 0 to 10. Responses of 3 and above were recoded as 3.

The first predictor is gender ideologies, which were measured by four statements in the questionnaire:

1. Men should focus on career, while women should focus on family.
2. Marrying well is more important for women than doing well.
3. Women should have at least one child.
4. Men should do half of the housework.

Responses were on a scale from "strongly disagree" to "strongly agree," rated from 1 to 5. These responses were recoded into binary variables, representing egalitarianism and non-egalitarianism.

The second predictor is the purpose of raising children, measured by nine statements in the questionnaire:

1. To help me when I get old.
2. To proliferate the family.
3. To help my family economically.
4. To enjoy raising a child.
5. To enjoy having a child accompany me.
6. To enjoy having a baby.
7. To make the family more important in my life.
8. To increase my sense of responsibility.
9. To strengthen connections with relatives.

Responses were categorized into five options: “strongly disagree,” “disagree,” “agree,” “strongly agree,” and “neither agree nor disagree,” coded from 1 to 5. These responses were recoded into binary variables, representing disagreement and agreement. For the nine items, responses of 1, 2, and 5 were coded as 0 (disagreement), while responses of 3 and 4 were coded as 1 (agreement).

The regression model, based on prior research on fertility intentions and fertility numbers, included relevant socio-demographic control variables: respondent’s gender, age (in years), highest educational attainment (eight categories), place of residence (rural or urban), employment status (unemployed, employed, or out of the labor force), income (wage income in the past year), marital status (never married, married, cohabiting, divorced, or widowed), whether they have children, number of children (recoded as 3 for 3 or more), and number of siblings (recoded as 3 for 3 or more).

Research Methods

In the analysis, we first used Latent Class Analysis (LCA) to identify multiple associations of the four indicators and to estimate the probability of individuals belonging to different classes, thereby distinguishing between different clusters of gender ideologies and purposes for raising children. To explore the potential relationship between these two dimensions and their connection to ideal fertility numbers, we estimated five and ten clusters for gender ideologies and child-rearing purposes, respectively, and up to ten clusters for their combination. The selection of clusters was based on information criteria, primarily SSA-BIC and BLRT, the principle of parsimony, and conceptual relevance.

The analysis includes three main models. The first model is a multivariate regression of gender ideology clusters. The second model extends the first by incorporating child-rearing purposes as a covariate to assess its conditional effect on the outcome. The third model is a multivariate regression of the combined clusters of gender ideologies and child-rearing purposes to examine their joint association with ideal fertility numbers. For those models, after selecting the most suitable classification, we used the BCH method to construct multivariate models. This method is suitable for exploring the predictive effect of latent classes on distal outcomes and avoids the issue of changing

latent classes during the regression process. Another advantage of the BCH method is that it accounts for uncertainty in class membership by addressing differences in auxiliary variable variance across classes through weights reflecting classification uncertainty. Full-information maximum likelihood was used to handle missing data. All analyses were conducted using Mplus.

Expected Findings

Based on prior research validating the Second Demographic Transition (SDT) and the multidimensional conceptual analysis above, the following findings are expected regarding the relationship between gender ideologies and ideal fertility numbers:

1. Non-egalitarians are expected to have higher ideal fertility numbers than egalitarians.
2. Individuals who support both women's rights in the labor market and women's caregiving roles are expected to have ideal fertility numbers between non-egalitarians and egalitarians, with a tendency toward non-egalitarians.

Family essentialists, who emphasize women's involvement in the family and reject female participation in the labor force, are expected to prioritize family-building and caregiving (Yang, 2023). However, the comparison of their ideal fertility numbers with non-egalitarians is unclear, leading to the following expectations:

3. Family-focused gender essentialists are expected to have higher ideal fertility numbers than other groups; 3(a) they are expected to have higher numbers than egalitarians, but 3(b) lower than non-egalitarians.

Regarding the multidimensional conceptual analysis of the combination of gender ideologies and purposes for raising children, and considering the presence of patriarchy, this study expects:

4. Most non-egalitarians in terms of gender ideologies are expected to have fertility purposes based on the continuation of the male bloodline.

Sheng and Li (2023) identified other prominent fertility purposes in recent years, categorizing them as low-desire passive, individual-oriented, dual-emotion-oriented, and family-oriented.

Understanding how multidimensional fertility purposes align with multidimensional gender ideologies—especially for groups that deviate from non-egalitarian gender perspectives—will be a key focus of this study. Given the contrast with patriarchy, the study anticipates:

5. Most egalitarians in terms of gender ideologies will have fertility purposes based on non-patriarchal foundations, such as individual or emotion-oriented goals.

Regarding the relationship between the clusters of gender ideologies and child-rearing purposes with ideal fertility numbers, and based on SDT and gender revolution theory, the expected findings are:

6. The group combining non-egalitarian gender ideologies with family-oriented fertility purposes is expected to have the highest ideal fertility numbers.

7. Within the egalitarian gender ideology group, differences in fertility purposes will drive differences in ideal fertility numbers, with non-family-oriented individuals having the highest numbers.

Since the study employs a multidimensional approach, additional groups not included in these expected findings may emerge from the results.

References

- Begall, K., & Hiekel, N. (2024). Beyond the continuum: A micro-level analysis of the gender equality-fertility nexus in three Nordic countries. Max Planck Institute for Demographic Research.
- Chen, T., & Hu, A. (2020). Individualism or familism? An analysis of the effects of different fertility motivations on fertility behaviors. *Jiangsu Social Sciences*, (2), 28–38.
- Chen, W. (2021). China's low fertility rate and the three-child policy: An analysis based on the data from the seventh national census. *Population & Economics*, 5, 25–35.
- Feng, X. T. (2018). Giving children a companion: The fertility motivations for a second child among urban parents of single children and its implications. *Journal of Jiangsu Administration Institute*, (4), 57–65.
- Goldscheider, F., Bernhardt, E., & Lappegård, T. (2015). The gender revolution: A framework for understanding changing family and demographic behavior. *Population and Development Review*, 41(2), 207–239.
- Grunow, D., Begall, K., & Buchler, S. (2018). Gender ideologies in Europe: A multidimensional framework. *Journal of Marriage and Family*, 80(1), 42–60.
- Hu, R., & Lin, B. (2020). Gender equality perspectives and women's fertility intentions. *Seeking Truth*, (4), 142–148.
- Hu, Y., & Scott, J. (2016). Family and gender values in China. *Journal of Family Issues*, 37(9), 1267–1293. <https://doi.org/10.1177/0192513x14528710>
- Ji, Y., & Zheng, Z. (2018). Low fertility in China from the perspective of gender and development. *Social Sciences in China*, 8, 143–161.
- Ji, Y., Wu, X., Sun, S., & He, G. (2017). Unequal care, unequal work: Toward a more comprehensive understanding of gender inequality in post-reform urban China. *Sex Roles*, 77(11-12), 765–778. <https://doi.org/10.1007/s11199-017-0751-1>
- Jin, Y., Song, J., & Chen, W. (2016). Fertility preferences and plans of urban women in China under the universal two-child policy. *Population Research*, 40(6), 22–37.
- Koo, A., Hui, B. P. H., & Pun, N. (2020). Gender ideologies of youth in post-socialist China: Their gender-role attitudes, antecedents, and socio-psychological impacts. *Chinese Sociological Review*, 1–28. <https://doi.org/10.1080/21620555.2020.1768366>
- Lesthaeghe, R. (2010). The unfolding story of the second demographic transition. *Population and Development Review*, 36(2), 211–251.

- Li, Z., Jiang, J., & Yin, H. (2024). The impact of gender role attitudes on fertility intentions: An empirical analysis based on CGSS data. *Jinyang Academic Journal*, (3), 34-48.
- Miller, W. B. (1995). Childbearing motivation and its measurement. *Journal of Biosocial Science*, 27(4), 473–487.
- Nauck, B. (2010). Intergenerational relationships and female inheritance expectations: Comparative results from eight societies in Asia, Europe, and North America. *Journal of Cross-Cultural Psychology*, 41(5), 690–705.
- Qian, Y., & Li, J. (2020). Separating spheres: Cohort differences in gender attitudes about work and family in China. *China Review*, 20(2), 19–52. <https://www.jstor.org/stable/26915620>
- Scarborough, W. J., Sin, R., & Risman, B. (2019). Attitudes and the stalled gender revolution: Egalitarianism, traditionalism, and ambivalence from 1977 through 2016. *Gender & Society*, 33(2), 173–200.
- Sheng, H., & Li, J. (2023). Analysis of generational and gender differences in fertility motivation: Based on CFPS2020 data. *Journal of Sociology*, 43(3), 187-212.
- Yang, R. (2023). Mosaic of beliefs: Comparing gender ideology in China across generation, geography, and gender. *International Journal of Comparative Sociology*, 002071522211474. <https://doi.org/10.1177/00207152221147493>
- Yu, J., & Xie, Y. (2019). The second demographic transition in China. *Population Research*, 43(5), 3.
- Yu, J., Zhou, Y., & Xie, Y. (2021). Macro factors affecting the ideal number of children among Chinese residents. *Population Research*, 45(6), 45.
- Zheng, Z. (2014). The measurement and application of fertility intentions. *Chinese Journal of Population Science*, 6, 15–25.