The Changes in Gender Role Attitudes and Fertility Intentions in China: A Focus on the Two-Child Policy Implementation Period (2015–2021)

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Abstract

This study examines how gender role attitudes are associated with fertility intentions in China across the period surrounding the implementation of the universal two-child policy. Drawing on data from the Chinese General Social Survey (CGSS) in 2015, 2017, 2018, and 2021, the analysis combines descriptive statistics and binary logistic regression to explore variations in intentions to have two or more children across survey years, social groups, and gender role orientations. Rather than estimating causal policy effects, the study treats the two-child policy as a contextual backdrop and focuses on changes in statistical associations over time.

The findings show that fertility intentions did not increase consistently during the two-child policy period. Instead, intentions varied across cohorts, education levels, employment statuses, and family situations. Individuals holding traditional gender role attitudes, such as endorsing a gendered division of labour, prioritising marriage over women's careers, or accepting gender hierarchies in the workplace, consistently reported higher fertility intentions across survey years. In contrast, respondents with more egalitarian gender attitudes, particularly those supporting equal sharing of household labour, exhibited lower fertility intentions, with little evidence of convergence over time. Gender differences in overall fertility intentions were modest, and interaction analyses indicate that gender role attitudes, rather than gender alone, play a more salient role in shaping reproductive intentions.

These patterns suggest that fertility intentions in contemporary China are strongly embedded in enduring gender norms and socio-economic constraints. The two-child policy appears to operate selectively, aligning more closely with traditional family models while offering limited support to individuals pursuing gender equality under conditions of high work–family conflict. The study highlights the importance of integrating gender ideology, labour market structures, and family institutions into analyses of fertility intentions and underscores the need for gender-responsive social policies to support sustainable fertility outcomes.

Declaration

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

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1. Context and Theoretical Framework

1.1 Introduction

Over the past decade, China has entered a period characterised by persistently low fertility and intensified demographic ageing (Wang and Chen, 2024; Zeng and Hesketh, 2016). Both of these issues have been broadly related to the influence of Confucian culture and population policy, as well as to broader changes in gender relations and family life (Rosker, 2015; Jiang and Liu, 2016). Confucian culture emphasises the importance of family and the role of women as caregivers, shaping expectations around caregiving and reproduction (Li, 2000). The population policy has been associated with gender and fertility patterns in China, forming part of the institutional context rather than functioning as an isolated policy intervention.

China's population policy has always been a topic of debate and criticism, but relatively limited attention has been paid to how policy reform intersects with gender inequality in shaping the attitudinal context of fertility decision-making and stated fertility intentions (Chen et al., 2017). This study situates gender role attitudes and fertility intentions within the socio-cultural and institutional conditions of the universal two-child policy implementation period (2015–2021), thereby providing contextual foundations for understanding the intersection of gender inequality and reproductive attitudes.

Existing research suggests that fertility regulation in the one-child policy era was associated with shifts in intra-household investment patterns in some contexts, including debates about girls' status within families (Jiang and Liu, 2016). However, these shifts coexisted with enduring Confucian norms surrounding lineage, son preference, and gendered family roles, which continue to inform the attitudinal environment in which fertility intentions are formed (Palmer, 2007).

In response to sustained fertility decline, China has introduced successive adjustments

to fertility regulation, including the universal two-child policy in 2016 and the three-child policy in 2021 (BBC News, 2021). Over the longer term, China's total fertility rate has fallen substantially, reaching 1.08 in 2022 according to official statistics (National Bureau of Statistics (NBS), 2022), and China entered a phase of negative population growth in 2023. These demographic developments have intensified scholarly attention to the social and institutional contexts within which fertility intentions are expressed.

Within China's modernization process, tensions between inherited gender norms and contemporary aspirations have become increasingly visible (Rosker, 2015; Connell, 2011). While women's educational attainment and labour market participation have expanded, persistent gendered expectations around caregiving and household responsibility contribute to work–family reconciliation pressures that are especially salient for women during marriage and childbearing stages (Ji and Wu, 2018; Liu, 2023). These tensions form a core part of the context in which gender role attitudes and fertility intentions were negotiated during 2015 to 2021, and they are introduced here to frame the interpretation.

This study is organised to distinguish clearly between contextual discussion, theoretical framing, empirical analysis, and interpretation. Chapter 1 establishes the social, institutional, and theoretical setting in which gender role attitudes and fertility intentions are examined, focusing on Confucian cultural legacies, women's educational and labour market positioning, work–family constraints, and fertility policy as an institutional background. Chapter 2 reviews existing empirical research on gender role attitudes and fertility, identifies unresolved questions in the literature, and formulates the research questions and hypotheses. Chapter 3 sets out the methodological framework, including data sources, variables, and analytical strategy, and clarifies the limits of inference associated with survey-based quantitative analysis. Chapter 4 presents descriptive and regression-based findings on the association between gender role attitudes and intentions to have two or more children across different survey periods. Chapter 5 situates these findings within existing literature, theoretical perspectives, and the structural conditions discussed earlier, and Chapter 6 summarises the main findings, contributions, and limitations of the study.

This structure reflects a progression from broad contextual grounding to more focused analytical stages. Within this sequence, Chapter 1 serves a preparatory function, delineating the cultural, institutional, and theoretical conditions under which gender role attitudes and fertility intentions are formed and expressed.

Accordingly, this chapter is organised to provide the contextual and theoretical resources required for interpreting fertility-related attitudes in later chapters. Section 1.2 examines the socio-cultural foundations of gender norms in China, with particular attention to Confucian family ideology, son preference, and shifts in family values, thereby outlining the normative environment surrounding work, family, and reproduction. Section 1.3 situates these attitudes within women's educational trajectories, labour market participation, and work–family constraints, highlighting the structural conditions that shape everyday negotiations of gender roles beyond formal policy provisions. Section 1.4 traces fertility policy reform between 2015 and 2021 as an institutional context in which attitudes and intentions are articulated, while Section 1.5 introduces the theoretical perspectives on gender, work, and fertility that inform the interpretation of observed patterns in fertility intentions.

1.2 Socio-cultural Foundations of Gender Norms in China

This section outlines the socio-cultural foundations of gender norms in China. It first examines Confucian family structures and gender hierarchy, before considering how these norms have been reproduced and transformed under conditions of social change.

1.2.1 Confucian Family Order and Gender Hierarchy

The Role of Confucianism in Shaping Chinese Society

For centuries, Confucianism has been the dominant force shaping Chinese society, influencing its culture, norms, values, and behaviors (Rosker, 2015). Confucian culture plays an irreplaceable role in shaping China's morality, social norms, politics,

and social ethics. Additionally, Confucianism emphasises hierarchy, responsibility, and social order, deeply rooted in the Chinese social structure (Wang, Chiang and Xiao, 2024). It provides a comprehensive framework for social patterns, from individuals and families to communities and the entire country, promoting a stable political and social system that significantly affects individuals and groups' attitudes and behaviors.

Although Confucianism has contributed to China's stability and order, it has also perpetuated gender inequality. This section aims to explore the influence of Confucianism on family order, gender hierarchy, and normative expectations surrounding gender (Ye, 2023). By examining Confucianism's historical background and basic principles and its impact on Chinese society, this section highlights how Confucian legacies continue to structure gendered norms and family relations, continuing to affect China's gender issues (Connell, 2011; Ye, 2023).

Confucian Perspectives on Gender Roles

Despite significant social and economic changes in recent decades, gender inequality remains a controversial issue in Confucianism, particularly because it involves the roles of men and women in society. As the traditional gender ideology of patriarchy still prevails in China, scholars are increasingly interested in the impact of Confucianism on gender inequality in contemporary China. Therefore, it is necessary to fully understand the influence of Confucianism on gender in the present day. In Chinese society, Confucian culture emphasises three aspects of family characteristics and rules: the importance of extended family, respect for elders, and favoring sons over daughters.

Family values and gender roles in Confucianism

The importance of the family, especially the extended family or clan, is one of the key values of Confucianism, which has been deeply rooted in Chinese culture for thousands of years(Wang et al., 2024)). In Chinese culture, the family is seen as the basic unit of society, and the extended family or clan has traditionally been highly valued. The extended family is seen as a source of strength, support, and security, and

is considered the ideal form of family structure. Confucianism has played an important role in promoting the importance of extended families in China. One of the main reasons for the importance of the extended family in China is the emphasis on filial piety.

In an extended family, there are more children who need to take care of their parents and grandparents, which is seen as a way of fulfilling filial piety. In an extended family, several generations of married couples live together with their children, sharing the economic and social responsibilities of the family. The core principle is that everyone should understand and act according to their social role (Lee, 2011). Assuming that each member of the family and community follows the rules and fulfills their obligations, this helps to avoid conflicts between family members and reduce conflicts between the family and the government (Lee, 2011). In addition, an extended family provides a support system for its members, which is particularly important in a society with a weak social welfare system.

However, the emphasis on extended family in China has also led to some negative effects. Emphasising the importance of the family sometimes leads to neglecting individual needs and desires, especially for women who are expected to prioritise family needs over their own (Li, 2000; Ye, 2023). Emphasising filial piety and family loyalty reinforces traditional gender roles. Women are expected to be obedient, serving their husbands and in-laws. The Confucian ideal of a virtuous woman is quiet, obedient, and submissive. Women who do not meet these expectations may face criticism or exclusion from their families and communities. Additionally, the emphasis on extended family can reinforce gendered expectations about women's domestic responsibilities and caregiving roles. In traditional Confucian families, boys are often given priority in family investment and future-oriented expectations, while girls are expected to stay at home and help with household chores (Jiang and Liu, 2016; Tsui and Rich, 2002). This leads to unequal expectations around intra-household investment and household labour within the family, reinforcing gendered role assignments. Therefore, Confucian emphasis on extended family, by reinforcing traditional gender roles, contributes to the reproduction of gender inequality in China. This focus on family loyalty and obedience under the framework of filial piety

establishes the foundational gendered expectations for women to prioritise domestic and caregiving roles (Li, 2000; Ji and Wu, 2018).

Respect for elders

Respect for elders is a core Confucian value that plays an important role in shaping social relationships and family dynamics in China. Confucianism emphasises the importance of filial piety, which includes respect and obedience towards parents and other elders in the family. This value is deeply rooted in Chinese culture and is reflected in various aspects of daily life. This social hierarchy reinforces traditional gender roles and perpetuates patriarchy within the family (Rosker, 2015). The eldest male in the family is designated as the patriarch, responsible for maintaining family relationships and ensuring that the family stays. This reinforces expectations for men to hold positions of power and authority within the family unit, while women are expected to be obedient and submissive (Rosker, 2015). Ancestor worship is an important aspect of Confucianism, used to maintain family stability and continuity.

However, while the value of respecting elders has positive aspects, it can also have negative consequences, especially for the younger generation and women. Emphasising filial piety can lead the younger generation to feel pressure to conform to traditional expectations, sacrificing their own desires and ambitions for the sake of their elders (Liu, 2016). This can lead to resentment and dissatisfaction, particularly among young people who may feel unable to pursue their own goals and aspirations due to social pressure to prioritise the needs of their elders (Liu, 2016).

Additionally, emphasising respect for elders is associated with gendered expectations that women take on a larger share of elder care (including care for parents-in-law) (Wang,Chiang and Xiao, 2024). This can reinforce unequal positioning within the household and shape women's roles within family life (Wang et al., 2022). Furthermore, the value of respecting elders can perpetuate authoritarian social relationships, with male ancestors usually receiving greater respect and reverence than female ancestors (Rosker, 2015). Traditionally, elderly men take precedence over other family members and have the final say in decision-making processes.

Patriarchy and the status of women in Confucianism

Confucianism places a great emphasis on patriarchal authority, which is reflected in the lack of autonomy and independence of women in relationships with men (Wang, Min and Ærenlund, 2016). In Confucianism, only male descendants have inheritance rights, which leads to a strong preference for sons to maintain family continuity and power (Lee, 2011). There are fundamental differences between men and women in their views on family structure, resulting in patriarchy. Women have never been considered formal members of the family and are unable to inherit property. Therefore, their main responsibility has often been framed in terms of maintaining patrilineal continuity within the husband's family.

Furthermore, any status and influence women can gain are related to their roles as mothers of sons, which is emphasised in Confucianism's moral principles of Sancong saidi for women. This principle states that women belong to their families before marriage and obey their fathers and brothers. After marriage, women belong to their husband's family and should obey their husband and son, and practice the four virtues of morality, physical charm, language etiquette, and needlework efficiency. Therefore, women are limited to living in social norms and institutional arrangements based on male perspectives (Wang et al., 2016). The traditional ethics of Confucian society, *Nan Zun Nu Bei*, emphasises male superiority over female and further reinforces women's hierarchical status. Thus, gender relations in patriarchy are based on power relations of domination and subordination, and Confucianism has contributed to the reproduction of Chinese patriarchy (Li, 2000).

Male preference and gender inequality in Confucianism

In an agricultural society dominated by male labour, having more male labour is important for a family's economic security (Li, 2000). Confucianism stipulates that when a daughter marries, she becomes a member of her husband's family and is no longer a member of her parents' family. Therefore, when parents are old and unable to work, they must rely on their sons. The more sons a family has, the more secure they feel, which is why people often say 'the more children, the greater the prosperity' (Li and Bian, 2023). This is especially true in rural areas where family support in later life

relies heavily on adult children, and sons become the main supporters of the family and elderly. Therefore, if a couple only has daughters, even if they have two or three, they may continue to express a strong preference for a son. This preference for male children leads to lower status for daughters in the family and exacerbates gender inequality.

Wang (2017) emphasised the role of Confucianism in shaping gender roles and family dynamics in East Asia. According to her, Confucianism reinforces gender division of labour within families, with women primarily responsible for household chores and child-rearing, while men are expected to be breadwinners and hold authoritative positions within the family (Wang et al., 2022). This reinforces patriarchal values and perpetuates gender inequality, as women are often marginalised and excluded from decision-making processes within the family (Wang et al., 2022). In addition, Confucian emphasis on filial piety and respect for elders often places a burden on women to care for elderly family members, further reinforcing gender roles and constraining women's roles within family life.

Overall, Confucianism plays an important role in shaping gender roles and family dynamics in East Asia. Its emphasis on respect for elders, hierarchical social relations, and gender division of labour reinforces patriarchal values, promotes the cultural belief of valuing male offspring over female, and perpetuates gender inequality (Mei and Jiang, 2022). Although efforts have been made in recent years to challenge and change these values, the influence of Confucianism on Chinese culture and society remains significant, including in the normative foundations of gender role attitudes discussed in this study (Ye, 2023). The following section develops this further by focusing on son preference and lineage logic as part of broader reproductive expectations.

1.2.2 Son Preference, Lineage Logic and Reproductive Expectations

Throughout history, Confucianism has played an important role in shaping family organisation and normative expectations in China, influencing gender relations within

households and intergenerational obligations (Li et al., 2021). Confucianism has both positive and negative associations on gender equality, particularly through norms surrounding lineage, inheritance, and the gendered organisation of family roles.

Male preference and gender inequality in Confucianism

The influence of Confucianism on family life and social relations includes emphasising hierarchy and obedience (Chen, 2022). In Confucianism, obedience to authority is very important, leading to a culture that respects male authority figures. This also leads to gendered division of labour, in which women are expected to prioritise their roles as wives and mothers over individual aspirations outside the domestic sphere. Some studies suggest a persistence, and in some contexts a reassertion, of traditional breadwinner–homemaker norms in attitudes towards family roles (Wang and Chen, 2024), which forms part of the cultural environment in which son preference and lineage expectations are reproduced.

Dual Challenges of Gender Inquality and Women's Status

According to the National Bureau of Statistics of China, the sex ratio at birth in 2010 varied significantly by birth order. The ratio was 113.73 for first children, 130.29 for second children, 161.56 for third children, with an overall average of 121.21 girls per 100 boys (NBS, 2010), highlighting the demographic context in which son preference and lineage expectations have been discussed.

In addition to demographic regulation, family planning policies have interacted with gendered family norms in ways that shape household expectations.The one-child policy may have been associated with changes in the status of girls within the family. This is because the policy may have increased the resources invested in them, which in turn shifted intra-household investment patterns (Tsui and Rich, 2002; Veeck, Flurry and Jiang, 2003). Traditionally, Confucian culture has been deeply rooted in patriarchy and male gender preference, as well as the practice of considering males as having an obligation to continue their lineage (Wang et al., 2022). This has been linked to parents prioritising their sons' resource allocation within the family. In situations where resources were scarce, daughters could be disadvantaged in intra-

household allocation, reflecting the prioritisation of sons within patrilineal family norms (Li, 2000). After the implementation of the one-child policy in the 1980s, a significant number of Chinese families became single-child families. This policy has resulted in parents valuing their only child, regardless of their sex (Veeck et al., 2003). When a girl is born and becomes the sole child, parents may invest heavily in her, which may be associated with better family status and access to more resources compared to those with male siblings (Lee, 2011). The Confucian tradition places substantial emphasis on education, some studies suggest that investment in family resources, particularly education in urban households, may partly moderate gendered disadvantages within families (Kim and Wang, 2023). Historically, women in Chinese society received limited education compared to men, but the one-child policy has been associated with a context in which family resources may be concentrated on daughters, without brothers competing for parental attention and resources.

Family Investment Practices

Investment in children within a family is a crucial factor in shaping the future of children's life chances and intra-household inequalities (Baker and Milligan, 2013). It is well established that parents invest in their children through various means such as time, money, and emotional support (Liu et al., 2023, 2003). However, the amount and type of investment vary depending on the child's gender and birth order. The literature suggests that parents often allocate resources differently between sons and daughters due to various reasons such as cultural beliefs, the expectation of future returns, and lineage-related expectations surrounding daughters' and sons' roles within the family.

Studies have shown that parents invest more in the developmental resources of their sons than their daughters, even when the daughters show better academic performance (Liu et al., 2023). Similarly, parents spend more money on their sons' extracurricular activities, such as sports and music, than their daughters' (Jacobsen and Dalsgaard, 2015). This differential investment can contribute to the reproduction of gendered expectations within families, including assumptions about sons' future roles and daughters' relative position in intergenerational arrangements.

Moreover, birth order also plays a significant role in shaping the investment in children within a family. The first-born child tends to receive more investment in terms of time, money, and emotional support compared to younger siblings (Baker and Milligan, 2013). The first-born child is often considered a testing point for parental expectations by parents, and they invest more in their education and extracurricular activities in line with higher expectations. This investment in the first-born child can have a long-lasting implication for intra-household allocation patterns and can also create a sense of competition among siblings, with younger siblings potentially receiving comparatively fewer inputs.

In contexts where families face resource constraints, parents often consider the potential implications of having additional children on their existing family structure when making decisions about fertility. It has been suggested that only parents who are capable of maintaining the level of investment in their current child may choose to have another child (Becker and Lewis, 1973), and therefore, an increase in the number of siblings may not affect the investment in the existing child if the size of the sibling provision chosen is small (Hao and Li, 2019). However, if parents allocate resources unequally among their children, an increase in sibling provision may reduce parental investment in some children while not affecting or even increasing investment in others (Quadlin, 2019). This indicates that the relationship of sibling provision on parental investment in children is not uniform and depends on the resources available to the family and the allocation of those resources among siblings (Quadlin, 2019; Hao and Li, 2019).

It is well documented that parents invest differently in their children based on their gender. One reason for this is that parents may have different preferences or expectations for their children depending on their gender. For example, research has shown that parents may invest more in their male children because they expect them to have higher earning potential, which can generate more financial returns for the family (Lu and Treiman, 2008). In certain cultures such as East Asia, there is a strong patriarchal preference for male offspring, consequently, male children receive preferential treatment in terms of a range of household resources, consistent with the assumption that sons are permanent members of the family while daughters are not

(Chu et al., 2007).

In China, where parental expectations and investment in children's development are increasing rapidly, both monetary and non-monetary investments have been shown to be associated with children's educational attainment and achievement (Chi and Qian, 2016; Zeng, 2016). The costs of educational opportunities are mainly borne by families, and investment is particularly important in a patriarchal culture where parents rely on their sons for the support of their elderly (Chi and Qian, 2016). Thus, investment in the development of male children may be understood as aligning with expectations of long-term intergenerational returns.

Overall, gender-based investment in children is a complex issue influenced by cultural, economic, and social factors. It is important to understand the reasons behind gender-based investment in children because these expectations help to reproduce son preference and shape family-level reproductive expectations, including assumptions about lineage continuation and intergenerational support.

1.2.3 Tradition, Modernisation and Changing Family Values

The discussion in this section examines how traditional family norms and values have been reshaped, reinterpreted, and sometimes contested in the context of social transformation.

Cultural Change and Shifts in Values

This process can be influenced by various factors, including economic and social developments, technological advancements, and shifts in political ideologies (Smith, 2019). As cultural and values change, traditional beliefs and practices may become less prevalent, and new ideas and practices may emerge. Rather than disappearing entirely, established cultural norms often coexist with emerging values, shaping social expectations in uneven and sometimes contradictory ways. However, cultural and values change can also be met with resistance, as some individuals may be resistant to change or may hold onto traditional beliefs and practices that are no longer widely

accepted (Jones, 2020).

Modern family theories have been developed largely in capitalist societies and may require contextual adjustment when applied to socialist countries, such as China (Ochiai et al., 2008). Research on the relationship between gender equality and fertility has primarily been conducted in capitalist countries, which may limit its applicability to socialist societies. This limitation highlights the importance of situating family and gender-related changes within their specific institutional and cultural settings.

Sechiyama (1996) argues that contemporary gender structures in East Asian societies, including China, are shaped by the interaction between traditional gender structures and current social systems, such as capitalism and socialism. While China, Japan, and South Korea are often grouped together in the 'Confucian cultural sphere,' China's modernisation process differs from that of Japan and South Korea. For instance, the institutional organisation of family life and gender roles has followed different trajectories across these societies, reflecting distinct historical and political contexts (Ochiai et al., 2008). These divergent trends have a profound connection with cultural and societal values, and contribute to ongoing tensions between inherited norms and evolving expectations (Chen, 2018).

Changing Marriage Values in East Asia

The concept of marriage has undergone significant changes in East Asia over the past few decades. Traditional values associated with marriage, such as the importance of family and community ties, have given way to new priorities that emphasise individualism, personal satisfaction, and romantic love (Ikels, 2020). These social, economic, and cultural shifts have been associated with shifts in the meaning and expectations of marriage, including a diversification of relationship forms. These changes have had significant implications for gender relations and family dynamics in East Asia, particularly in terms of expectations around partnership, family obligations, and intergenerational ties.

However, in developed Asian societies, the decision to marry and have children is

often made simultaneously, meaning that the decision to marry is closely linked to the decision to have children (Shirahase, 2000).

In East Asia, factors beyond the desire for children often influence the decision to marry. Hypergamy, in particular, remains strong, and the concept of whom one should marry may be less flexible than in Western countries. These partner-selection norms shape expectations within intimate relationships and can influence bargaining and power dynamics within marriage and the family (Jones et al., 2008). These social and cultural norms can have significant implications for gender relations and the power dynamics within marriage and the family.

It is crucial to understand the complexities of the East Asian context and its unique approach to marriage and fertility when interpreting patterns of family formation and reproductive expectations (Van de Kaa, 2004; Goldscheider, Bernhardt and Lappegård, 2015). This thesis therefore treats changing marriage norms as part of the broader socio-cultural context in which gender role attitudes and fertility intentions are formed, rather than as a basis for evaluating specific policy interventions (Li et al., 2021).

Changes in the values associated with marriage have significant relevance for understanding family formation patterns in East Asia (Takahashi, 2004; Yi and Therese, 2016). This region has been characterised by a distinctive approach to family formation, with late childbearing caused by late marriage being a primary factor (Jones, 2018). Although this explanation has not been extensively used in European countries to account for demographic change (Testa, 2012), this difference can be attributed to the negligible incidence of cohabitation and out-of-wedlock births in developed Asian societies, which contrasts with the situation in Europe (Jones, 2019). In developed East Asian societies, the decision to marry and to have children is often interlinked, with the decision to marry being closely connected to the decision to have children (Shirahase, 2000). However, marriage decisions in East Asia are influenced by various factors beyond the desire to have children. Hypergamy, for example, remains strong, and there is less flexibility regarding the concept of who should marry whom in comparison to Western countries (Jones et al., 2008). These norms can shape

gendered expectations within relationships and reproduce unequal bargaining positions within marriage.

The surge in divorce rates in East Asian nations signifies a significant shift in the attitudes and profiles of divorce, given that divorce was once viewed with a considerable stigma, and there was immense societal pressure to remain in an unhappy marriage for the sake of the children, reputation and saving face (Klobas, 2015). The rising economic independence of women and the pressure to live in densely populated urban environments in East Asian countries are also factors that influence the trend towards divorce (Jones et al., 2008). However, there is a controversial question about whether East Asian societies are shifting towards individualism and moving away from Confucian values. Marital change matters for understanding how family formation is organised in contexts where childbearing is closely tied to marriage, in these countries where out-of-wedlock births are rare, unlike Northern and Western Europe where the effect of marital status on fertility is more ambiguous (Jones, 2019).

The notion of equity in fertility allows couples to determine the respective caregiving roles of both parents, as long as both partners agree that the outcome is fair (Hudde, 2016). This is an essential component of gender equality and fertility theory, as fertility decisions are not universal but differ from culture to culture (Van de Kaa, 2004;). When women no longer perceive the prevailing cultural institutional gender context as just, fertility intentions may contribute to hesitation or postponement in family-related decision-making. Their partners may also support their decision, but it is crucial how couples, especially women, react to the institutional context (Li et al., 2021). Cultural values shift slowly, and idealised family morals are hard to change. This perspective highlights the limits of rapid normative change and the importance of perceived fairness within institutional and cultural constraints, rather than implying that specific policy directions can be straightforwardly derived from these dynamics.

1.3 Women's Employment, Socio-economic Status and Work–Family Constraints

This section situates women's fertility-related attitudes within the broader structural context of women's employment, socio-economic position, and work–family constraints in contemporary China. It outlines the institutional and cultural conditions under which women's educational attainment, labour market participation, and care responsibilities have evolved. These structural conditions shape the opportunities, expectations, and constraints faced by women across different life domains, and provide essential background for understanding how gender role attitudes are formed and negotiated (Esping-Andersen, 2009). By examining changes in education, employment, and work–family arrangements, this section establishes the contextual foundations for the analysis of gender role attitudes and fertility intentions presented in later chapters.

1.3.1 Expansion of Female Education and Changing Socio-economic Position

The expansion of female education is central to understanding women's changing socio-economic position in China. The following subsection situates this development within Confucian educational traditions and gendered interpretations of learning, highlighting both enabling educational norms and enduring patriarchal constraints.

Female education and empowerment in Confucianism

Although Confucianism historically contributed to the marginalization of women in Chinese society, it has also shaped educational norms that were later reinterpreted in ways that created space for women's educational participation over time.

One influential feature of Confucian educational thought is its emphasis on the value of education itself. In Confucian thought, education is highly valued as a means of self-cultivation and personal development, contributing to a culture of academic achievement and respect for learning. At the same time, Confucianism emphasises the cultivation of personal moral qualities and the ability to contribute to the welfare of society as a means of education (Zhu, 2019). Therefore, education is not only seen as a personal pursuit, but also as a responsibility to the larger community. This emphasis on an education culture has supported the social legitimacy of educational attainment,

including the expansion of women's access to schooling and qualifications in modern China.

A further relevant element is its emphasis on meritocracy. In Confucian thought, social status and authority are based on merit rather than arbitrary factors such as birth or wealth (Rosker, 2015; Leng and Kang, 2022). While achieving true gender equality in education certainly presents challenges and obstacles, Confucian ideals of meritocracy can function as a normative reference point for arguing that educational achievement should be socially recognised regardless of gender (Ye, 2023).

Furthermore, Confucianism emphasises the importance of family relationships and social harmony, which has historically provided a cultural background where women's education and empowerment are not only beneficial to women themselves, but also to their families and society as a whole (Sheng, 2012). One manifestation of this is the emphasis on the role of women in the moral development of children in Confucianism. Mothers are educated in areas such as observing rituals to guide the moral growth of their children (Chen, 2022), highlighting the crucial role of mothers in moral education (Liu, 2016). Although this framing is gendered, it has historically contributed to recognising women's educational roles and capacities within the household, which forms part of the background to later shifts in women's expectations and opportunities.

Overall, Confucianism has had a positive impact on education in China, but its influence on gender roles is a contentious issue. Confucianism emphasises traditional gender roles for women as caregivers and mothers, which has been mobilised to legitimise gender discrimination in education (Hu et al., 2023). Although Confucianism emphasises the importance of education for both men and women, its patriarchal interpretation has resulted in gender inequality and limited opportunities for women in certain fields. Against this backdrop, the expansion of female education is analytically important: it has reshaped women's skills, aspirations, and perceived socio-economic position, which are key contextual conditions for understanding later work–family constraints.

Impact of Confucianism on the Highly Educated Population

The impact of Confucianism on gender inequality and educational stratification in China is complex (Ye, 2023). Confucianism emphasises the importance of education for both men and women, which has led to an increase in China's highly educated population (Chen, 2022). Also, Confucianism's emphasis on the hierarchical system and patriarchy has resulted in gender gaps in education and limited opportunities for women in certain fields (Chen, 2022).

Male preference and educational opportunity gap in Confucianism

In shaping family values, Confucianism emphasises the importance of family and filial piety, which historically reinforced lineage-centred preferences and gendered expectations within households. In educational allocation, such expectations have been linked to differentiated investments and perceived returns across sons and daughters, contributing to unequal opportunity structures in some contexts.

Confucianism's traditional gender roles may also discourage women from having children. Confucianism places a strong emphasis on the division of labour between men and women, and women are expected to prioritise their role as wives and mothers over their career or other pursuits (Ji and Wu, 2018; Connell, 2011). For highly educated women, the expansion of educational attainment therefore coexists with enduring normative expectations about 'appropriate' roles, shaping their socio-economic positioning and perceived life-course trajectories.

Hierarchy and fertility choice in Confucianism

Additionally, Confucianism's emphasis on hierarchical social relations may also contribute to the trend of people choosing not to have children (Zhou, 2019). Among highly educated groups, this may translate into strong expectations of continuous self-improvement and occupational success, which can shape how educational attainment is converted into socio-economic position and social recognition (Chen, 2022).

Overall, the influence of Confucianism on the fertility of people in China is complex and multifaceted (Li et al., 2021; Ye, 2023). Its enduring valuation of education has supported the expansion of schooling and credentials, including for women, while hierarchical and patriarchal interpretations have continued to shape gender-

differentiated expectations. Together, these dynamics form an important backdrop to women's changing socio-economic position.

In summary, Confucianism has had a significant impact on Chinese society, especially in regards to gender inequality and the social meaning attached to education (Ye, 2023). Confucian emphasis on traditional gender roles has contributed to persistent gendered expectations, while its long-standing cultural prioritization of education has also facilitated rising female educational attainment (Chen, 2022). This expansion of women's education is central to understanding changes in women's aspirations and socio-economic positioning, which in turn provides essential context for later discussion of labour market participation and work–family constraints in Section 1.3.2 onwards.

1.3.2 Gendered Inequality in Labour Market Participation

Women's rising educational attainment has unfolded alongside persistent gendered norms regarding paid work and family responsibilities, shaping patterns of labour market participation and occupational positioning. Against this background, the following section examines how gendered inequality in labour market participation continues to structure women's socio-economic position in China (Cooke and Zhao, 2021).

Persistence of the Traditional Breadwinner Model

Despite significant social and economic changes in China over the past few decades, traditional gender roles and family dynamics remain deeply ingrained in Chinese society (Connell,2020). One example of this is the continued existence of the traditional breadwinner model, in which men are expected to be the primary earners and women are expected to focus on domestic responsibilities. This model has important implications for gender inequality in employment, as it shapes expectations regarding women's labour market participation and their assumed responsibility for unpaid domestic work (Liu, 2023).

During the Mao era, women were encouraged to receive education and participate in the labour market, with the goal of achieving gender equality in the social and economic fields. Mao's famous saying, 'What men can do, women can do too,' encapsulated the ideology of gender equality prevalent from the 1950s to the 1970s, particularly in relation to women's formal inclusion in public institutions (Palmer, 2007).

Since the implementation of reforms and opening-up policies, an increasing number of women have joined the labour market, alongside rising levels of education and social participation. While contemporary economic conditions often require dual-earner households, the traditional breadwinner–homemaker model has persisted as a normative reference shaping gendered expectations (Sun and Zhou, 2022).

Issues of Gender Inequality in Employment

Gender disparity in employment is a significant issue in China. Despite women's high rates of labour market participation, gendered inequalities persist in employment outcomes. In particulat, traditional attitudes towards fertility and gender roles persist, leading to gender inequality in the workplace. Women are still paid less than men, with a wage gap of around 20 per cent, and they are less likely to hold high-paying positions (Huang and Jin, 2022). However, the labour participation rate of Chinese women in the labour market is high, with 80.8 per cent of women between the ages of 20 and 50 in jobs (World Bank, 2020). This high participation rate coexists with persistent occupational segregation, as women remain unevenly distributed across industries and positions (Huang and Jin, 2022). While institutional frameworks formally promote women's participation in employment and the protection of labour rights (Cooke and Zhao, 2021), persistent disparities between formal provisions and workplace practices highlight enduring structural inequalities.

Advancing Gender Equality through Policies and Laws in China

It is important to acknowledge that social policies and laws continue to reflect the deep-rooted influence of Confucian culture. For instance, the Chinese Constitution states that 'Women enjoy the same rights as men in political, economic, cultural,

social and family life,' rather than advocating for 'equal rights for men and women,' which is the legal expression of gender equality in many countries worldwide. This suggests that even in China's Constitution, there exists an underlying gender premise in policymaking, legal equality is framed in relation to men's rights as the implicit standard.

Furthermore, the definition of gender equality can be interpreted as setting men's behaviour as the standard for women (Li, 2000), thereby ignoring gender differences and solely striving for consistency between men and women. Consequently, women's caregiving roles are often overlooked, and they are expected to perform as well as men, regardless of their caring responsibilities, leading to discrimination if they fail to do so, for instance, due to caring responsibilities.

Policy efforts to formalise gender equality and protect women's rights are evidenced by the Law of the People's Republic of China on the Protection of Women's Rights and Interests in 2005 (Palmer, 2007). This law clearly defines the integration of women into national development plans and aims to reduce discrimination against women. China has also developed administrative measures to ensure women's equality in policy implementation. For example, the *Outline for the Development of Chinese Women* (1995–2000), (2001–2010), (2011–2020) and (2021–2030) (State Council, 1995; 2001; 2011; 2021) was formulated to fulfil the government's commitment to the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). These documents provide strategies for guaranteeing women's equal rights and eliminating discrimination.

However, gender inequality continues to persist in China. One area where gender inequality remains is in the workforce. Women in China face a gender pay gap, with women earning on average 22 per cent less than men (NBS, 2022). These patterns indicate a gap between formal legal provisions and workplace practices, suggesting that legal frameworks alone have limited capacity to alter organisational norms and employer expectations.

Tensions between Gender Equality Policies and Cultural Influences

The unequal division of labour in families is a core issue of gender inequality in China. It is strongly influenced by Confucian culture and traditional gender roles. Women usually bear the main responsibility for housework, childcare, and elder care. Even in dual-income households, women spend much more time on unpaid work than men (OECD, 2023). This unequal allocation of unpaid work shapes expectations regarding women's availability and commitment in the labour market, forming an important background to gendered patterns of employment participation.

Unequal labour division in families also leads to women's economic dependence on men. By weakening women's labour market attachment and earnings capacity, unequal care responsibilities can reinforce gendered economic positioning within households (Liu and Marois, 2023).

Gender inequality affects not only women's economic and career prospects but also their self-identity and social status. Long-term unpaid work makes women appear less valuable than men. Such perceptions can influence organisational cultures and employer assumptions, shaping how women's work commitment and career orientation are evaluated (Blau and Kahn, 2017).

Unequal labour division at home also impacts women's self-confidence and mental health. The stress of double responsibilities leads many women to lose motivation for career advancement. They often turn to traditional gender roles instead (Huang and Jin, 2022). This loss of self-identity affects women's development potential. It also helps pass down traditional gender roles to future generations.

There is a clear conflict between culture and law in this context. Formal equality provisions coexist with persistent cultural norms, limiting their capacity to reshape gendered expectations in employment contexts.

Developments in Children's Education

The traditional division of housework has been challenged by the increasing availability of household appliances and paid domestic services (Qing, 2020). However, the importance of investing in children's education has remained unchanged, and families are dedicating more resources to scientific child education

(OECD, 2018). As a form of non-substitutable family labour, education-related involvement is difficult to outsource and can therefore function as a continuing 'role load' alongside paid employment (OECD, 2018; Qing, 2020). This non-substitutable character of educational involvement reinforces expectations that family members, most often women remain to consistently available for education-related responsibilities, regardless of their labour market participation.

Cultural norms surrounding children's education continue to associate educational responsibility with maternal roles, reinforcing gendered expectations about caregiving and family involvement. In China, the responsibility for childcare has shifted from the government to families or the market, resulting in a feminised, intensive and fine-tuned care regime (Liu and Marois, 2023). This shift places greater responsibility for education-related care within households, reinforcing gendered expectations about women's role in managing children's educational needs alongside paid work.

Therefore, children's education constitutes a form of non-substitutable family labour that is culturally and structurally associated with women, shaping expectations about their availability and continuity in paid employment (Song and Lai, 2020).

In summary, gendered inequality in labour market participation in China reflects the persistence of traditional role expectations, occupational segmentation, and unequal career trajectories (Cooke and Zhao, 2021). Despite high levels of female labour force participation, enduring norms associated with the breadwinner model continue to shape how women's paid work is organised and valued. At this stage, education-related care responsibilities are discussed as part of the broader structural background shaping women's work involvement and labour market continuity, rather than as direct employment penalties associated with motherhood. These motherhood-related penalties are examined in the following subsection. These employment conditions constitute an important structural context for understanding women's subsequent experiences of work–family conflict, discussed in the following sections (Ji and Wu, 2018).

1.3.3 Motherhood Penalty, Career Interruption and Employment Discrimination

While gendered inequalities in labour market participation shape women's employment trajectories more broadly, these inequalities often intensify around childbirth (Ji and Wu, 2018). Beyond patterns of participation and occupational positioning, women may face distinct employment penalties associated with motherhood, including career interruption, discrimination, and constrained advancement opportunities (Correll, Benard and Paik, 2007). This subsection examines how motherhood-related penalties operate within labour market structures and cultural expectations, emphasising structural and normative mechanisms rather than policy effects or causal impacts (Cooke and Zhao, 2021).

Workplace-Side Mechanisms: Employer Risk Perceptions and Pregnancy Stigma

Within the Chinese context, women's employment trajectories are shaped by a broader institutional and cultural tension in which labour market participation is encouraged, while caregiving responsibilities continue to be socially expected (Ji and Wu, 2018). Chinese society promotes women's engagement in paid work and career development, yet family expectations simultaneously require women to maintain primary responsibility for care, creating structural contradictions around marriage and childbirth (Hu et al., 2023). Against this background, childbirth becomes a critical point at which women's labour market attachment is re-evaluated within organisational decision-making, particularly in recruitment, promotion, and contract renewal contexts.

The 2016 China Labour Market Development Report indicates that the participation rate of female professionals in China has shown a significant downward trend (Lai et al., 2017). Rather than indicating a single causal factor, this trend reflects the heightened vulnerability of women's labour market participation during childbearing stages. To avoid the increased cost of labour during the maternity period, some employers have demonstrated a male-only or male-priority attitude in their recruitment processes (Leng and Kang, 2022). In some cases, employers are even reluctant to hire women who express a desire to have a second child.

Two surveys involving more than 230,000 participants conducted in 2017 and 2018 show the workplace situation of Chinese women. According to the surveys, 22 per cent of women believed they suffered severe discrimination in the workplace. Married women without children were more prone to discrimination than those with children, reflecting employers' anticipatory assumptions that women of childbearing age may face future caregiving commitments. Moreover, around 11.5 per cent of the surveyed women lost their chances of promotion due to pregnancy (Zhaopin Limited, 2017; 2018). These findings point to pregnancy stigma operating through expectations of reduced availability and continuity rather than observed performance.

Wang (2016) argued that childbirth creates three options for married women who have given birth. Female professionals may face options such as prioritising caregiving responsibilities at the expense of career continuity; re-entering the workforce while encountering heightened discrimination and barriers to advancement; or remaining in their previous positions under constrained promotion and development conditions (Liu and Marois, 2023). Each option infringes on women's employment continuity and career development prospects. These pathways highlight how motherhood is associated with cumulative employment risks, including promotion interruption and re-entry barriers, even in the absence of explicit dismissal (Sun and Zhou, 2022).

Taken together, these workplace-side mechanisms demonstrate how employer risk assessments and normative assumptions surrounding motherhood shape women's career trajectories following childbirth.

Family-Side Mechanisms: Post-birth Intensive Care Expectations and Role Overload

Alongside labour market practices, motherhood-related penalties are also reinforced through family-side mechanisms that intensify after childbirth. Although technological change and paid domestic services have altered some aspects of housework, investment in children's education has remained a non-substitutable family responsibility (OECD, 2018; Qing, 2020). Following childbirth, educational involvement increasingly constitutes a core component of caregiving responsibilities within families.

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This context has contributed to the emergence of intensive care expectations, under which mothers are expected to maintain sustained involvement in children's education and development after childbirth (Sheng, 2012). These expectations are reinforced by cultural narratives that position mothers as primary agents responsible for children's educational outcomes, and are particularly pronounced among highly educated women (Mu and Hu, 2023).

Unlike other forms of domestic labour that may be partially outsourced, education-related caregiving remains difficult to substitute, requiring continuous time and emotional investment from mothers. As a result, women are often expected to sustain high levels of educational involvement alongside paid employment, generating cumulative role demands (Mu and Hu, 2023). These cumulative demands can reduce women's capacity to maintain continuous and uninterrupted labour market participation, thereby increasing exposure to employment interruption and slower advancement (Hu et al., 2023).

Norms surrounding children's education further frame maternal involvement as an indicator of responsible motherhood, implicitly linking children's educational outcomes to maternal effort (Hu et al., 2023). In this context, educational responsibility is frequently culturally coded as maternal work, such that mothers' ongoing involvement is treated as a normative benchmark of 'responsible' parenting. At the same time, the gradual relocation of childcare responsibility from the state towards families and market provision has contributed to a feminised and increasingly intensive care regime (Liu and Marois, 2023). Together, these dynamics concentrate education-related care within households and disproportionately on women, amplifying role overload after childbirth and increasing exposure to employment interruption and slower progression (Ji and Wu, 2018). Within this framework, post-birth caregiving responsibilities compete directly with paid work, reinforcing structural constraints on women's employment continuity (Brinton and Oh, 2019).

In China, the gradual shift of childcare responsibility from the state to families and the market has resulted in a feminised and intensive care regime (Liu and Marois, 2023). Following childbirth, this shift places increasing responsibility for education-related

caregiving within households, where such responsibilities are disproportionately assumed by mothers (Ji and Wu, 2018). This concentration of caregiving labour contributes to sustained role overload, heightening the risk of career interruption and reinforcing motherhood-related penalties in employment (Liu and Marois, 2023).

1.3.4 Work–Family Reconciliation Gap and Care Responsibilities

This subsection develops the work–family reconciliation gap as a contextual mechanism linking gendered role expectations to fertility-related decision-making in contemporary China. While women's educational attainment and labour market participation have expanded, family and institutional arrangements continue to allocate care responsibilities unevenly. In this context, the 'return to home' debate is not simply a matter of personal preference; it is embedded in a broader configuration of cultural norms, care infrastructure, and workplace arrangements that shape the feasibility of combining paid work with family life (Song, 2016; Liu, 2016).

Care Infrastructure and Institutional Contexts

China's care regime has undergone a long-term reconfiguration in which the responsibility for childcare has gradually shifted away from the state towards families and, where possible, market provision. As discussed in earlier sections, families or the market now bear the burden for childcare, leading to a feminized, intensive, and refined care system (Liu and Marois, 2023). This shift is especially consequential where low- and middle-income households cannot consistently purchase market-based services, because low-income women struggle to afford market-based childcare services (Deng, Zhou and Hu, 2023). Under these conditions, care responsibilities become structurally embedded in household arrangements rather than being offset through reliable external provision.

This institutional context interacts with the policy environment in a way that may intensify gendered expectations rather than alleviate them. Previous discussions have shown that maternity leave regulations have increased workplace discrimination against women and have not lessened women's caregiving obligations at home (Sun

and Zhou, 2022). The broader implication is that formal equality commitments and partial support measures do not necessarily translate into substantive reductions in care burdens, particularly where childcare infrastructure remains limited and where market solutions are unevenly accessible.

Gendered Allocation of Care within Families

Within families, care responsibilities are strongly gendered, and this allocation is reinforced by Confucian cultural legacies and the persistence of traditional gender roles. As documented in existing research, housekeeping, child care, and elder care are typically the primary responsibilities of women. Women devote significantly more time to unpaid labor than males, even in households with two incomes (Song and Lai, 2020). This unequal distribution constrains women's capacity to sustain continuous employment and creates chronic time scarcity, particularly during marriage and childbearing stages.

The gendered allocation of unpaid work also has downstream effects on women's economic positioning and bargaining power. Additionally, women's primary caregiving responsibilities can constrain their labour market participation, which may reduce earning potential and diminish negotiating power in home decision-making, and the unequal labor division results in women's economic dependence on men (Liu and Marois, 2023). These dynamics are not restricted to childcare; elder care obligations are also gendered, consistent with Chapter 1's discussion that filial piety and respect for elders are associated with expectations that women take on a larger share of elder care, including care for parents-in-law (Wang et al., 2022).

In addition, unequal care allocation shapes women's self-perception and social valuation. The long-term unpaid work makes women appear less valuable than men, which may intensify discrimination and reduce women's access to advancement opportunities (Blau and Kahn, 2017). Research also suggests that the stress of double responsibilities may shape women's motivation for career advancement, increasing the likelihood of reverting to traditional roles (Huang and Jin, 2022).

Misalignment between Work Requirements and Care Responsibilities

The reconciliation gap becomes most visible when workplace arrangements and organisational norms assume an uninterrupted worker model while family arrangements assign women primary responsibility for care. Existing research suggests that economic reforms have put women at a disadvantage (Liu, 2016), and the unequal division of labour limits women's career development and becomes worse during childbearing and childcare periods (Correll et al., 2007).

This misalignment helps explain why the 'return to home' narrative can appear plausible even when women's labour market participation is high (Cooke and Zhao, 2021). In the presence of limited flexibility, continuous performance expectations, and gendered assumptions about care, women may experience paid work and family life as structurally incompatible (Brinton and Oh, 2019). Thus, this core contradiction can be summarisedas a conflict between culture and law: formal progress exists, but deep-rooted gender roles directly impact policy implementation, and women remain under double pressure at home and at work.

Importantly, this is not merely an issue of individual coping; it reflects a persistent structural gap where care demands are not sufficiently redistributed within households or supported externally, while workplaces continue to evaluate commitment through availability norms that implicitly disadvantage those with disproportionate care loads (Ji and Wu, 2018; Liu and Marois, 2023).

Cultural Discourses Normalising 'Return to Home'

The 'return to home' debate constitutes an important cultural-discursive layer through which structural work–family constraints are reframed as matters of personal preference or gendered suitability. Since the 1980s, public debates in China have repeatedly addressed the idea of women withdrawing from paid employment to focus on family responsibilities, often invoking ideals of being a 'good wife' and fulfilling traditional gender roles (Song, 2016). These debates position women's retreat from the labour market not as a response to institutional constraints, but as an appropriate alignment with normative expectations surrounding femininity and family life (Connell, 2011).

A prominent example emerged in 2011, when Zhang Xiaomei proposed encouraging middle-class women to leave paid employment and return to domestic roles. Her argument rested on claims that women are inherently more suited to domestic labour, elder care, and child education, and that gender differences should be recognised and accommodated rather than treated as equivalent (Song, 2016). This intervention illustrates how biological reasoning and differentiated gender treatment are mobilised to legitimise women's primary responsibility for unpaid care work within the household (Connell, 2011).

A related discursive strand frames withdrawal from paid work as a form of relief from a perceived double burden of employment and family responsibilities. Within this framing, combining career and family life is portrayed as excessively demanding for women, while returning home is presented as an acceptable or even preferable response (Song, 2016). Survey evidence from the late 2000s suggests a modest increase in the proportion of women expressing a preference for full-time homemaking, a trend that has been interpreted within public discourse as reflecting women's own inclinations rather than the constraints they face (Zhou, 2019). Song (2016) extends this line of reasoning by suggesting that returning home has come to be framed as a practical response to dual pressures from work and family, particularly when paid employment becomes unsustainable. In this account, the family is constructed as a refuge from labour market strain, with traditional gender norms providing women with socially recognised exit routes that are not equally available to men (Song, 2016; Connell, 2011).

Rather than resolving the work–family reconciliation gap, this discourse functions to normalise a gendered strategy of adjustment that aligns with patriarchal divisions of labour. As Song (2016) argues, as long as traditional gendered divisions of labour remain intact, women continue to shoulder a disproportionate share of home and care responsibilities, reinforcing their structurally disadvantaged position in the labour market. In this sense, the 'return to home' narrative operates as a cultural justification for unequal institutional arrangements (Cooke and Zhao, 2021). By framing women's long-term labour market attachment as incompatible with marriage, intensive parenting, and intergenerational care, it contributes to a broader normative

environment in which gendered resolutions to work–family conflict are rendered legitimate and taken for granted, with indirect implications for fertility intentions (Zhou, 2019; Li et al., 2021).

1.3.5 Structural Constraints Beyond Policy Announcements

This subsection draws together the preceding discussion by highlighting the structural constraints that persist beyond formal policy announcements. Across Sections 1.3.1 to 1.3.4, women's educational expansion, labour market participation, and care responsibilities have been shown to be embedded within a broader configuration of cultural norms, institutional arrangements, and workplace expectations (Ji and Wu, 2018; Brinton and Oh, 2019). While policy frameworks formally promote gender equality and fertility support, these announcements operate within structural conditions that remain largely unchanged (Cooke and Zhao, 2021).

A central constraint lies in the persistent gendered division of labour within both households and workplaces. Despite rising female educational attainment and high rates of labour force participation, women continue to shoulder a disproportionate share of unpaid care responsibilities, including childcare, education-related involvement, and elder care (Ji and Wu, 2018; Liu and Marois, 2023). These care obligations are not fully offset by institutional provision or market solutions, resulting in chronic work–family reconciliation difficulties. As a consequence, women's employment trajectories and life-course decisions are shaped by structural pressures rather than by policy intentions alone.

At the institutional level, a misalignment remains between workplace norms and family arrangements. Employment structures continue to assume continuous availability and uninterrupted commitment, while family and care systems allocate primary caregiving responsibilities to women (Cooke and Zhao, 2021). This tension limits the extent to which formal gender equality policies can translate into substantive change in everyday practices. Rather than eliminating constraints, policy announcements may coexist with, or even reinforce, existing expectations by leaving

underlying care arrangements and gender norms intact (Ji and Wu, 2018).

Taken together, these dynamics suggest that fertility-related decision-making is shaped less by the presence or absence of policy signals than by the broader structural environment in which women negotiate work, family, and care responsibilities (Zhou, 2019; Li et al., 2021). The persistence of these structural constraints provides an essential context for understanding gender role attitudes and fertility intentions, which are examined empirically in the subsequent chapters.

1.4 Fertility Policy Trajectory as Institutional Context (2015–2021)

Building on the discussion of cultural norms and structural constraints, this section outlines the trajectory of China's fertility policies as an institutional context for the analysis (Jiang and Liu, 2016). It provides a concise overview of policy adjustments from birth promotion to birth regulation and subsequent relaxation, with particular attention to the two-child policy period (2015–2021). Rather than evaluating policy effects, the section situates fertility intentions within the policy environment in which they are expressed, clarifying the institutional background relevant to the subsequent empirical analysis (Zeng and Hesketh, 2016; Zhou, 2019).

1.4.1 From Birth Promotion to Birth Regulation and Adjustment

Since the founding of the People's Republic of China in 1949, China's population policy has undergone significant shifts, moving from an initial emphasis on encouraging fertility to support labour force expansion and military capacity (Huang and Jin, 2022). However, from the 1970s onwards, growing concerns about overpopulation and resource constraints prompted the introduction of family planning policies. This long-term policy trajectory provides the historical backdrop for understanding subsequent policy adjustments.

Pro-natalist Population Policies (1949–1970)

From 1949 to 1970, China's population policies were primarily oriented towards encouraging fertility. During this period, fertility was generally encouraged, and population growth was viewed as compatible with economic recovery and state-building objectives. Official statistics indicate rapid population expansion during the early post-1949 years, with China's total population rising from 540 million in 1949 to 600 million by 1953, and continuing to grow to 829 million by 1970, alongside a high total fertility rate of 5.6 (NBS, 2020). These developments reflected a policy orientation in which fertility was largely left unrestricted and actively supported.

Anti-natalist Population Policies (1971–2001)

From early 1970s onwards, population governance entered a new phase characterised by explicit fertility regulation. In response to sustained population growth during the preceding decades, policy priorities shifted towards limiting births and restructuring reproductive behaviour. The introduction of the *Wan-Xi-Shao* policy between 1971 and 1973 promoted later marriage, longer birth intervals, and fewer children per couple, signalling a clear departure from earlier pro-natalist approaches (Huang and Jin, 2022).

This regulatory orientation was further institutionalised with the formal adoption of the one-child policy in the late 1970s, which was subsequently incorporated into the constitutional framework (Zhang, Zhang and Liu, 2024). From 1980 onwards, fertility regulation became increasingly standardised and embedded within China's system of population governance, forming a stable institutional framework that persisted for several decades.

Taken together, China's population policies evolved from an initial phase of fertility encouragement to a prolonged period of structured fertility regulation (Hu and Shi, 2018). Rather than assessing the outcomes of these policies, this section highlights the continuity of state involvement in reproductive decision-making and the institutionalisation of fertility governance over time (Xu and Pak, 2015). This historical trajectory forms the backdrop against which more recent policy adjustments, particularly those introduced during the mid-2010s, can be situated (Zeng and Hesketh, 2016).

1.4.2 The Universal Two-Child Policy and Associated Support Measures

Building on the long-term trajectory of fertility governance outlined in the previous section, this part focuses on the adoption of the universal two-child policy in 2016. The aim is to describe the policy as an institutional adjustment within China's existing population management framework and to outline the accompanying support measures introduced during this period (Zhang et al., 2024; Zeng and Hesketh, 2016). This section situates the two-child policy within the broader policy environment in which fertility intentions and gender role attitudes are expressed.

The universal two-child policy implemented in China in 2016 represented an adjustment to existing fertility regulations (Zeng and Hesketh, 2016). The policy allowed all couples to have two children within the existing framework of population governance. This section outlines the institutional features of the universal two-child policy and situates it within the broader fertility policy environment.

The introduction of the universal two-child policy occurred against a demographic backdrop characterised by population ageing (Zhang et al., 2024). Over recent decades, the proportion of the Chinese population aged 65 and over increased from 4.9 per cent in 1982 to 13 per cent in 2022, and the rate of population aging is accelerating (NBS, 2021). International organisations have highlighted the scale of China's demographic ageing in long-term projections (WHO, 2015).

Existing research situates the two-child policy within a broader demographic context characterised by population ageing and long-term fertility decline (Liang and Zhang, 2012; Zeng, 2019). Since the 1960s, China's total fertility rate (TFR) has been in decline. In 2019, the proportion of China's population aged under fifteen was 17.8 per cent, a significant drop from 40.7 per cent in 1964 (NBS, 2020). Additionally, the number of the working-age population in China peaked at 922 million in 2012, and has since decreased, indicating that the population dividend has weakened over the years (NBS, 2020).

As shown in Table 1.1, these support measures varied substantially across regions in

both scope and implementation, and most cash-based incentives were introduced only after the announcement of the three-child policy, limiting the extent to which survey data from the two-child policy period can directly capture individuals' exposure to specific benefits (Jing et al., 2022).

Table 1.1 Selected National and Subnational Fertility-Related Support Measures in the Two-Child Policy Era (2016–2021)

Year	Level / Region	Key Fertility-Support Measures
2016	National	Universal Two-Child Policy officially implemented. Allowed all couples to have two children. Maintained statutory maternity leave extensions (incentive leave), with specific days determined by provincial legislation.
2016	National	Most provinces extended maternity leave to 128–158 days, and introduced 7–30 days of paternity leave.
2016	Shanghai City	Representative Leave Example (2016 Amendment): Female employees receive an additional 30 days of birth leave (on top of the 98 days statutory leave); male employees receive 10 days of spouse paternity leave.
2016	Chongqing City	Representative municipal leave extension: Female employees receive an additional 30 days of maternity leave on top of the statutory 98 days (totalling 128 days). Paternity/Husband's nursing leave is 15 days.
2016	Hunan Province	Representative provincial leave extension: Female employees receive an additional 60 days of maternity leave on top of the statutory 98 days (totalling 158 days). Paternity/Husband's nursing leave is 20 days.
2016	Guangdong Province	Representative provincial leave extension: Female employees receive an additional 80 days of incentive maternity leave on top of the statutory 98 days (totalling 178 days). Paternity/Husband's nursing leave is 15 days.
2019	National	First national-level document promoting the development of care services for children under three. Encouraged local governments to explore parental leave and support the provision of childcare services by enterprises and communities.
2020	Beijing City	Childcare Services Implementation: Set targets including establishing at least 34 demonstration childcare institutions and developing a municipal 0–3 childcare service system.
2020	Shanghai City	Early exploration of family leave: Female employees receive 60 days of birth leave (in addition to maternity leave); male employees receive 10 days of spouse paternity leave (pre-dating the late 2021 amendment).

1.4.3 The Three-Child Policy and Emerging Institutional Responses

Following the introduction of the universal two-child policy, further adjustments to China's fertility regulations were announced in 2021. This section introduces the three-child policy as an extension of the existing fertility governance framework and situates it, together with the associated institutional responses, within the evolving policy environment in which fertility intentions are articulated (BBC News, 2021; Zhang et al., 2024).

In May 2021, China introduced a policy allowing couples to have up to three children, representing a further adjustment to existing fertility regulations (Zeng and Hesketh, 2016). This section outlines the institutional features of the three-child policy and situates it within the evolving fertility policy environment.

After the seventh national census showed a significant decline in birth rates, China announced on May 31, 2021, that it would allow couples to have three children and provide some support measures were effective, then the two-child policy should have already been successful.

The number of women of childbearing age in China has declined, and the average age at first marriage and first childbirth has increased in recent years. Between 2016 and 2020, the size of China's female population of childbearing age (aged 20 to 34) decreased by an average of 3.4 million per year, with 3.66 million fewer women in 2020 than in 2019 (Ren, 2020). The number of registered marriages in China has continuously declined over the past seven years, with 40 per cent fewer marriages registered in 2020 than in 2013, and the average age of first marriage and first childbearing delayed by 2.7 and 2.6 years, respectively (Xu et al., 2023).

Low fertility intentions continue to persist among Chinese young people. Official reports indicate that family reproductive decisions are associated with economic and social conditions related to education, housing, and employment (REN, 2020). Furthermore, the average number of children planned by the post-90s generation is only 1.66, which is 10 per cent lower than that of the post-80s. The survey (2021) also reveals that 75.1 per cent of respondents reported a heavy financial burden, 51.3 per

cent had no one to care for their children, and 34.3 per cent experienced a drop in salary after giving birth, with 42.9 per cent of them experiencing a decrease of over 50 per cent. These reported constraints form part of the institutional and socio-economic context in which fertility intentions are expressed (REN, 2020; NIMPDMS, 2021).

During the three-child policy period, additional support measures were announced in policy documents (He, Li and Han, 2023). These measures include improving the maternity leave and maternity insurance system, which provides female workers with up to 98 days of leave (REN, 2020). In addition, the National People's Congress of the People's Republic of China (NPC) and the Ministry of Education (MOE) have proposed several measures to protect the legitimate rights and interests of women in employment (NPC, 2022; MOE, 2021). For instance, employers suspected of gender discrimination will be interviewed. Furthermore, the policy aims to develop an inclusive childcare system, promote equity in education, increase the availability of high-quality educational resources, and reduce family expenditure on education. One of the measures taken to reduce family expenditure on education is the rescheduling of school hours, which includes two hours of after-school time for primary school students. Moreover, the policy aims to reduce the frequency of examinations and suspend tutorial sessions for subjects outside the school curriculum on national holidays, which is known as the Double Reduction Policy (MOE, 2021). These measures reflect the supplementary support provided by the state in response to survey results (NPC, 2022).

1.4.4 Policy Observability and Analytical Limits of Survey Data

This section reflects on the analytical scope and limitations of the preceding discussion of cultural context and population policy evolution. While previous sections have outlined persistent gendered norms and structural inequalities, these discussions serve as contextual background rather than direct objects of empirical measurement (Neuman, 2023).

In 2016, the universal two-child policy was implemented in China, allowing couples to have two children (Bao, Chen and Zheng, 2017). However, the available survey data do not allow for a direct assessment of how such policy adjustments alter deeply embedded gender norms or cultural practices. Instead, the policy functions as a contextual marker within which attitudes and fertility intentions are observed (Zhou, 2019).

Confucian culture highly values the patriarchal hierarchy and male inheritance in Chinese families (Qian and Jin, 2018). Against this cultural backdrop, changes in fertility policy altered the formal constraints surrounding childbearing, while survey data capture attitudes and intentions expressed under these evolving policy conditions rather than the behavioural mechanisms through which preferences are enacted (Li et al., 2021).

The coexistence of traditional and modern values underscores the complexity of interpreting fertility intentions within a changing institutional environment. While gender inequality shapes family and employment experiences, its effects cannot be causally identified using cross-sectional survey data (Wooldridge, 2010).

Overall, this section clarifies that the present study does not assess the causal impact of population policies or cultural change. Instead, it delineates the analytical limits within which gender role attitudes and fertility intentions are examined using survey data (Podsakoff, Mackenzie and Podsakoff, 2012).

1.5 Theoretical Perspectives on Gender, Work and Fertility

This section introduces the theoretical perspectives that underpin the thesis, focusing on how gendered institutions, labour market arrangements, and family norms provide the context in which gender role attitudes and fertility intentions are formed. It also clarifies key concepts and theoretical lenses that inform the interpretation of observed patterns in attitudes and intentions during the two-child policy implementation period (2015–2021).

1.5.1 Concepts of Gender Equality, Equity and Gender Systems

Gender equality has become a widely discussed and debated topic in contemporary society. At the heart of this discourse lies the issue of fairness, whereby everyone should have equal opportunities, regardless of their gender (United Nations, 2015). While this seems a simple premise, defining gender equality remains a complex and contested matter. There have been three primary definitions of gender equality proposed, which have significant implications for policy-making and understanding gender-related issues (UN, 2018). This study aims to critically discuss the definition of gender equality and relevance for analysing fertility intentions. Specifically, the focus is on how gendered institutions and norms shape the context in which individuals and couples form fertility intentions. They treats gender inequality as a structural condition that can be linked to fertility intentions through multiple pathways, including cultural and value changes, family division of labour, the labour market, and investment in children (Qian and Jin, 2018). This study will begin by discussing the definitions of gender equality. These pathways are discussed here at the level of theoretical framing and are subsequently connected to the empirical focus of the thesis.

This study first clarifies key conceptual distinctions, namely, gender equality, gender equity, and gender systems, before proceeding to outline how different conceptualizations imply different expectations about the relationship between gender role attitudes and fertility intentions. Crucially, it does not evaluate the effectiveness of specific policy interventions, but rather uses these concepts to inform the interpretation of observed patterns in attitudes and fertility intentions (Xu et al., 2023).

The definition of gender equality is a subject of much debate as there is no consensus on its meaning across scholars, institutions, and policy communities. Three primary definitions of gender equality have been proposed. These definitions are introduced here as analytical lenses rather than as criteria for evaluating policy performance.

First Approach: The Equality of Sameness

The first approach to defining gender equality considers equality as equality of opportunity (Verloo and ProQuest, 2007). This definition implies that all individuals in society, regardless of gender, have equal rights and opportunities, and the societal norms and rules are based on the perspective of both genders. The concept of equality, in this case, emphasises fairness, rationality, equal opportunities, and freedom of choice, as exemplified by equal pay for equal work. Supporters of this view argue that providing special protection for women is necessary to address the discrimination they have faced historically (Walby, 2005). Therefore, those who advocate for equality of opportunity believe that true gender equality between men and women can only be achieved through this approach (UN, 2018). This is the most prevalent definition of gender equality and is supported by most gender equality laws and regulations, which are based on the principle of equal treatment.

The issue with this perspective is that it fails to acknowledge the gender differences that exist. Physiologically, men and women differ, and this is an objective reality that cannot be overlooked. Additionally, this view does not challenge the position of patriarchy directly. By defining equality based on male norms, it expects women to conform to the same standards as men, effectively forcing them to become more like men to achieve equality. This results in formal equality, which may not always benefit women (Walby, 2012).

Despite an increase in the number of industries in which women participate, occupational segregation remains more common for women than men, with white-collar jobs screening out women more often than blue-collar jobs, and private firms excluding women more than public sectors (Han et al., 2023). Even though the rate of female employment has improved, there is still a significant gender gap in the distribution of occupations and industries (Han et al., 2023). Women are less likely to hold high-paying positions, and their positions are lower than those of men (Du, 2023). As a result, most rule-makers are men, and women are still excluded from core politics. Therefore, by pursuing only formal equality and disregarding the substantive differences between genders, gender inequality between men and women may be

further perpetuated.

This critique highlights that formal equality may coexist with persistent gendered power relations when underlying institutional and cultural norms remain unchanged (Lowndes, 2019). By treating male life-course patterns and labour market norms as universal benchmarks, this approach risks reproducing existing hierarchies rather than transforming them (Verloo and ProQuest, 2007).

The consequences of this approach are evident in the labour market, where women are still concentrated in low-paying, low-status occupations, and face barriers to advancement. Occupational gender segregation, both horizontal and vertical, continues to limit women's access to high-paying jobs and positions of power (England, 2015). Economic globalisation has further entrenched this segregation, with women in developing countries occupying the worst jobs in the global capitalist system (Du, 2023; Wang et al., 2016). This approach to gender equality also fails to address the political exclusion of women. Despite progress in increasing female representation in politics, women are still underrepresented in decision-making positions (England, 2015). The persistence of male-dominated political institutions and practices perpetuates gender inequality in policy-making and governance.

From a theoretical perspective, this critique suggests that analyses of gender equality should extend beyond formal rights to consider substantive opportunities and institutional arrangements (UN Women, 2019). Such distinctions are relevant for understanding why formal commitments to equality may coexist with persistent gendered constraints in everyday life (Lowndes, 2019).

In conclusion, this approach to gender equality, which focuses solely on formal equality, fails to address the fundamental issues of gender inequality. As an analytical framework, the equality of sameness highlights the limits of formal institutional change when underlying gendered norms and power relations remain intact. A more comprehensive approach that addresses the underlying structures of patriarchy is necessary to achieve true gender equality (Walby, Armstrong and Strid., 2012).

Second Approach: The Equality of Difference

The second approach to defining gender equality is based on acknowledging gender differences, as argued by Verloo and ProQuest (2007). This approach emphasises the need for special protection for women in areas such as employment, promotion and participation in decision-making. It recognises that women have suffered from long-term gender discrimination and inequality in society, and that women are a disadvantaged group compared to men. Therefore, women should be protected by legislation (Wang, 2018), and necessary measures should be taken to address gender differences to achieve equality in the final outcome (Walby, 2012). For example, unpaid care work is often disproportionately performed by women, but its contribution to the economy is often overlooked. The equality of difference approach recognises the importance of care work and aims to reward careers in this area, such as paying care workers, to prevent women from being financially disadvantaged compared to men (England, 2015). However, this approach has been criticised for overemphasising gender differences and reinforcing traditional prejudices against women. It may also neglect differences within the female group, such as race, age, and class (Lowndes, 2019).

Furthermore, this approach risks prioritising gender difference in policy design without sufficiently accounting for broader social and economic structures (Wang et al., 2016). This may lead to the creation of specific regulations that treat women as a vulnerable group, thereby perpetuating discrimination against them. It is important to note that gender equality needs to be equal in both process and outcome (Lowndes, 2019), and if gender attributes require women to put in more effort to achieve equality, then this approach may not be suitable enough. For instance, studies have shown that women are more likely to bear the burden of unpaid care work, which can limit their access to education, training and job opportunities (Song and Lai, 2020). This can result in a gender pay gap, which persists in most countries around the world (OECD, 2020).

While this approach of gender equality is meant to provide special protection to women, it is not without its flaws. The focus on gendered difference as a policy category ignores the broader social and economic factors that contribute to gender inequality (Walby et al., 2012). Moreover, the emphasis on protecting women can

lead to the perception that they are a vulnerable group, perpetuating traditional prejudices (Wang et al., 2016; Lowndes, 2019). Additionally, this approach overlooks the diversity within the female group, such as race, age, and class, thereby failing to address the complex intersectionality of gender issues. Furthermore, focusing on differences between men and women can result in women being subjected to different criteria than men when evaluated for roles in society (Wang et al., 2016).

While unpaid care work is an essential component of society, the equality of difference approach may inadvertently reinforce gendered expectations around caregiving, reinforcing gender stereotypes and potentially leading to further discrimination against women (Wang et al., 2016). In fact, studies have shown that women who take on caregiving roles may experience negative consequences in terms of their careers and earning potential (England, 2015). From an analytical perspective, such gendered expectations are relevant for understanding how attitudes towards care and work may shape fertility intentions.

Therefore, achieving gender equality requires an approach that goes beyond simply recognising gendered differences and providing special protection to women. It must address the underlying social and economic factors that contribute to gender inequality and take into account the diversity within the female group (UNECE, 2010). In fact, gender equality needs to be equal in both process and outcome (Lowndes, 2019), and if gender attributes require women to put in more effort to achieve equality, then this approach may not be suitable. Therefore, a multifaceted approach that recognises gender differences while addressing social and economic factors that contribute to gender inequality may be more effective in achieving gender equality.

In conclusion, to achieve true gender equality, it is necessary to adopt a comprehensive approach that recognises and addresses the systemic and structural factors that perpetuate gender inequality. This requires taking into account the unique experiences of different groups of women and acknowledging the role of men in promoting gender equality. While the equality of difference approach is not

uncommon, it remains controversial in explaining the meaning of gender equality (UNECE, 2010). As a theoretical perspective, it is therefore best treated as a partial framework that highlights the limits of uniform equality while also raising questions about the consequences of institutionalising gender difference.

Third Approach: Political Diversity

The third approach to defining gender equality involves adopting political diversity measures to address sameness and difference between men and women (Walby et al., 2012). This approach posits that achieving gender equality requires changes in the behaviour and standards of both genders (UNECE, 2010). For instance, providing care services in the workplace can help to coordinate work and family lifeSuch measures are often cited as examples of institutional arrangements intended to accommodate diverse gendered roles. This view is commonly discussed within gender policy debates. This view is commonly discussed within gender policy debates, emphasising the importance of considering the comprehensiveness, particularity, and validity of different gender policy areas (Verloo and ProQuest, 2007). Rather than privileging a single definition, this approach highlights the need to consider variation across social domains. Although there is a debate over the best definition of gender equality, each country and region must consider its unique situation, including economic development levels and social customs, to adopt the most suitable definition method.

The third approach to gender equality, which involves adopting political diversity measures to achieve sameness and difference, has gained widespread support in the field of gender perspectives (Walby et al., 2012). While this approach acknowledges the importance of addressing gender inequality through changes in behaviour and standards of both genders, it also raises some significant concerns.

One of the main issues with this approach is that it fails to recognise that gender inequality is deeply rooted in societal structures and power relations. Structural inequalities such as patriarchy, gender roles, and social norms shape individuals' behaviours and choices, perpetuating gender inequality in various areas of life (Zhu, 2019). Therefore, it is not enough to rely solely on behavioural change to achieve

gender equality (UNECE, 2010). From an analytical perspective, this limitation suggests that behavioural adjustments may have constrained effects when underlying institutional arrangements remain unchanged.

Furthermore, the idea of pursuing gender equality in all social areas sounds ideal, but it is not always practical or achievable. In reality, gender equality initiatives often face resistance from powerful groups who benefit from the existing gender hierarchy (Verloo and ProQuest, 2007). This resistance can manifest itself in various forms, such as social and cultural norms, institutional barriers, or even violent backlash (Zhu, 2019). These forms of resistance illustrate the limits of approaches that emphasise coordination without directly addressing power asymmetries.

Moreover, the focus on political diversity measures may lead to the neglect of the needs and experiences of marginalised groups, such as women of colour, LGBTQ+ people, and women with disabilities. Intersectional approaches that recognise and address multiple and intersecting forms of oppression are necessary to achieve gender equality for all (Crenshaw, 1989; UNECE, 2010). Without such perspectives, political diversity approaches risk obscuring variation within gender categories.

In conclusion, while the third approach to gender equality, which involves adopting political diversity measures, has some merit, it should not be the sole focus of gender equality efforts (Ye, 2023). Structural inequalities, resistance to change, and intersectional considerations should also be taken into account (Verloo and ProQuest, 2007). Analytically, understanding gender equality requires a comprehensive and intersectional approach that addresses power imbalances and structural barriers, as well as individual behaviours and attitudes (Zhang and Emery, 2023). Moreover, it is important to recognise that gender equality is a complex and multifaceted issue that cannot be reduced to a single approach or solution (Wilson, 2016). Each approach to defining gender equality has its strengths and weaknesses, and different approaches may be more suitable for different contexts and situations. Accordingly, political diversity should be treated as one component within a broader conceptual framework (Zhang, Liu and Lummaa, 2022).

In conclusion, there are three main approaches to defining gender equality: the

equality of sameness approach, the equality of difference approach, and the political diversity approach (Walby et al., 2012). While each approach has its merits and limitations, it is essential to recognise that gender inequality is deeply rooted in societal structures and power relations (Zhu, 2019). For analytical purposes, a holistic and intersectional perspective is useful for capturing the interaction between institutions, norms, and individual attitudes. Such a perspective provides the conceptual foundation for examining how gender role attitudes are embedded within broader social arrangements.

Gender Equity

McDonald (2000a) puts forward the argument that there is a significant difference between gender equity and gender equality, and suggests that gender equity is the more appropriate concept to use. According to McDonald (2013), gender equity is a straightforward concept that can be easily measured by comparing male and female outcomes in areas such as education, employment, wages, participation, and health. In contrast to gender equality, which is often interpreted as seeking uniform outcomes, gender equity allows for different outcomes as long as they are perceived by both men and women as fair or at least not very unfair. Furthermore, gender equity only requires the existence of equal opportunities rather than equal outcomes. Therefore, gender equity is a perception of fairness and opportunity, rather than strict equality of outcomes (McDonald, 2000b).

However, this perspective has been subject to criticism. Firstly, the notion of gender equity is often used to justify the maintenance of the status quo, as it allows for unequal outcomes as long as they are deemed fair by those affected. This approach fails to challenge existing power structures and can perpetuate gender-based discrimination and inequality (Connell, 2011). Secondly, McDonald's definition of gender equity is vague and can be easily manipulated to maintain the status quo. What is perceived as fair can be influenced by social norms, cultural beliefs, and individual biases. This makes it difficult to determine what constitutes a fair outcome, leading to potential disparities and injustices (Walby et al., 2012). Finally, McDonald's concept of gender equity overlooks the fact that gender inequality is rooted in societal

structures and systems that disadvantage women. While equal opportunities are important, they are not sufficient to address the structural causes of gender inequality. From an analytical perspective, this limitation raises questions about the explanatory scope of equity-based frameworks.

While the notion of gender equity as a perception of fairness and opportunity is appealing, it fails to recognise that equal outcomes and opportunities are interrelated and essential for achieving gender equality. Moreover, the concept of gender equity may lead to complacency regarding unequal outcomes for men and women, as long as these outcomes are perceived as fair by both genders. This approach may not be effective in addressing the root causes of gender inequality, which are often rooted in patriarchal structures and social norms (McDonald, 2006). Additionally, measuring gender equity simply by comparing male and female outcomes in various areas, as proposed by McDonald (2013), can be problematic. It oversimplifies the complex and multifaceted nature of gender inequality and fails to account for the intersectional aspects of gender. Furthermore, gender equity may not address the underlying power imbalances that contribute to gender inequality, such as the under-representation of women in leadership positions.

In conclusion, while the concept of gender equity has some merit, it may not be the most effective approach to achieving gender equality. Its relevance lies in highlighting perceptions of fairness, while also illustrating the limitations of equity-based approaches when structural and institutional inequalities persist.

Gender System

Mason's adoption of the gender system concept posits that gender roles prescribe a division of labour and responsibilities between women and men and bestow different rights and obligations to each (Mason, 1997). The gender system has two aspects: gender roles, which are socially constructed roles and expectations of men and women related to the division of labour in the family (Mason, 1997; McDonald, 2000a), and gender equity, defined as institutionalised inequality between male and female members of society and is often linked to macro indicators of a country's level of gender equity (Mason, 2001). The degree of equity in rights assessment determines

the degree of gender equity. Gender equity is therefore a value-laden concept that sidesteps the question of whose values should be applied. However, Mason's gender system concept has been criticised for its inability to consider intersectional factors that may affect gender roles and equity, such as race and class. Moreover, the concept of gender equity is often used in a technocratic way, with its narrow focus on indicators failing to capture the full complexity of gendered experiences.

Mason's adoption of the gender system concept provides a useful framework for analysing the division of labour and responsibilities between men and women, as well as the rights and obligations allocated to each. However, the concept's twofold structure may oversimplify the complexity of gender relations. Gender roles, as socially constructed expectations, are not static but evolve over time in response to societal change and shifting power dynamics (Connell, 2011). Furthermore, the gender system's focus on equity as an institutionalised inequality does not fully capture how gender intersects with other axes of disadvantage, such as race, class, and sexuality, which can result in differing levels of disadvantage for women (Crenshaw, 1989). This suggests that a more nuanced understanding of gender relations that recognises multiple and intersecting sources of inequality.

Moreover, the value-laden nature of gender equity raises the question of whose values should be applied when assessing the degree of equity. Fraser (1994) emphasises the importance of recognising the diversity of values and experiences among different groups of women, rather than assuming a universal experience of gender oppression. This highlights the relevance of intersectionality in analysing the complexity of gender relations and cautions against essentializing women's experiences. Accordingly, while Mason's gender system provides a useful starting point for analysing gender relations, it benefits from being situated within a broader, intersectional analytical framework.

Mason's concept of the gender system provides a useful framework for understanding gender roles and equity interact within societies. However, one limitation of this approach is the tendency in some applications to treat gender roles as fixed and unchanging. Although gender roles may be culturally constructed, they are subject to

continuous renegotiation and transformation over time. Societal norms and expectations surrounding gender evolve alongside economic, political, and demographic changes, and these dynamics must be incorporated into analyses of gender systems (Mason, 2001).

Another limitation of Mason's gender system is that it may not fully account for how gender roles and equity intersect with other forms of oppression, such as race, class, and sexuality. Intersectionality highlights that gender cannot be analysed in isolation from other social identities (Walby et al., 2012). A comprehensive understanding of gender systems therefore requires attention to the ways in which multiple forms of inequality intersect and reinforce one another.

Despite these limitations, Mason's gender system remains a valuable analytical tool for examining the relationship between gender roles and equity. By emphasising the interaction between normative expectations and institutional arrangements, the highlights how gendered divisions of labour are reproduced and contested within specific social contexts (Connell, 2011).

Fraser (1994) distinguishes between gender equity and gender equality, and proposes the concept of parity of participation. She argues that justice requires social arrangements that enable all individuals to participate as equals in social life. However, institutionalised hierarchies of cultural value can prevent people from interacting on equal terms, leading to status inequality or misrecognition. In the context of the family, Fraser (1994) contends that a gender-equitable family does not assign income, paid work, or care responsibilities on the basis of gender. Instead, it promotes equal respect, equal access to resources and capabilities, and equal participation in socially valued activities, while challenging male-centred measures of social value.

Fraser's concept of parity of participation reflects a radical-democratic interpretation of equal moral worth, emphasising that justice requires conditions under which individuals can interact as peers. Yet, entrenched cultural hierarchies can undermine such parity by producing misrecognition and unequal status. Her framework therefore draws attention to both material and symbolic dimensions of gender inequality.

Critically, Fraser's framework has been criticised for paying insufficient attention to historical and structural processes, such as colonial legacies and neoliberal globalisation, that shape gender relations (Walby et al., 2012). In addition, some scholars argue that parity of participation alone may not fully address the intersectional nature of inequality, particularly where gender intersects with race, class, and sexuality. Nevertheless, Fraser's emphasis on participation, recognition, and redistribution continues to provide an influential lens for analysing gender justice.

Fraser's conceptualisation of gender equity and gender equality offers valuable insights into the complexities of gender-based inequality. Her focus on participation and recognition underscores the importance of social arrangements that allow individuals to engage as equals (Walby et al., 2012). Although her framework has limitations, particularly regarding structural and intersectional dimensions, it remains influential in shaping contemporary debates on gender, justice, and social organisation (Connell, 2011).

Taken together, these conceptualizations show that 'gender equality' refers to different normative benchmarks and institutional arrangements, ranging from formal equal treatment to outcome-oriented protection and domain-specific coordination (Connell, 2011). The distinctions between equality, equity, and gender systems are analytically important because they imply different expectations about how gender role attitudes may relate to fertility intentions under varying work–family constraints (Zhou, 2019; Li et al., 2021). In this study, these concepts structure the interpretation, providing a theoretical foundation for the subsequent discussion of household dynamics, care regimes, and the empirical analysis of attitudes and fertility intentions.

1.5.2 Fertility Change and Value Transformation: The Second Demographic Transition

This subsection introduces the Second Demographic Transition (SDT) as a theoretical framework for understanding long-term fertility change in relation to value transformation (Van de Kaa, 1997; 2004). Rather than treating SDT as a predictive

model or a policy evaluation tool, it is used here to situate fertility intentions within broader shifts in family norms, individual aspirations, and social expectations. This perspective is particularly relevant for interpreting how preferences for family size coexist with institutional and gendered constraints, which is central to the analytical focus of this study (Zhou, 2019).

The Second Demographic Transition (SDT)

The Second Demographic Transition (SDT) theory was one of the first to provide a general description of the emergence of sub-replacement fertility (Van de Kaa, 2004). While SDT offers a broad value-based account of fertility decline, reproductive decision-making has also been conceptualised through a macro-micro framework that links individual intentions to the opportunities and constraints provided by institutional contexts (Philipov, Liefbroer and Klobas, 2015). This theory relates the various changes in fertility, partnerships, and living arrangements that first occurred in Northern and Western Europe to a dramatic shift in values (Testa, 2012). The SDT was based on the analysis of changing attitudes towards marriage and fertility patterns in European countries. The SDT emphasises the transition from traditional norms, responsibilities, and ideologies related to the family to new so-called 'post-materialist values', including the rejection of institutional control, individual self-fulfilment, and the emphasis on the importance of lifestyle and personal freedom (Van de Kaa, 2004). The main manifestations of the SDT in relation to marriage and family formation include delayed marriage, an increase in the age of first marriage, the prevalence of non-marital cohabitation, an increase in the number of divorces, and an increase in the number of couples with one child. As Van de Kaa (2004) highlights, such changes in perceptions can occur at different times and with different intensities in different regions.

The Second Demographic Transition theory has been widely examined using cross-national survey data to assess whether value change is associated with shifts in partnership behaviour, family formation and fertility preferences across Europe (Van de Kaa, 2004; Testa, 2012; Sobotka and Beaujouan, 2014). Findings from comparative European research suggest that features associated with the SDT, such as

single living, premarital cohabitation and childbearing outside marriage, gradually spread across different regions of Europe (Sobotka and Beaujouan, 2014). This shift occurred in many regions, including Scandinavia in the 1960s, Western Europe in the 1970s, and the Iberian population in the mid-1980s, and extended to Central Europe (Sobotka and Beaujouan, 2014). Research has also shown that individuals living in non-traditional family arrangements do not necessarily share identical value orientations, indicating that behavioural change does not always correspond neatly with broader ideological shifts (Testa, 2012).

Comparative European research has identified a range of value- and context-related factors associated with family formation and fertility preferences, including attitudes towards parenthood, religiosity, materialist and post-materialist orientations, and socio-demographic characteristics such as gender, age, income and education (Philipov et al., 2015; Testa, 2012). These studies highlight that parenthood continues to be widely valued across Europe, even as its institutional centrality has weakened. This pattern is consistent with evidence that low fertility may persist despite continued aspirations for family life (Sobotka and Beaujouan, 2014). In their systematic analysis of cross-national survey data, Sobotka and Beaujouan (2014) found that around 60 per cent of women perceive having two children to be the most desirable outcome.

This shift has been discussed in relation to a range of factors, including changing attitudes towards parenthood, the increasing prevalence of non-traditional family structures, and shifts in values from materialism to post-materialism (Van de Kaa, 2004). While the desire for parenthood may remain strong, other factors such as economic instability, lack of support for working parents, and the cost of raising children are significant deterrents for those considering starting a family (Brinton and Oh, 2019). In SDT accounts, these factors are often considered alongside broader value change, rather than as single-cause explanations (Philipov et al., 2015).

At this stage, the SDT literature illustrates the complex interplay between individual and social factors in shaping fertility preferences across Europe. While there remains a strong desire for parenthood, various social and economic factors continue to

influence family size decisions (Testa, 2012). For the purposes of this thesis, SDT is used as a macro-level lens for interpreting how value change may coexist with constrained fertility intentions, rather than as a framework for evaluating policy effectiveness (Van de Kaa, 2004).

In contrast to some expectations of the Second Demographic Transition (SDT) theory, the widespread preference for fewer children does not seem to be reflected in practice. In many countries, there exists a considerable gap between ideal and actual fertility rates, suggesting that couples are often constrained in their ability to fulfil their fertility preferences (Hudde, 2016). Notably, China does not neatly fit the trend of desiring smaller families, with many urban women expressing a desire to have only one child (Zhang and Zhao, 2023). However, this preference for smaller families in China is unlikely to be driven by ideological shifts associated with the SDT, but rather reflects the influence of fertility constraints, such as economic challenges and the difficulties associated with balancing childbearing, parenting and career development, especially for women. This distinction is important for interpreting the Chinese case, where low fertility intentions may reflect constrained choices and institutional contexts rather than value change alone.

These constraints are multifaceted and include economic and labour market uncertainties, direct costs associated with child-rearing, and a lack of support for working parents (Brinton and Oh, 2019). Moreover, the increasing prevalence of non-traditional family structures and changing attitudes towards parenthood have also played a role in shaping fertility preferences (Van de Kaa, 2004). While the SDT theory suggests that the widespread acceptance of post-materialistic values has been discussed as being associated with a preference for fewer children, the reality is that individual and social factors continue to exert a considerable influence on fertility choices. Accordingly, SDT is often most informative when read alongside approaches that foreground institutional constraints and gendered opportunity structures (Lesthaeghe, 2014; Zaidi & Morgan, 2017; Han & Brinton, 2022).

This gap between ideal and actual fertility rates suggests that the desire for parenthood remains strong, but a range of social and economic factors continue to

constrain individuals' ability to fulfil their fertility preferences (Hudde, 2016). The case of China highlights the importance of considering specific cultural and economic contexts in shaping fertility preferences. In this thesis, these considerations are used to contextualise the role of fertility constraints and their potential association with fertility intentions across diverse cultural and economic settings (Li et al., 2021). The decline of marital and fertility rates in East Asia has been attributed to the factors proposed by the Second Demographic Transition (SDT), but it can also be explained by women's responses to persistent gender inequities in family-oriented institutions (McDonald, 2000b). These two explanations are not mutually exclusive, and both may occur simultaneously.

However, Rindfuss and Choe (2016) contend that East Asia's extremely low fertility rates can be attributed to a unique combination of factors. Some of the factors contributing to the low fertility rates in East Asia include high levels of education, delayed marriage and childbearing, gendered labour market arrangements, weak family-friendly policies, and inadequate support for child-rearing. These factors are interconnected and may operate together in ways that are associated with persistently low fertility rates. For instance, high levels of education and delayed marriage and childbearing can lead to a reduced window of opportunity for childbearing, while weak family-friendly policies and inadequate support for child-rearing make it challenging for couples to balance work and family responsibilities. In addition, traditional gender norms, cultural values, and societal expectations also play a role in shaping fertility choices in East Asia (Rindfuss and Choe, 2016). For example, the emphasis on son preference and the pressure to conform to social norms regarding marriage and childbearing can discourage women from pursuing education and career opportunities (Lin, 2018). These gendered expectations and social norms may constrain women's agency and limit their opportunities to make autonomous fertility choices.

Overall, the East Asian discussion underscores that value-change perspectives such as SDT intersect with gendered institutions and work–family constraints, which is directly relevant to interpreting fertility intentions in contexts where institutional support is limited (Zhou, 2019).

Taken together, the SDT literature highlights the importance of value change in shaping orientations towards family formation, while also pointing to the limits of value-based explanations when fertility intentions are constrained by institutional and household-level conditions (Goldscheider et al., 2015). In contexts such as East Asia, these constraints are closely linked to gendered divisions of labour, care responsibilities, and work–family arrangements. This observation provides a conceptual bridge to the next subsection, which examines household dynamics and care regimes as key mechanisms through which gender role attitudes are connected to fertility intentions.

1.5.3 Household Dynamics, Care Regimes and Fertility Intentions

This subsection examines the household-level mechanisms through which gendered divisions of labour, care responsibilities, and child-investment expectations may shape fertility intentions (Ji and Wu, 2018). It focuses on how intensive parenting norms, care regimes, and within-family resource allocation structure the perceived costs and feasibility of additional childbearing (Zhang et al., 2022). These perspectives provide a micro-level bridge between the broader theoretical discussion in Section 1.5 and the empirical analysis of gender role attitudes and fertility intentions in later chapters.

Intensive Parenting and Educational Expectations

The traditional division of housework has been challenged by the increasing availability of household appliances and paid domestic services (Qing, 2020). However, the importance of investing in children's education has remained a persistent priority, and families are dedicating more resources to child development and education (OECD, 2020). This has led some scholars to question whether mothers are spending too much time on child-rearing activities, resulting in the emergence of a standard for intensive mothering that demands child-centeredness, expertise, emotional involvement, financial investment, and constant effort to promote their children's development (Xu, 2021). Despite the fact that modern mothers have

invested significant time and effort in promoting their children's development through activities such as reading, teaching, and feeding, the media has created a sense of urgency around mothers' responsibility to become child development experts, teachers, and gatekeepers who protect their children from harm (Du, 2023). This trend is particularly evident among highly educated mothers (Mu and Hu, 2023). Budig (2018) argue that parents play a crucial role in providing opportunities for preschoolers to achieve their developmental potential.

The social construct of competitive motherhood has gained popularity, encouraging women to compete on reproduction and their children's education (Song, 2016). This ideology is deeply ingrained in maternal beliefs, which emphasise that a child's developmental progress are a reflection of maternal achievement (Du, 2023). As a result, mothers with a strong maternal ideology believe in expert-guided knowledge, intensive labour and high costs of raising children, and may experience stronger expectations to assume primary responsibility for caregiving and educational support (Du, 2023). Moreover, mothers with higher levels of education tend to spend more time educating their children than those with lower levels of education which can coincide with higher levels of educational stress and psychological strain (Berrington, 2014).

The active time spent educating children is shown to have positive effects on their well-being (Han, Gowen and Brinton, 2023) and is considered a key family resource. However, intensive educational involvement may coincide with elevated stress and psychological strain for some mothers, particularly among those with higher levels of education (Chen, 2022). Such mothers may face intensified educational expectations compared with earlier cohorts, which may have a negative effect on their mental health.

The trend of intensive motherhood is present in mothers with various levels of education and may be driven by a competitive culture of social comparison (Chen, 2022). In analytical terms, this dynamic is relevant because intensive caregiving and educational involvement can raise the perceived costs of childbearing and parenting, which may be reflected in lower or more constrained fertility intentions under limited

work–family support (Han et al., 2023).

In China, the responsibility for childcare has shifted towards families and market provision in many settings, resulting in a feminised, intensive and fine-tuned care regime (Liu and Marois, 2023). However, low-income women struggle to afford market-based childcare services (Cook and Dong, 2011; Deng et al., 2023). As a result, mothers are increasingly expected to invest in their children's education and social upbringing, leading to an increasing proportion of education in motherhood (Chen, 2018). Yao's (2023) study on educational competition in East Asia found that this intensive education can cause significant psychological stress for childbearing-aged mothers, which has been linked to lower fertility intentions, especially for families with one child. Educated women are more likely to value education and invest more time and emotion into educating their children, even in cases where the father is unable to contribute adequately. This pattern is consistent with research suggesting gendered asymmetries in caregiving expectations, which may contribute to gender differences in reported fertility intentions.

Taken together, the literature on intensive parenting and educational competition highlights how child 'quality' expectations can increase the perceived time, emotional, and financial costs of raising children. In contexts where caregiving and educational responsibilities are disproportionately borne by mothers, these pressures can shape household bargaining and work–family trade-offs in ways that are reflected in fertility intentions.

Family Investment Practices

Investment in children within a family is a central aspect of household decision-making (Liu et al., 2023). It is well established that parents invest in their children through various means such as time, money, and emotional support (Liu et al., 2023). However, the amount and type of investment vary depending on the child's gender and birth order. Previous research indicates that parental investment decisions are shaped by gendered expectations, anticipated returns, and perceived risks within specific cultural contexts.

Studies have shown that parents invest more in the education of their sons than their daughters, even when the daughters show better academic performance (Liu et al., 2023). Similarly, parents spend more money on their sons' extracurricular activities, such as sports and music, than their daughters' (Baker and Milligan, 2013). Such differential investment patterns contribute to gendered disparities in opportunities within the household, which may shape expectations regarding family size and childbearing decisions.

Moreover, birth order also plays a significant role in shaping the investment in children within a family. The first-born child tends to receive more investment in terms of time, money, and emotional support compared to younger siblings (Baker and Milligan, 2013). Parents may allocate more resources to first-born children as they face less competition for household resources. This pattern highlights how parents may prioritise maintaining investment levels for particular children when household resources are constrained.

In contexts of low fertility, parents often consider the potential impact of having additional children on existing household resource allocation when forming fertility intentions. It has been suggested that only parents who are capable of maintaining a desired level of investment in their current child may choose to have another child (Becker and Lewis, 1973). Accordingly, anticipated resource dilution may act as a constraint on fertility intentions. However, parental resource allocation is not uniform, and additional children may reduce investment in some children while not affecting, or even increasing, investment in others (Quadlin, 2019).

In China, where parental expectations and investment in education are increasing rapidly, both monetary and non-monetary investments have been shown to be associated with children's educational participation and development (Zeng, 2016). The costs of educational opportunities are mainly borne by families, and investment in education is particularly important in a patriarchal culture where parents rely on their sons for the support of their elderly (Zeng, 2016). These considerations shape how parents evaluate the feasibility of having additional children under constrained household resources.

Family size and child quality have been the subject of much research in the social sciences. One of the dominant theories in this field is the resource dilution hypothesis (Anastasi, 1956; Blake, 1981; 1989), which states that the presence of other children in a family dilutes parental inputs by allocating them to more children. The resource dilution hypothesis has been widely used to explain the relationship between sibling size and children's access to education and related household investments in resource-constrained settings (Shen, 2020; Kugler and Kumar, 2016). However, the resource dilution hypothesis does not address how limited parental resources are distributed among children within the same family (King, 1987). While resource dilution provides a useful starting point, it does not fully capture the complexity of household investment strategies.

Unequal Investment in Children

Research has demonstrated that parents allocate resources unevenly among children based on factors such as gender, birth order, and perceived ability (Blake, 1981; 1989). First-born children may receive greater investment due to reduced competition for household resources, while children perceived as having higher academic potential may attract additional parental support. These patterns highlight that anticipated resource competition within families can shape fertility intentions, particularly when parents prioritise maintaining high levels of investment per child.

The resource dilution hypothesis is a useful framework for understanding how family size may be associated with perceived constraints on household resources and parental time (Blake, 1989). However, it fails to account for the complexities of parental investment strategies within the same family. Unequal investment in children based on factors such as gender, birth order, and perceived needs or potential can result in significant variations in how parents allocate time, money, and care within households (Jiang and Liu, 2016; Baker and Milligan, 2013). For the purposes of this thesis, the relevance of this framework lies in clarifying may help to clarify how anticipated resource dilution and within-family allocation may shape fertility intentions, particularly where parents seek to maintain a high level of investment per child.

The literature has demonstrated that in East Asian societies, parental resource allocation is contingent upon the gender and birth order of their children (Jiang and Liu, 2016; Sheng, 2012). Additionally, Blake (1989) found that older children, particularly girls, were more likely to receive reduced parental investment in extended families where budgetary constraints limited household educational spending. This is consistent with Li, Zhang and Zhu's (2008) findings in urban areas of mainland China, where having siblings was associated with changes in parental investment patterns. These patterns are often discussed in relation to son preference, which leads parents to favour boys over girls in intergenerational transfers, including reduced investment in daughters' education or urging girls to work or marry earlier to support the family and provide education for younger siblings.

Overall, existing studies suggest that gendered norms and expectations continue to shape how resources are allocated within families in East Asian contexts. Rather than evaluating policy effectiveness, this literature highlights how persistent son preference and birth-order considerations may increase the perceived costs and complexity of childrearing for parents, particularly when maintaining investment levels across children is viewed as difficult.

Chen's (2020) study examined associations between changes in family size in China between 2010 and 2016 and parental investment in the education of the eldest child. According to Chen, having a younger sibling is associated with a reduction in parents' desire to invest in the education of their first child and education-related expenditure. Chen's research also showed that having a younger sister does not significantly reduce parental aspirations or the educational expenditure received by the first child if the first-born is male. This finding is consistent with previous research conducted in East Asia, where first-born girls were shown to be disproportionately disadvantaged by having a younger sibling compared to first-born boys. Chen (2020) found that while firstborn girls face competition from both younger brothers and sisters, firstborn sons are only negatively affected by having younger brothers; they do not face competition from younger sisters.

The results of Chen's study highlight that having a younger sibling is associated with

changes in how parents allocate education-related resources to first-born children, particularly if the first-born is female (Chen, 2020). This supports previous research conducted in East Asian societies that highlighted the disproportionate disadvantage experienced by first-born girls with a younger sibling (Quadlin, 2019). It also suggests that sibling gender composition may structure perceived competition for household resources (Chen, 2020). From the perspective of this thesis, such findings are relevant because they illustrate how anticipated resource competition and gendered expectations may shape perceptions of the feasibility of having additional children, which can be reflected in fertility intentions.

Taken together, this strand of research suggests that sibling composition and birth order may shape within-family allocation patterns, and that these patterns can be gendered. For the purposes of this thesis, the key implication is that parents' expectations about maintaining high levels of investment per child, and about how such investment may vary across children, can function as a perceived constraint when forming fertility intentions, particularly in settings characterised by intensive educational competition.

Son Preference and Gendered Allocation

The phenomenon of son preference and its influence on resource allocation within families has been widely studied, with China serving as a particularly relevant case for examining how such preferences may operate under low-fertility conditions (Hu and Shi, 2018). The unequal treatment of children based on their gender and birth order in China is well-documented, with access to family resources such as education largely influenced by the presence of younger siblings and the gender of those siblings (Chen, 2020). Research has shown that having younger siblings does not necessarily lead to a decrease in parental investment in the education of the eldest son, but may be associated with reduced investment allocated to the eldest daughter. The preference for sons remains prevalent in Chinese society, with the majority of families continuing to favour male children (Hu and Shi, 2018; Chen, 2019).

Son preference can shape intra-household resource allocation by prioritising sons in education-related spending and support, particularly under conditions of constrained

household budgets (Hu and Shi, 2018; Chen, 2020). Such practices illustrate how gendered norms may structure parental expectations about the costs and returns of childrearing, which is relevant to understanding how fertility intentions are formed in contexts of intensive family investment (Hu and Shi, 2018).

Overall, the literature reviewed in this subsection highlights three interlocking mechanisms relevant to fertility intentions: (1) Intensive parenting norms that raise expected time and emotional commitments, (2) Feminized care regimes that concentrate responsibility on mothers, and (3) Within-family investment strategies that make additional children appear difficult to support at a desired 'quality' level. These mechanisms clarify how gendered household arrangements and investment expectations structure the context in which fertility intentions are formed and expressed. This framework helps to inform the interpretation of gender role attitudes and the patterns observed in the subsequent quantitative analysis.

1.5.4 Theoretical Implications for the Present Study

This chapter has outlined a set of theoretical perspectives that are used to situate fertility intentions within broader gendered, institutional, and household contexts in contemporary China. And these perspectives emphasise how individual intentions are formed within enduring social norms, work–family arrangements, and expectations surrounding care and childrearing.

Taken together, the discussions in Sections 1.5.1 to 1.5.3 highlight that gender inequality operates across multiple levels. At the macro level, gender systems and value frameworks shape expectations about family roles and appropriate divisions of labour. At the meso level, changing norms around parenting, care provision, and educational investment influence how families evaluate the demands of childrearing. At the micro level, household decision-making reflects gendered responsibilities and perceived constraints on time, income, and career continuity, particularly for women (Ji and Wu, 2018).

For the purposes of this study, these perspectives are providing an analytical lens for

interpreting observed patterns in gender role attitudes and fertility intentions across different policy periods (Li et al., 2021). In particular, they help to clarify why fertility intentions may remain constrained even in contexts where formal policy restrictions have been relaxed, and why such constraints may be experienced differently by men and women.

By linking gender norms, household dynamics, and institutional contexts, this framework establishes the theoretical foundation for the empirical analysis that follows. It informs the selection of key variables, the interpretation of statistical associations, and the focus on differences across gender and policy periods. In this way, the chapter positions fertility intentions as socially embedded outcomes shaped by gendered structures rather than as isolated individual preferences (Connell, 2011).

2. Empirical Literature, Research Gaps, and Analytical Framework

2.1 From Context and Theory to Empirical Investigation

Gender inequality and persistently low fertility levels are two key issues that China has faced over recent decades (Qing, 2020). Following the introduction of the universal two-child policy in 2015, a growing body of empirical research has examined patterns of fertility intentions and reproductive behaviour within this evolving institutional context (Jiang and Liu, 2016). Furthermore, gender inequality plays a central role in shaping Chinese women's reproductive intentions, with education and employment status being two key factors that are repeatedly identified as important correlates (Zhang et al., 2024).

To understand the complex dynamics between gender inequality and fertility rates in China within this changing institutional and social context, this chapter builds on the discussion in Chapter 1 and turns to empirical investigation. This literature review synthesises existing empirical studies on the factors associated with fertility intentions (Yi and Therese, 2016). Particular attention is paid to how gender role attitudes, socio-economic characteristics, and household arrangements are operationalised and examined in survey-based research (Li et al., 2021). Rather than formulating new research questions, the chapter clarifies areas of convergence, divergence, and limitation in the existing empirical literature.

This literature review reviews existing research on gender inequality and fertility intentions in China. It examines empirical findings on gender inequality, studies conducted across different fertility policy periods, and how gender inequality is conceptualised and measured in survey-based research. Additionally, the review examines the preferences and expectations of young Chinese women regarding fertility intentions and the association of gender inequality on their decision-making. The chapter also considers household-level dynamics discussed in the empirical literature. Rather than advancing policy evaluations or recommendations, the review focuses on clarifying empirical patterns and identifying unresolved questions in the

literature.

Gender inequality's association with fertility intentions in China has been extensively documented in the literature. Women's education and employment status have been shown to be key factors linked to reproductive intentions, with women who have higher education often exhibiting delayed or reduced fertility intentions than women with lower education levels (Chen, 2022). This is discussed in relation to the conflict between women's traditional role as caregivers and the desire to pursue careers, as well as the high cost of childcare in urban areas (Hu et al., 2023). In addition, delayed marriage and workplace gender inequality, such as wage discrimination and limited career development opportunities, are frequently associated with lower fertility intentions. Furthermore, China's one-child policy, implemented from 1979 to 2015, is often discussed as part of the broader historical and institutional background (Chen, 2022), including a strong preference for male children and leading to the widespread practice of sex-selective abortion. These demographic legacies are commonly cited in the literature, with a significantly higher number of males than females in the population, shaping subsequent gender norms and family expectations.

China's population policy has been continuously evolving over the past few decades, providing an important institutional backdrop for fertility research. Empirical studies conducted around the introduction of the two-child policy frequently use policy periods as temporal reference points (Huang and Jin, 2022). However, these studies also acknowledge the limitations of identifying direct policy effects using cross-sectional survey data. Accordingly, this chapter focuses on how gender inequality is discussed and examined in relation to fertility intentions during the two-child policy implementation period, without attributing observed patterns to policy effectiveness.

The significance of this literature review lies in understanding the importance of gender inequality in shaping the reproductive behaviour of different socio-economic and educational groups in China. Education is frequently highlighted in the empirical literature as a key dimension along which fertility intentions and gender role attitudes diverge (NBS, 2022), making educational attainment an important variable in subsequent empirical analyses. This review focuses on mapping existing empirical

findings and identifying unresolved questions in the literature.

2.2 Empirical Studies on Fertility Intentions and First Birth Decisions in China

The decision to have a child is a complex and multifaceted process that is influenced by various factors, including cultural, educational and gender inequality factors (Zheng et, al., 2016). These factors can vary depending on the individual, their values and beliefs, and the context in which they live (Yang, Yue and Ma, 2025). A growing body of empirical research examines how first-birth intentions are patterned in relation to socio-economic characteristics, gender-related attitudes, and household circumstances, including education, employment, income, and access to health services (Yang et, al., 2025). Consistent with the thesis scope, this section synthesises survey-based evidence on correlates of first-birth intentions and early parity transitions, and clarifies how gender inequality is operationalised in quantitative studies. The review focuses on empirical studies conducted in China, while drawing selectively on comparative findings only where they directly inform measurement and interpretation of gender role attitudes and household arrangements.

2.2.1 Cultural Determinants

First-birth intentions are frequently examined in relation to attitudinal and normative orientations, including views on marriage, family formation, and gender roles (Zheng et al., 2016). In this section, 'cultural' factors are treated analytically as measurable attitudes and perceived norms used in empirical research, rather than as broad civilisational contrasts. The focus is therefore on how survey-based studies operationalise these orientations and document their statistical relationships with first-birth intentions in China.

Cultural Conceptions of Marriage and Family

Empirical studies typically examine marriage and family orientations through

attitudinal items and perceived norms, and then test whether these measures are associated with the timing and likelihood of intending a first birth (Yang et, al., 2025). Within China-focused research, marriage remains a salient institutional and normative reference point in survey measures of family formation, and studies commonly treat marital status and marriage-related attitudes as key covariates when modelling first-birth intentions (Yang et, al., 2025).

Cultural beliefs surrounding marriage and family are discussed as being associated with decisions about having children, as well as social, economic, educational, and healthcare factors (Zheng et al., 2016). Studies suggest that individuals from lower socioeconomic backgrounds and with less education are more likely to adhere to traditional gender roles and family structures (Yang et, al., 2025). This adherence to traditional gender roles is often linked to pressure on women, putting their roles as mothers below other responsibilities such as work or education, resulting in a delay in having children until they feel they have achieved certain. Similarly, men from lower socioeconomic backgrounds may report stronger normative expectations to form a family earlier to meet traditional expectations of masculinity and fatherhood (Zhu, 2019).

Cultural beliefs about the importance of marriage and family can intersect with other social factors, such as gender, socioeconomic status, and religion (Zhu., 2019). In China-focused studies, family-centred norms are often discussed as part of the broader cultural context, while empirical analyses rely on attitudinal measures and household characteristics to capture these orientations. For the purposes of this review, theoretical perspectives are treated as interpretive lenses that inform the choice and interpretation of variables, rather than as stand-alone explanations.

Cultural Perspectives vs Social Exchange Theory in Fertility Research

Cultural perspectives emphasise the role of shared values, norms, and ideologies in shaping fertility intentions. From this viewpoint, reproductive decision-making is embedded within culturally specific understandings of gender roles, family obligations, and social expectations. In the Chinese context, Confucian gender ideology has historically prescribed differentiated roles for men and women,

associating women with caregiving responsibilities and men with breadwinning roles. These cultural norms continue to influence fertility intentions by shaping what is considered appropriate, desirable, and morally valued within family life (Mason, 1997; Rosker, 2015; Lee, 2011).

Social exchange theory, by contrast, conceptualises fertility decisions as the result of cost–benefit calculations in which individuals assess the perceived rewards and costs associated with childbearing (Becker, 1985). From this perspective, fertility intentions depend on how individuals evaluate economic resources, opportunity costs, employment stability, and expected returns from family formation. Childbearing is therefore understood as a strategic response to structural constraints such as income prospects, career penalties, and access to childcare, rather than as an expression of cultural obligation alone (Hu et al., 2023; McDonald, 2000a).

While cultural theory highlights the normative foundations of fertility intentions, social exchange theory foregrounds rational assessments of resources and constraints (Connell, 2011). These approaches are not mutually exclusive. Fertility intentions often emerge from the interaction between culturally defined gender expectations and structurally conditioned cost benefit considerations (Goldscheider et al., 2015). This study integrates both perspectives by demonstrating how traditional gender norms may reduce the perceived social and economic costs of childbearing for some groups, while for individuals with egalitarian gender attitudes, higher opportunity costs and structural barriers contribute to lower fertility intentions (Brinton and Oh, 2019). By combining cultural and exchange-based explanations, the analysis captures both the normative and material dimensions of fertility decision-making in contemporary China.

In China, cultural beliefs about the importance of marriage and family are deeply rooted in traditional Chinese culture and are often discussed alongside institutional arrangements and historical population governance as part of the broader context for family formation (Rosker, 2015). Marriage and family are highly valued in China, and having children is considered a fundamental part of fulfilling one's family responsibilities. Historical population policies, including the One-Child Policy, which

was implemented from 1979 to 2015 and aimed to limit family size and encourage early marriage and childbearing (Xu and Pak, 2015).

Studies conducted in more recent policy periods continue to report that marriage- and family-related norms are salient correlates of fertility intentions in China (Ye, 2023). One theory that is sometimes used to interpret these findings is social exchange theory, which frames decision-making in terms of perceived costs and benefits embedded within social obligations and expectations (Xu and Pak, 2015).

However, current research on the cultural beliefs surrounding the importance of marriage and family in Chinese reproductive decision-making is also limited (Mason, 1992). For example, many studies focus on government policies and economic factors as contextual conditions, but do not fully explore the role of cultural beliefs in shaping reproductive decision-making (Gu, 2022). A further limitation is that survey measures may not capture the full variation in how norms are interpreted across social groups, making it difficult to adjudicate between competing mechanisms using standardised items alone (Xu and Pak, 2015).

Contradictions between Gender Norms and Cultural Paradigms in China

Empirical research on first-birth intentions in China frequently incorporates gender norms through attitudinal measures, such as views on breadwinning, caregiving, and the expected division of labour within marriage (Zhang et al., 2023; Liu, 2017). Rather than treating gender norms as a fixed cultural trait, quantitative studies typically test whether variation in these attitudes is associated with individuals' reported intentions to have a first child, often alongside indicators of education, employment, and partnership status.

In China, gender role beliefs are commonly measured and discussed. Women are often expected to prioritise family responsibilities over careers, while men are seen as the main financial providers (Zhang et al., 2024). Studies report that these attitudes are associated with women's intentions to have children, especially under economic pressure and social expectations (Zhang, 2023). Gender norm perspectives are often used to interpret these patterns, although findings vary by measurement choice and

sample composition (Lee, 2011; Zhang, 2023).

Comparative studies have reported that traditional gender role attitudes are sometimes associated with higher fertility levels at the aggregate level (Mitchell and Gray, 2007). Such findings are often interpreted in relation to a clearer division of labour, which may coincide with lower perceived work–family conflict in some contexts. However, other studies document that more egalitarian gender role attitudes are associated with delayed or reduced fertility intentions, particularly among women, when expanded employment opportunities are combined with persistent care responsibilities (Li et al., 2021).

Gender role attitudes are associated with fertility intentions for men and women differently. Studies show that men who support gender equality often report greater involvement in domestic life and, in some contexts, higher fertility intentions (Chen et al., 2022). On the other hand, women who support gender equality are more likely to report delayed or lower fertility intentions, a pattern frequently interpreted in relation to unmet expectations regarding the division of unpaid labour (Chen et al., 2022). Empirical findings further suggest that these associations vary across national contexts. In Western Europe, support for equality is often found to coincide with lower birth rates, while in Eastern Europe, some studies report a positive association (Hudde and Engelhardt, 2020).

The relationship between gender role beliefs and attitudes is conceptually related but analytically distinct. Gender role beliefs often reflect cultural traditions and justify the division of labour between men and women. In contrast, gender role attitudes reflect the desire for gender equality (Zhang et al., 2023). In the Chinese context, several studies note a divergence between attitudinal change and everyday practices. While there has been progress towards gender equality in public life, traditional gender role beliefs continue to shape private and family life (Short, Ma and Yu, 2000).

Traditional gender role beliefs are frequently associated with women prioritising family responsibilities over careers, a pattern that some studies link to higher fertility intentions (Zhang and Emery, 2023; Liu and Marois, 2023). However, more equal gender role attitudes are sometimes associated with heightened work–family tension,

particularly in settings where institutional support for care remains limited (Bernhardt, Goldscheider and Turunen, 2016). These contrasting findings highlight the complexity of linking gender role orientations to fertility intentions across contexts.

Cultural Perspectives on Childbearing

In empirical fertility research, cultural perspectives on childbearing are typically examined through attitudes and perceived norms related to reproduction, family formation, and gender roles (Jiang et al., 2023). Rather than treating culture as a fixed background characteristic, survey-based studies operationalise these perspectives using attitudinal items that capture views on ideal family size, the social value of childbearing, and expectations surrounding parental roles. Additionally, cultural beliefs about gender and family roles, including expectations about women's reproductive responsibilities, are commonly analysed as correlates of fertility intentions (Xu and Pak, 2015).

In the empirical literature, cultural influences on reproductive decision-making are often theorised using behavioural and socio-contextual frameworks. One such framework is the Theory of Planned Behavior (TPB), which assumes that individual behavior is shaped by attitudes, social norms, and perceived behavioral control (Ajzen, 1991). In survey-based studies, TPB is typically reflected in measures of childbearing attitudes, perceived family or peer expectations, and perceived constraints related to work, housing, or childcare (Philipov, Liefbroer and Klobas, 2015).

Another framework frequently referenced is the Social Ecological Model (SEM), which recognises that reproductive intentions are embedded within multiple layers of context, including household arrangements, workplace conditions, and broader institutional environments (Philipov et al., 2015). SEM-informed studies therefore tend to combine attitudinal measures with indicators of socio-economic and contextual constraints, rather than attributing fertility decisions to cultural beliefs alone.

Theory of Planned Behaviour vs Social Ecological Model

The Theory of Planned Behaviour (TPB) conceptualises fertility intentions as the outcome of individual-level cognitive processes, emphasising attitudes toward behaviour, subjective norms, and perceived behavioural control as the key determinants of intentional action (Ajzen, 1991). Within fertility research, TPB has been widely applied to explain how personal beliefs about childbearing, perceived social expectations, and individuals' confidence in managing parental responsibilities shape stated fertility intentions (Philipov et al., 2015). From this perspective, reproductive decision-making is primarily understood as a function of individual motivation and perceived feasibility.

In contrast, the Social Ecological Model adopts a multi-level analytical framework that situates individual decision-making within broader social, institutional, and cultural environments. Rather than focusing exclusively on individual cognition, this approach highlights how fertility intentions are shaped by interactions across multiple levels, including family arrangements, labour market structures, community norms, and policy contexts (Philipov et al., 2015). Research adopting a social ecological perspective emphasises that reproductive intentions cannot be fully understood without considering structural constraints such as work–family conflict, childcare availability, and gendered institutional arrangements (Esping-Andersen, 2009; McDonald, 2013).

While TPB provides a clear framework for modelling how individual attitudes and norms translate into fertility intentions, it is less equipped to capture the structural and contextual conditions that enable or constrain reproductive choices. The social ecological model, by contrast, explicitly incorporates these contextual dimensions but offers less specificity regarding individual-level cognitive mechanisms (Philipov et al., 2015). This study draws on insights from both perspectives but aligns more closely with the social ecological approach by treating fertility intentions as socially embedded responses shaped by the interaction between gender role attitudes and enduring institutional and cultural constraints. This framework is particularly relevant for understanding fertility intentions in China, where policy changes operate within persistent gendered divisions of labour and limited work–family support structures.

Empirical studies in China often note that gendered expectations surrounding childbearing are associated with women's reported fertility intentions (Su-Russell and Sanner, 2023). Such expectations are typically captured through survey items on perceived norms and timing concerns, rather than direct observation of decision-making processes (Xu and Pak, 2015).

In China, having children is often seen as a necessary step to fulfill family and social obligations (Xiang et al., 2023). Social norm theory is sometimes used to interpret these associations, suggesting that perceived expectations from kinship networks and social circles may be linked to fertility intentions (Fong and Hu, 2014).

Overall, empirical studies treat cultural perspectives on childbearing as attitudinal orientations and perceived norms that are statistically associated with fertility intentions (Xiang et al., 2023). The main challenge identified in the literature lies in measurement and interpretation, as similar attitudes may operate differently depending on socio-economic conditions and institutional context (Xu and Pak, 2015).

2.2.2 Education and Fertility Intentions

Education is a recurrent theme in empirical research on fertility intentions, and studies frequently examine how educational attainment and related socio-economic positioning are associated with first-birth intentions (Zhang and Zhao, 2023). This subsection reviews findings on educational attainment and educational resources as correlates of first-birth intentions. The focus is on how education is operationalised in survey-based studies, what patterns are reported across groups, and where results are inconsistent across data sources and model specifications.

Influence of Higher Education on First-Birth Decisions

Higher education provides individuals with more choices and opportunities to pursue their career and personal goals, which is often discussed as being associated with later timing of family formation and delayed first-birth intentions (Berrington and Pattaro,

2014; Prickett and Augustine, 2021). Cross-national evidence from Europe has documented later childbearing among highly educated women, a pattern that is frequently interpreted in relation to prolonged education and career sequencing (Eurostat, 2021).Educational attainment is also linked to socio-economic resources, which some studies associate with greater perceived capacity to support childrearing (Baker and Milligan, 2013). In addition, higher education is often correlated with more egalitarian gender role attitudes, which can condition how individuals evaluate the compatibility of work and family roles (Hakim, 2011). The direction of association between egalitarian attitudes and first-birth intentions is not uniform across studies, and results depend on how gender attitudes and work–family constraints are measured and modelled.

Studies in East Asian contexts sometimes emphasise normative expectations around family formation and examine whether perceived social pressure is associated with fertility intentions across educational groups (Feng et al., 2024). Some studies also link education to socio-economic security and status, which may coincide with different evaluations of childbearing costs and benefits (Shen and Jiang, 2022). Evidence regarding whether higher education aligns with traditional or egalitarian gender role orientations is mixed across settings; some studies report that educated women may still face strong traditional expectations in family roles, which can shape reported fertility intentions (Zhang and Zhao, 2023).

In China, studies show that the more educated a person is, the smaller their family tends to be (Zhang and Zhao, 2023). Research shows that women are more likely to postpone marriage and childbirth in pursuit of their careers (Liu, 2023; Han et al., 2023). However, educated individuals in China may also desire to have children as a way to balance work and life and fulfill family responsibilities. Current research indicates that the relationship between higher education and the decision to have children in China is complex and varies across groups and study designs (Gao and Wang, 2025). While some studies have found a positive correlation between higher education and the decision to have children (Chen, 2022), others have not found a significant relationship. This inconsistency suggests sensitivity to measurement choices (e.g., intentions versus realised fertility), sample composition, and model

specification.

Despite increasing attention on the relationship between higher education and the decision to have children in China, current research has some limitations and gaps. Most studies rely on cross-sectional data, which limits the ability to draw causal conclusions. Research mainly focuses on women and neglects the role of men in family formation decisions.

Educational Accessibility as a Determinant of Reproductive Choices

Access to education is commonly examined in relation to economic opportunities and resources that are associated with fertility intentions. Cross-national studies have reported positive associations between educational attainment, economic stability, and fertility behaviour in some high-income contexts (Hu et al., 2023). Moreover, having access to education is frequently linked to greater knowledge of family planning and reproductive health. Empirical studies in Northern European countries suggest that higher education levels are associated with planned fertility and contraceptive use, reflecting greater capacity to align intentions with reproductive behaviour (Hu et al., 2023). Educational expansion is also associated with changing attitudes toward family size. In several Western European contexts, studies report declining completed family size alongside rising educational attainment, a pattern often interpreted in relation to changing opportunity costs and life-course preferences (Becker, 1981; Lesthaeghe, 2014).

Research in East Asian contexts examines whether access to education resources and economic stability are associated with fertility intentions (Gao and Wang, 2025). Studies also link educational expansion to shifts in attitudes toward family size. Evidence from China and South Korea documents a trend toward smaller intended family sizes alongside rising educational attainment (Lim, 2021; Anderson and Kohler, 2013; Fleckenstein, Lee and Himmelweit, 2023).

Access to education resources is frequently discussed in Chinese studies as part of the socio-economic context associated with fertility intentions (Gao and Wang, 2025). Some studies report that higher educational attainment coincides with better

employment prospects and economic security (Chen, 2022). Access to education is also associated with greater awareness of family planning practices. Research has found that in China, parents with higher education are more likely to use contraception and plan their families (Qin, Padmadas, and Falkingham, 2023). These findings are generally interpreted as reflecting differences in information access and planning capacity across educational groups.

However, current research has some limitations and gaps. Many studies focus on education in isolation, without jointly modelling other structural factors such as housing costs or social norms that may condition educational effects (McDonald, 2000; Balbo, Billari and Mills, 2013). In addition, reliance on self-reported measures of intentions and behaviour may introduce reporting bias (Podsakoff et al., 2012).

Overall, empirical studies suggest that educational attainment and access to education resources are associated with fertility intentions through multiple pathways (Chen, 2022; Gao and Wang, 2025). These pathways include differences in economic resources, information and planning capacity, and attitudes toward family size (Becker and Lewis, 1973; Becker, 1985; Balbo et al., 2013). However, current research has limitations and gaps, as findings remain sensitive to model specification and the inclusion of additional structural constraints (Qin, et al., 2022; Zhang and Zhao, 2023).

Parental Attitudes towards Children's Education

Firstly, critical theory suggests that attitudes towards child education are influenced by broader social, economic and political backgrounds. For example, considering children as an economic asset has been associated with higher fertility preferences, while considering children as a burden has been linked to lower fertility intentions (Becker and Lewis, 1973; Becker and Tomes, 1976). In Western societies, children are typically seen as an important economic investment, and attitudes towards education are frequently discussed as relevant factors in family decision-making (Becker, 1985; Becker and ebrary, 1991). Secondly, academic theory suggests that attitudes towards education are influenced by social norms and cultural values. For instance, education is highly valued in Western societies, and parents may highly

value their children's education (Blake, 1981; Blake, 1989). This has been discussed as shaping how parents evaluate the costs and expectations associated with childrearing, as they may want to provide the best education opportunities for them (Berrington and Pattaro, 2014). Thirdly, studies have shown that parents' attitudes towards education affect their level of investment in their children's education. For example, highly-valuing parents are more likely to invest in their children's education by providing education resources and opportunities (Baker and Milligan, 2016; Prickett and Augustine, 2021). This investment is often examined alongside fertility intentions as parents may want to ensure that they have resources to invest in their children's education (Becker and Lewis, 1973; Balbo, et al., 2013).

In Eastern countries, the attitude towards child education is frequently discussed in relation to family formation decisions. For example, the traditional Confucian values in East Asia place great importance on education, and shape parental expectations regarding childrearing and educational investment (Rosker, 2015; Li, 2000). However, rapid modernization and industrialization have led to changes in social norms and educational values that complicate how education-related attitudes are reflected in fertility intentions (Feeney, 1994; Van de Kaa, 2002; Lesthaeghe, 2014). Secondly, academic theory suggests that attitudes towards education are influenced by social norms and cultural values. For instance, in East Asian societies, the idea of having children as a way of fulfilling family obligations and expectations is often discussed in relation to fertility intentions (Kan and Hertog, 2017; Brinton and Oh, 2019).

Additionally, the importance of education in East Asian societies may cause parents to prioritise educational opportunities over other aspects of life, including career development and personal fulfillment (Anderson and Kohler, 2013). Thirdly, studies have shown that parents' attitudes towards education in Eastern countries affect their level of investment in their children's education. For example, parents in China who view education as a means of achieving social mobility may invest significant amounts of money in their children's education, often at the expense of other aspects of their lives (Mu and Hu, 2023). This educational investment is commonly examined in relation to fertility intentions and timing, as parents may want to ensure they have

resources to invest in their children's education (Weng et al., 2019).

In China, people's attitude towards education is influenced by social norms and cultural values. For example, education is highly valued in Chinese society, and parents often prioritise their children's education over other aspects of life (Sheng, 2012). Studies also note the broader institutional emphasis on education as part of the context within which family decisions are made (Li and Tsang, 2003).

Parents' attitudes towards education also affect their investment in their children's education. For instance, parents who view education as a means of achieving social mobility may invest a significant amount of money in their children's education, often at the expense of other aspects of their lives (Wang and Chen, 2024). This educational investment is often discussed alongside fertility intentions, as parents may want to ensure they have resources to invest in their children's education (Chen, 2020).

There are limitations and gaps in research understanding the complex factors that influence attitudes towards children's education and their impact on Chinese family decision-making. For example, while research indicates that the importance of education in Chinese society affects family decision-making, further research has not yet fully clarified the degree to which this influence varies across different social and economic contexts (Mu and Hu, 2023; Gao and Wang, 2025). Additionally, with China continuing to undergo significant social and economic transformation, there is limited research on the impact of changing attitudes towards education (Chen, 2022).

Overall, attitudes towards children's education are frequently discussed as relevant factors in studies of family decision-making and fertility intentions in China (Weng et al., 2019; Wang and Chen, 2024). Parents' attitudes affect their investment in their children's education and the timing of childbirth (Chen, 2020). However, there are limitations and gaps in research understanding the complex factors that influence attitudes towards children's education and their impact on Chinese family decision-making. Existing evidence remains uneven across social and economic contexts, particularly in periods of rapid social change (Qin et al., 2022; Balbo et al., 2013).

2.2.3 Gender Role Attitudes and Household Labour Division

For a long time, gender inequality has been an interesting topic in the field of social sciences, with many studies exploring its implications on various aspects of individual lives (Walby et al.,; Daly, 2020). One significant area where gender inequality has been shown to have a major association is in reproductive decision-making (McDonald, 2000b; Mason, 2001). Gender inequality has been identified as an important factor that can be associated with higher or lower families from having children (Goldscheider et al., 2015; Han et al., 2024). Many countries still face significant gender differences in various aspects of life, such as attitudes towards women's career prospects, caregiving responsibilities, and household division of labour (Blau and Kahn, 2017; Ji et al., 2017; Kan and Hertog, 2017).

Impact of Attitudes towards Women's Career Prospects

The changing role of women in the workforce has altered traditional family structures and made their career aspirations increasingly important (Blau and Kahn, 2017; Esping-Andersen, 2009). The increase in women's education and labour force participation has led to a transformation of traditional gender roles, which is frequently discussed in relation to the decision to have children (Goldscheider et al., 2015; Brinton and Oh, 2019). Research shows that when women perceive more career development opportunities, they are more likely to postpone starting a family (Berrington and Pattaro, 2014). This suggests that women's career prospects are a key factor in the decision to have children. Secondly, research suggests that societal attitudes towards women's career prospects significantly shape reported patterns in the decision-making process of Western families (Han et al., 2024; Hudde, 2016). A recent study found that in countries where there are more gender-equal attitudes towards women's work, women tend to have their first child at a later age on average (Eurostat, 2026). This is consistent with the view that societal attitudes towards women's career prospects have a direct impact on the timing of family formation. Finally, research also discusses institutional arrangements (such as parental leave provision and childcare availability) as contextual conditions that may shape how career prospects are evaluated alongside fertility intentions (McDonald, 2006; Fraser,

1994).

However, traditional gender roles and cultural norms that emphasise women's maternal and domestic responsibilities are still prevalent in many Eastern countries (Adisa, Cooke and Iwowo, 2019; Kan and Hertog, 2017). This cultural understanding of women's societal roles restricts their opportunities for career development, resulting in lower female labour force participation rates (World Bank, 2020). As a result, some studies argue that women's career prospects may be less central in models of fertility intentions where expectations of women's labour force participation remain limited (Brinton and Oh, 2019). Additionally, research shows that the education level and opportunities for resource acquisition for Eastern women play a crucial role in family decisions about childbirth (Mason, 1997; Feeney, 1994). Limited opportunities for women to obtain education and employment are often associated with early marriage and childbirth, with studies interpreting this pattern as reflecting constrained pathways to personal achievements and economic independence (Anderson and Kohler, 2013). This suggests that family decisions about childbirth are influenced by sociocultural factors that place early marriage and childbirth above women's career prospects. Finally, research indicates that policies that promote gender equality and empower women are discussed in relation to family decisions about childbirth in Eastern countries (McDonald, 2013; Rindfuss and Choe, 2016).

In China, there has been a significant change in women's societal roles and an increase in female labour force participation rates (World Bank, 2026; Liu and Marois, 2024). Despite these changes, attitudes towards women's career prospects in society remain mixed (Cooke and Zhao, 2021; Geng, 2022). A recent study found that women who believe their career prospects will be negatively impacted by having children are more likely to delay starting a family (Du, 2023; He et al., 2023). This suggests that in China, women's career prospects are a key factor in family decisions about having children. Secondly, the one-child policy implemented in China from 1979 to 2015 is frequently referenced as historical background in studies of family formation and gender norms (Hu and Shi, 2018; Gu, 2022). Studies discuss how son preference and related gender norms formed under earlier policy periods may remain relevant background considerations in fertility research (Mei and Jiang, 2025; Xu and

Pak, 2015). Although the one-child policy has ended, this cultural preference for male children still exists and is discussed as being associated with family decisions about childbirth (Chung and Gupta, 2007).

There are some limitations and gaps in current research on this topic. Firstly, most studies are focused on urban areas and lack data on attitudes towards women's career prospects among women in rural areas of China (Xiao and Wu, 2022). Secondly, research on how gender inequality relates to fertility intentions is limited (Zhou, 2019; Li and Jiang, 2019).

Influence of Caregiving Responsibilities on Reproductive Decisions

Traditional gender roles and cultural norms that strongly emphasise women's caregiving responsibilities still exist in some Western countries (Adisa et al., 2019). This cultural perception of women's social roles limits their opportunities for career development and economic independence, resulting in lower female labour force participation rates (Blau and Kahn, 2017). Therefore, family decisions regarding childbirth are largely discussed in relation to caregiving responsibilities, as women are expected to prioritise their role as caregivers over their career aspirations (Budig and England, 2001; Correll et al., 2007). Secondly, research shows that social support levels and opportunities to access caregiving resources play a crucial role in family decisions regarding childbirth in Western countries. Limited opportunities to access affordable childcare, parental leave, and other support policies for caregiving responsibilities are often discussed as significant economic and logistical barriers to having children (Fraser, 1994; Esping-Andersen, 2009). This indicates that family decisions about childbirth are influenced by social, cultural, and economic factors that place caregiving responsibilities above other life goals. Lastly, research suggests that policies promoting gender equality and work-life balance are discussed as part of the institutional context for family decisions regarding childbirth in Western countries (McDonald, 2006; Daly, 2020).

In Eastern countries, the decision of families to have their first child is largely influenced by the attitude towards caregiving responsibilities. Firstly, some studies describe strong family-centred norms, where the family is seen as the basic unit of

society and the importance of family unity is emphasised (Kan and Hertog, 2017; Brinton and Oh, 2019). This cultural perception of the family is closely related to caregiving responsibilities and the expectation that family members will provide care and support for each other. These expectations are discussed as shaping how individuals evaluate the feasibility and timing of childbearing (Mason, 2001). Secondly, policies promoting gender equality and work-life balance are sometimes referenced as part of the institutional context for family decisions regarding childbirth in Eastern countries (Rindfuss and Choe, 2016).

In China, it is traditionally expected that women should primarily take care of children and elderly family members (Ji et al., 2017). However, with more women entering the workforce, attitudes are changing and men are starting to take on more caregiving responsibilities (Song and Lai, 2020). Additionally, the pressure of providing for the family can affect attitudes towards caregiving responsibilities. Research has shown that men who are the sole breadwinners for their families are unlikely to take on childcare responsibilities, which may be associated with the decision to have children (Kan and Hertog, 2017). Attitudes towards caregiving responsibilities can impact the decision to have children in multiple ways. If a couple has different attitudes towards caregiving responsibilities, it could lead to conflict and uncertainty about who will take care of the children (Hudde and Engelhardt, 2020). This can make the decision to have children more challenging. If one party is unsure about taking on caregiving responsibilities, it could lead to a decision to delay or not have children. Attitudes towards caregiving responsibilities can also influence the decision to have children if the family relies on grandparents or other family members for caregiving support (Deng Correll 2023; Zhang and Emery, 2023). If the family is unable to obtain caregiving support, their likelihood of having children may be lower.

However, the current literature has limitations. Firstly, most existing research focuses on women's perspectives and pays less attention to men's attitudes towards caregiving responsibilities (Kato, Kumamaru and Fukuda, 2018). Secondly, existing research mainly explores the relationship of attitudes towards caregiving responsibilities on the decision to have the first child, with less focus on the decision to have a second child (Bao et al., 2017). Thirdly, the broader cultural and societal attitudes towards

caregiving responsibilities, beyond individual beliefs and values, remain underexplored (Ji et al., 2017; Cooke and Zhao, 2021).

Effects of Household Labour Division on Family Planning

Increasingly, research has emphasised the importance of gender roles and cultural expectations in shaping family dynamics and reproductive decision-making (Goldscheider et al., 2015; Mason, 2001). Studies conducted in several Western countries, including the United States, the United Kingdom, and Australia, indicate a correlation between the division of household labour and fertility intentions and behaviour (Bernhardt et al., 2016). Research shows that women who spend more time doing housework often report lower fertility intentions or delayed childbearing, while men who contribute more to household labour are often associated with higher fertility intentions (Hudde and Engelhardt, 2020). Additionally, perceptions of fairness in the division of labour are important, as couples who perceive the division to be fair have a higher willingness to have children (Kato et al., 2018).

In Eastern countries, the division of household labour is frequently examined as a correlate of first-birth intentions (Kan and Hertog, 2017; Kim, 2018). Research shows that in many Eastern countries, women are still primarily responsible for household chores and childcare, while men are expected to be the main breadwinners (Ji et al., 2017). This unequal allocation of labour is often discussed in relation to women not having enough time and energy to pursue other goals, including starting a family (Brinton and Oh, 2019). Additionally, the burden of household labour may be associated with stress and overwhelm, which may prevent couples from having children. Moreover, gender expectations around household labour can cause tension and conflict in interpersonal relationships, which may be linked to couples delaying starting a family (Han et al., 2024).

Research on this topic in China is currently limited, and the relationship of household division of labour on fertility desires and intentions varies by region and socio-economic group (Li and Jiang, 2019). For example, studies indicate that in urban areas where women have more opportunities for education and employment and more equitable division of labour, fertility desires tend to be lower in some samples (Liu,

2023). In contrast, in rural areas where traditional gender norms are more deeply ingrained, household division of labour is more unequal and fertility desires tend to be higher in some studies (Xiao and Wu, 2022).

Despite increasing research on this topic, there are still limitations and gaps. For instance, the influence of cultural and policy factors on household division of labour and reproductive decisions needs further investigation (Shen and Jiang, 2022). The recent relaxation of population policies is sometimes used as a temporal marker when interpreting fertility desires and behavior, but evidence remains mixed and difficult to compare across studies (Qin et al., 2022).

Overall, empirical studies frequently link gender role attitudes and household arrangements to fertility intentions (Kan and Hertog, 2017; Zhou, 2019). Attitudes towards women's career prospects, caring responsibilities, and unequal distribution of household chores are often discussed as being associated with stress and tension within the family, making it difficult for couples to make a decision to start a family (Ji et al., 2017; Song and Lai, 2020). Moreover, gender inequality can limit women's access to education, job opportunities, and political participation, which may condition how individuals evaluate the feasibility of childbearing (Blau and Kahn, 2017; Cooke and Zhao, 2021).

2.3 Empirical Research on Second and Higher-Order Birth Intentions

Deciding whether or not to have another child is an important decision for any family, and is commonly discussed in relation to parents' resources, family dynamics, and existing childrearing arrangements (Balbo et al., 2013; Šobot, 2021). While many factors can influence a family's decision to have another child, empirical studies report heterogeneous patterns across households and social groups (Feng et al., 2024; Jing et al., 2022). Some families may choose to have another child to provide siblings for their existing child, while others may wish to expand their family or ensure support in their later years (Downey, Yao and Merry, 2024). On the other hand, some families may decide not to have another child due to financial difficulties, career

aspirations, or other personal reasons (Liu et al., 2023; Ning et al., 2022). Understanding the factors associated with additional childbearing intentions is important for interpreting observed fertility patterns (Sobotka and Beaujouan, 2014). This section will explore the factors that are discussed in the literature as correlates of a family's decision to have another child.

2.3.1 Household-Level Factors in Additional Childbearing Decisions

Deciding to have another child is often examined as a household-level process shaped by intra-family coordination and perceived constraints (Tong, Gan and Zhang, 2024; Shen and Jiang, 2022). The entire family is formed by the narratives, actions, and strategies of multiple family members (Su-Russell and Sanner, 2023). Previous parenting experiences, the level of family cooperation in parenting, the current economic situation of the family, the well-being of family members, predictions about the cost of parenting and the division of parenting tasks all influence negotiations about having one (or more) children (Qian and Jin, 2018; Zhang et al., 2022). During the negotiation process, family members weigh the benefits and sacrifices of having a second child, reflect on their gender responsibilities in parenting and family roles, and rebuild their marital and intergenerational relationships (Hudde and Engelhardt, 2020; Wang et al., 2022).

Influence of the First Child's Gender and Attitude on Fertility Intentions.

In the patriarchal family system, the mother can ensure her position and exercise more power by giving birth to a son (Adisa et al., 2019). Therefore, in China, the gender of the first child is frequently examined in relation to parents' future childbearing intentions (Xu and Pak, 2015). Evidence suggests that women whose first child is a girl are more likely to have a second child (Mei and Jiang, 2025). This preference can further skew the gender ratio (Chung and Gupta, 2007).

In addition, the voice and attitude of the first child can also affect women's choice of having a second child. After the long-term implementation of the one-child policy, Chinese families tend to revolve around the child (Hu and Shi, 2018; Gu, 2022). For

example, parents and grandparents tend to overindulge the only child, creating so-called 'little emperors' and 'little princesses' who are highly prioritised within the household (Veeck et al., 2003). Therefore, the interests of the born child are prioritised in many ways over other family members, and the attitudes of the first child play a crucial role in the family. The main reason for this is that the arrival of another child may affect the interests and mental health of the first child. Many parents are worried that when the second child arrives, the first child will feel deprived of the economic investment and attention and love of parents that they once enjoyed alone (Blake, 1981; Chen, 2020). This sense of deprivation may have a negative impact on the growth and development of the first child (Li et al., 2008). As responsible parents, parents may approach this decision cautiously to ensure the quality of life of the first child (Becker and Lewis, 1973). Many families show absolute respect for the first child, and when parents have plans for a second child, they hope to hear the opinions of the first child. If the first child strongly opposes it, parents are likely to choose to give up the idea of having a second child (Su-Russell and Sanner, 2023).

Attitudes of Husbands towards Household Responsibilities

Husbands' attitudes can influence women's desire to change their fertility intentions and plans (Tong et al., 2024; Qian and Jin, 2018). In recent years, two new terms have emerged in Chinese society: 'widowed-style parenting' and 'widowed-style marriage'. These refer to a significant absence in family education and care. Currently, most 'widowed-style parenting' in China is due to the absence of fathers. This is because in most parts of China, men generally do not have paternity leave, or the leave is too short (People's Daily Online, 2016). For example, in most provinces, they only have ten days of leave, so it is difficult for fathers to take on parenting responsibilities outside of work. Mothers have to change their family and work status and actively or passively take on most of the parenting work (Ji et al., 2017; Liu and Marois, 2024). In addition, traditional thinking still considers raising children as primarily the mother's responsibility (Kan and Hertog, 2017). Therefore, some fathers are only willing to provide economic support and are unwilling to take care of their children. The absence of fathers in the family is also discussed as a factor associated

with lower fertility intentions among women (Kato et al., 2018). In addition, some studies on differences in couples' fertility desires have found that male and female fertility desires are influenced by different factors and there are differences (Shen and Jiang, 2022). Men's fertility desires are higher than women's, but family annual income and age have a greater impact on women's fertility desires (Zheng et al., 2016). Couples with higher incomes are more likely to have a second child (Zhu, 2019).

Influence of Grandparents' Care and Expectations

Chinese families have a long tradition of sharing childcare responsibilities with grandparents (Deng et al., 2023). After the reform in China, the government has withdrawn from providing childcare services, and commercial childcare services are still in their infancy or unaffordable (General Office of the State Council of the People's Republic of China, 2019). It is common for urban families to rely on grandparents' help (Zhang and Emery, 2023). Unlike Western countries, Asian parents work together across two generations. Specifically, young parents work during the day, and grandparents provide care resources; in the evening, young parents take care of their children, and grandparents provide support. In the absence of public resources, such childcare services provide a solution for families who cannot afford to buy household labour (Beijing Municipal People's Government, 2020).

Inter-generational connections in Chinese families are strong, and grandparents are highly involved in their children's marriage choices, reproductive preferences, and family life (Su-Russell and Sanner, 2023). In recent years, as family size has decreased, wedding costs have risen, and urban housing prices have soared, young people increasingly require their parents' economic support to get married and establish their own families, especially in one-child families (Gu, 2022). On the one hand, grandparents can continue to influence young people's daily lives. Especially in the absence of formal public childcare policies, living with grandparents may reduce mothers' child-rearing time (Deng et al., 2023).

On the other hand, grandparents of this generation are more deeply influenced by Confucian traditions and prefer large families and male descendants (Rosker, 2015;

Li, 2000). Young couples may be pressured by grandparents to have a second child (Shen and Jiang, 2022). Given this collaboration with grandparents in childcare and the need for families to rely on dual incomes, continued childcare support from grandparents is essential for parents deciding whether to have a second child (Zhang and Emery, 2023). Grandparents' childcare assistance largely depends on their health status. Healthy grandparents are helpful in parents' decision-making regarding having a second child (Zhang et al., 2022). In addition to grandparents' help in taking care of children, intergenerational differences or parenting conflicts are not uncommon in Chinese families (Mu and Hu, 2023). Therefore, intergenerational conflicts in raising the first child can make mothers hesitant to have a second child (Su-Russell and Sanner, 2023).

Women's Autonomy in Reproductive Decision-Making

In patriarchal families, women rarely have access to wealth and resources, so their bargaining power within the family is very limited (Adisa et al., 2019; Lowndes, 2019). Therefore, husbands and their families may exert substantial influence over reproductive choices (Shen and Jiang, 2022). In the daily interactions and negotiations between spouses and generations, communication and persuasion, practical assistance or economic rewards, pressure, direct resistance, excuses, and passive avoidance can be observed (Qian and Jin, 2018). However, in recent decades, women have become more empowered, giving them greater autonomy in their reproductive decisions (Blair and Madigan, 2021). More and more women who hope to have no more than one child or who already have one child express interest in not having more children (Jiang et al., 2023). Nevertheless, women with greater bargaining power in the family, especially those who do not want more than one child and already have one child, are unlikely to express their intention to give birth again (Zhou, 2019).

The gender and attitude of the first child can be associated with parents' future intentions (Xu and Pak, 2015; Mei and Jiang, 2025). Attitudes of husbands towards sharing household chores and supporting childbirth also are frequently examined in relation to a family's decision to have a second child (Kan and Hertog, 2017; Tong et al., 2024). Care and pressure from grandparents can also influence women's decisions

regarding having another child (Deng et al.,2023; Zhang and Emery, 2023). However, women have the power to choose to stop giving birth when they do not want more children, and this power has been discussed in relation to women's autonomy in reproductive decision-making (Qian and Jin, 2018; Liu, Y., 2023).

2.3.2 Socio-economic Considerations in Decisions on Family Expansion

The decision to have another child is a complex one that is influenced by various factors, including the quality and quantity of existing children (Becker and Lewis, 1973; Becker and Tomes, 1976). Parents weigh the costs and benefits of having another child, taking into account factors such as financial stability, childcare responsibilities, and their own personal desires (Balbo et al., 2013; Šobot, 2021). Research has shown that the quality and quantity of children in a family can be associated with parents' future intentions regarding having more children (Blake, 1981; Li et al., 2008). This subsection reviews the relationship between children's quality and quantity and a family's decision to have another child, examining various factors that are discussed as correlates of this decision-making process. Through this review, the discussion highlights how studies conceptualise children's quality and quantity on family decision-making and why these factors are often considered when interpreting fertility trends and family dynamics (Chen, 2020; Zhou, Jia and Yang, 2021).

Balancing Children's Quality and Quantity in Family Planning

Becker's introduction of economics into the field of family and fertility shed new light on the understanding of the relationship between family income and the demand for children (Becker and ebrary, 1991). According to Becker's theory, when a family's income increases, the demand for both income and the number of children is positively correlated, which is often interpreted as being consistent with higher desired family size at lower levels of income growth. As the family's income and the demand for the quantity and quality of children increase, continuous growth in family income becomes unsustainable, and parents are forced to limit their demand for

children (Becker and Lewis, 1973). Consequently, if family income continues to increase, parents will prioritise child quality over child quantity and limit the number of children, resulting in an increase in child quality (Becker and Tomes, 1976). This shift in parental preference towards child quality is due to an increasing focus on child care and education. Thus, Becker's theory suggests that economic and social development lead to a greater emphasis on the quality of life for children and a subsequent reduction in the number of children.

Becker's theory on the relationship between family income and fertility has its limitations. He assumes that a family's income is based on rational behavior with fixed preferences, but human preferences are not only variable but also diverse. He argues that the reason for the observed association between income and fertility in some contexts is not the quality of children but the change in preferences (Becker, 1985). He suggests that the change in preferences is closely related to the living standards of the previous generation. When the living standards of the next generation are higher than those of the previous generation, people will want more children. However, when this standard cannot meet the needs of parents, they will suppress their fertility demand. Therefore, Becker's theory may be applicable to developed countries and cannot fully explain fertility behavior in developing countries and economically underdeveloped areas (Balbo et al., 2013).

Regarding family fertility behavior, Becker views children as durable consumer goods. He emphasises that the cost of the number of children includes the time parents need to raise a child, the cost and risk that the mother must bear during pregnancy and childbirth, and all economic and spiritual expenditures (Becker, 1985). Furthermore, there is also a cost to the quality of a child, such as the expenses parents invest in a child's education, nutrition, and other human capital investments (Becker and Tomes, 1976). According to Becker, the opportunity cost of fertility is closely related to the time price of the mother. This is often used to interpret the salience of the mother's income on family fertility decisions (Budig and England, 2001).

Becker's economic theory has made significant contributions to understanding family and fertility behavior, but it has limitations in explaining complex human behavior

that must be recognised. According to Becker's theory, when family income increases, the demand for children initially increases. However, as income continues to increase, parents' preferences for child quality are expected to control the number of children and improve their quality (Li et al., 2008).

The applicability of this theory to fertility behavior in China may be limited, as a study found a weak positive correlation between income and fertility rates in China (Zhu, 2019). This suggests that in China, social and cultural factors may be more salient in some analyses of fertility decisions than economic factors. For example, traditional Chinese culture values having sons to continue the family bloodline, and despite China's economic and social development, this preference for boys still exists (Mei and Jiang, 2025; Chung and Gupta, 2007).

China's fertility behavior has been significantly impacted by its one-child policy, which is widely discussed as an important historical and institutional backdrop shaping family size norms and fertility trajectories (Hu and Shi, 2018). Additionally, this policy has been associated in prior research with a gender imbalance with more male births than female births (Xu and Pak, 2015).

While Becker's economic theory provides a useful framework for understanding fertility behavior in some countries, it may have limited applicability to China's fertility behavior. Therefore, when studying China's fertility behavior, it is useful to consider cultural and social factors alongside relevant institutional and historical context (Mason, 1992; McDonald, 2000b).

Becker's economic theory on family and fertility rates has been studied by scholars in the fields of demography and family studies, yet its applicability to the Chinese family context remains questionable. While Becker's theory explains a positive correlation between family income and demand for children, it does not explicitly consider the cultural and social factors that influence fertility behavior in China (Greenhalgh, 2016).

In China, the traditional belief that having children is a way of fulfilling responsibilities and continuing family lineage is still strong (Rosker, 2015). This

belief has been discussed as relevant to fertility preferences and family formation norms, even though the country has experienced rapid economic growth in the past few decades (Blair and Madigan, 2021). Additionally, China's one-child policy is commonly referenced as a key policy background, and was associated in the literature with gender imbalances and other gendered consequences (Gu, 2022; Yang, W., 2023).

Moreover, the quality of children in Chinese families is not only determined by the family's income or human capital investment. Social and cultural factors, such as the importance of education and pressure to meet societal expectations, also are discussed in relation to the quality of children in Chinese families (Mu and Hu, 2023; Sheng, 2012). For example, parents may invest heavily in their children's education to ensure their success and social status, which can be a significant economic burden for the family (Veeck et al., 2003).

Furthermore, Becker's theory assumes that parents make rational decisions about the number and quality of their children. However, Chinese families may face external pressures that are discussed in relation to their fertility behavior, such as government policies and societal norms (Jiang and Liu, 2016). For decades, the government's family planning policy has constituted an important institutional background in demographic research, and societal expectations of having a son can also be associated with family decisions (Milwertz, 1996).

The literature on children's quality and quantity has highlighted the complex relationship between family size, child quality, and various economic, social, and cultural factors (Chen, 2020; Zhou et al., 2021). While the classic economic theory of Becker provides a useful framework for understanding the relationship between family income and fertility behavior, it has its limitations in explaining the fertility behavior of Chinese families. Social and cultural factors, such as societal expectations, family pressure, and the importance of education, are also critical factors that impact the quality of children in families (Weng et al., 2019). Furthermore, government policies can be relevant contextual conditions for fertility behavior, but they can also have associations discussed in prior research, including

gender imbalances and gendered outcomes (Zhang et al., 2024). Overall, studies point to the interplay between economic, social, and cultural factors (Balbo et al., 2013; McDonald, 2013).

2.3.3 Employment, Career Constraints, and Fertility Intentions among Educated Groups

The decision to have another child is a complex and multifaceted issue that is influenced by a variety of economic, social, and cultural factors (Balbo et al., 2013; Šobot, 2021). In the context of China, this decision is particularly significant due to the country's history of strict family planning policies and the cultural value placed on having children as a means of continuing the family lineage (Jiang and Liu, 2016; Milwertz, 1996). In recent years, China has undergone a rapid economic transformation, which has led to changes in the country's labour market and social structure (National Bureau of Statistics of China, 2021). These changes have been discussed as having distinct implications for the educated group in China, particularly women, who face unique challenges in balancing work and family responsibilities (Liu, Y., 2023; Brinton and Oh, 2019). This section reviews empirical research on the decision to have another child in the context of gender inequality in the labour market, focusing specifically on how work–family constraints are discussed in relation to fertility intentions among more educated groups in China.

Discrimination against women persists throughout the employment cycle (Cooke and Zhao, 2021; Gao, Hernanz and Suarez, 2024). Gender-based employment discrimination is evident during women's job search, with some recruitment ads using headlines such as 'men preferred' or 'male applicants only' (Geng, 2022). Additionally, some companies require female job seekers to refrain from marriage and childbirth during the contract period, depriving qualified women of equal employment opportunities (He et al., 2023). Employers are reluctant to hire women because they consider them less capable than men (Zhaopin Limited, 2017; 2018). Research on gender discrimination in Chinese workplaces has identified single-gender recruitment as one of the most prevalent forms of workplace inequality, where employers

explicitly recruit male-only applicants, further perpetuating gender inequality in employment opportunities (Gao et al., 2024). Despite legal and normative commitments to equality, discriminatory practices are still reported in empirical accounts of recruitment and hiring (National People's Congress, 2022).

Gender Disparities in Employment Opportunities

The theory of human capital suggests that individual choices are more likely to be determined by personal preferences (Becker, 1985). Employers may hire based on their own preferences, without taking into account the economic interests of the company (Gao et al., 2024). Gender-based employment discrimination occurs when female employees face higher entry barriers and unequal promotion pressures in the labour market, even with the same level of productivity as male employees (Cooke and Zhao, 2021; Geng, 2022). Gender income differences between men and women are less likely to be caused by gender differences, but rather by the widening gap after human capital investment and division of household labour (Blau and Kahn, 2017; Liu and Zuo, 2023). For women, childbirth and employment are often treated as competing demands, and individuals cannot simultaneously meet the needs of work and family (Budig and England, 2001; Du, 2023). Therefore, the period of women exiting the labour market due to childbirth may affect their accumulation of human capital (Zhang, 2023). When they return to the labour market after childbirth, their previous work experience and accumulation of human capital may be perceived as having weakened, resulting in differences in the stock of human capital between men and women (Leng and Kang, 2022; Wu and Yan, 2025).

Fertility Decisions among Educated Groups under Labour Market Constraints

Human capital theory argues that individuals' education and skills determine their productivity and earning potential (Becker, 1985). In China's labour market, women's education levels have increased significantly over the past few decades, coinciding with increased labour force participation and some reduction in the gender wage gap (Ministry of Education of the People's Republic of China, 2022; World Bank, 2026). However, gender inequality persists in the labour market, as women are still underrepresented in high-paying occupations and leadership positions (Blau and

Kahn, 2017; Liu and Zuo, 2023). This suggests that education alone is not sufficient to eliminate gender inequality in the labour market (Chen, 2022; Gao and Wang, 2025).

Preference theory suggests that women's lifestyle preferences and family responsibilities influence their employment decisions (Hakim, 2000; Hakim, 2003). In China, women face significant pressure to fulfill traditional gender roles, which often conflict with their career aspirations (Ji et al., 2017; Cooke and Zhao, 2021). Educated women are more likely to delay marriage and childbirth to focus on their careers, which may limit their options for having children in the future (Brinton and Oh, 2019; Blair and Madigan, 2021). However, the new policy allowing couples to have two children may provide more options for educated women to balance their work and family responsibilities (Huang and Jin, 2022; Leng and Kang, 2022).

Educated women in China face a double bind when it comes to deciding whether to have another child. On the one hand, they are more likely to prioritise their careers and delay childbirth, given the investment they have made in their education and the limited career opportunities for women with children (Du, 2023; He et al., 2023). On the other hand, educated women are more likely to have access to resources that make it easier to balance work and family responsibilities, such as childcare and flexible work arrangements (Deng et al., 2023; Zhang and Emery, 2023).

Moreover, the decision to have another child may be influenced by social and cultural norms, including expectations surrounding family lineage (Rosker, 2015; Su-Russell and Sanner, 2023). The decision to have another child among educated groups in China is complex and influenced by multiple constraints discussed in the literature, including gender inequality in the labour market and work–family tensions (Liu, 2023; Zhou, 2019).

Maternal penalty and reproductive choices

The maternal penalty is a phenomenon that refers to the labour market penalty that motherhood has on women's careers and earning potential (Budig and England, 2001; Correll et al., 2007). While motherhood can be a rewarding and fulfilling experience,

it can also have significant implications for women's employment and financial security (Du, 2023). In particular, women who have children often face discrimination and reduced opportunities in the labour market, which can lead to lower wages and fewer opportunities for career advancement (He et al., 2023; Leng and Kang, 2022). The decision to have another child can be a complex one for women, especially for those who are highly educated and invested in their careers (Brinton and Oh, 2019). This decision can be influenced by various factors, including social and cultural norms, as well as the challenges of balancing work and family responsibilities (Liu, 2023; Zhou, 2019). This subsection reviews empirical studies linking the maternal penalty to fertility intentions and perceived work–family constraints.

When discussing why women are reluctant to have more children, it is often overlooked that giving birth and being a mother can hinder women's careers (Budig, 2014). In OECD countries, mothers spend more time on their children's education and household chores than men, which makes it more likely for them to withdraw from the labour market, thereby increasing the supply of child care (Prickett and Augustine, 2021; Baker and Milligan, 2016). Therefore, fertility rates and caregiving responsibilities are important explanatory factors for the gender income gap (Blau and Kahn, 2017); fertility (number of children) has been associated with lower levels of women's income (Petersen, Penner and Høgsnes, 2014; Sun and Zhou, 2022).

According to Becker, female employees face higher barriers to entry and unequal promotion pressures in the labour market due to their gender, leading to gender-based employment discrimination (Becker, 1985). The reasons for gender income differences between men and women are few because of gender differences. However, the gender income gap widens after investment in human capital and household division of labour (Blau and Kahn, 2017; Liu and Zuo, 2023). Becker pointed out that men are more adaptable in market production, while women are better at household or non-market production, and caring for children is women's most important job (Becker, 1985). From the perspective of human capital, female job seekers are discriminated against because their human capital accumulation is low, and their labour productivity in the job is lower than that of men (Gao et al., 2024). According to the maximization principle, employers tend to choose men, so

discrimination against women is a decision justified within the model (Cooke and Zhao, 2021). Additionally, women with children are also more likely to engage in part-time work, but usually in low-paying occupations (Du, 2023; Zhang et al., 2024).

Women's wages in China are reported to decrease with each child they have, and the decrease in wages increases with the number of children (Sun and Zhou, 2022). Moreover, highly skilled women experience greater maternity penalties, while the impact of pregnancy penalties on more educated women is greater than that on less educated women (Petersen, Penner and Høgsnes, 2014). Some studies interpret this pattern as reflecting how childcare responsibilities reduce their job performance and productivity (Budig and England, 2001). Jobs with high income, long working hours, and high intensity are particularly affected by motherhood, and the higher the job position, the greater the discrimination against motherhood (Correll et al., 2007; He et al., 2023). Women are also more likely to face obstacles to promotion (Leng and Kang, 2022). Conversely, women with lower education levels are in the low-end of the labour market from the outset and receive limited punitive effects (Budig, 2014).

A study using CHNS data showed that from 1989 to 2015, the average wage growth rate of mothers was 1.6 per cent lower than that of non-mothers (Du, 2023). After controlling for age and region, the study found that in 1989, every additional child was associated with a 9.41 per cent decrease in women's wage rates, while by 2015, every additional child was associated with a 17.47 per cent decrease in women's wage rates (Du, 2023). The penalty for being a mother was reported to increase over time for women of all education levels, and the difference in penalties was described as becoming smaller (Sun and Zhou, 2022; Zhang et al., 2024).

Responses of Educated Women to the Maternal Penalty

The decision to have another child in China is a complex issue influenced by various factors, including the gender inequality in the labour market, the maternal penalty, and the social and cultural norms (Balbo et al., 2013; Zhou, 2019). Educated groups are frequently discussed in relation to the decision to have another child (Brinton and Oh, 2019; Chen, 2022). These groups are more likely to have demanding careers and face the maternal penalty (Du, 2023; He et al., 2023). However, they also have access

to better education and healthcare, which may reduce the burden of child-rearing (Mu and Hu, 2023). Educated groups are more likely to delay having children due to career considerations, but they are also more likely to use assisted reproductive technologies to have children later in life (Blair and Madigan, 2021). These technologies are costly and may not be available to lower-income families.

Scholars have largely focused on the impact of the family on gender inequality, yet they have neglected the costs that women bear for maternal behavior, such as childbirth and child-rearing (Budig, 2014; England, 1992). Mothers are increasingly taking on more maternal burdens and are facing greater discrimination and competition in the workplace (Correll et al., 2007; Leng and Kang, 2022). As a result, the punishment for being a mother is a reduction in income or even leaving the labour market (Sun and Zhou, 2022; Zhang et al., 2024). However, these penalties are not limited to mothers alone, as childless women are also not spared from such punishment if they become pregnant or have children later on (He et al., 2023). Some women may choose to give up having children to maintain their competitiveness in the labour market and pursue their careers, which is discussed in relation to declining fertility intentions (Liu, 2023; Jiang et al., 2023).

Despite the importance of the decision to have another child in China, there are several research gaps and limitations in this area. Firstly, most studies have focused on the economic and social factors influencing this decision, with limited attention given to the role of cultural and psychological factors (Su-Russell and Sanner, 2023). Secondly, most studies have relied on quantitative methods, and existing evidence can be limited by differences in measurement choices, model specification, and the coverage of specific subgroups, which may constrain how the complexity of fertility intentions is captured in survey-based analyses (Podsakoff et al., 2003; Podsakoff et al., 2012). Finally, there is a need for more longitudinal studies to understand how the decision to have another child evolves over time and how it is influenced by changes in social and economic conditions (Gao and Wang, 2025; Feng et al., 2024).

2.4 Policy Periods as Contextual Markers in Fertility Research

In empirical research on fertility intentions in China, population policy reforms are frequently referenced as temporal and institutional background (Jiang and Liu, 2016; Zeng and Hesketh, 2016). Given the constraints of survey-based data and the complexity of fertility decision-making, many studies adopt policy periods as contextual markers to organise analysis across time, while remaining cautious about attributing observed changes in fertility behaviour to specific policy interventions (Qin et al., 2022).

A substantial body of literature situates fertility intentions within broad policy phases, such as the one-child policy era, the selective relaxation period, and the universal two-child policy period, to examine how reproductive attitudes and intentions are articulated under different institutional environments (Bao et al., 2017; Wang et al., 2022). In this approach, policy timing is primarily used to delineate historical context and to structure comparative analysis across survey waves, rather than to isolate policy effects (Feng et al., 2024). Researchers commonly emphasise that fertility intentions are shaped by a combination of cultural norms, gender relations, labour market conditions, and family arrangements, which evolve alongside, not necessarily because of, policy changes (Balbo et al., 2013; Zhou, 2019).

Empirical studies using repeated cross-sectional or longitudinal survey data often compare fertility intentions before and after major policy adjustments to explore whether patterns of association between individual characteristics and fertility intentions differ across periods (Jing et al., 2022; Ning et al., 2022). In these analyses, policy implementation dates serve as reference points that help organise temporal variation in attitudes and intentions. However, scholars consistently caution that such comparisons do not permit strong causal claims, as policy reforms coincide with broader socioeconomic transformations, including rising educational attainment, changing gender role expectations, and increasing work–family tensions (Qin et al., 2022; Huang and Jin, 2022).

Within the literature on China's two-child policy, several studies adopt a similar strategy by situating fertility intentions within the period following the policy's introduction while avoiding direct evaluation of policy effectiveness (Li et al., 2021;

Zhang et al., 2024). These studies highlight that although the policy marked an important institutional shift, its implementation was embedded in a wider context characterised by persistent gender inequality in the labour market, limited childcare provision, and uneven access to family support (He et al., 2023; Deng et al., 2023). As a result, observed fertility intentions during the two-child policy period are typically interpreted as reflecting the interaction between long-standing structural constraints and evolving normative expectations, rather than as straightforward responses to policy relaxation (Liu, 2023; Han et al., 2024).

Methodological limitations further reinforce this cautious use of policy periods in fertility research (Podsakoff et al., 2003). Survey data generally lack detailed information on individuals' exposure to specific policy instruments, such as local-level incentives, childcare subsidies, or employment protections, which vary substantially across regions and over time (Guangdong Provincial People's Congress Standing Committee, 2016; Shanghai Municipal People's Government, 2016). Consequently, policy periods are often treated as broad institutional backdrops rather than measurable treatment variables (Wooldridge, 2010). This approach allows researchers to examine how the social meaning and feasibility of childbearing may shift across periods, without over-interpreting observed differences as policy-induced changes (Qin et al., 2022).

Taken together, existing empirical research demonstrates that policy periods are most effectively employed as contextual markers that frame fertility intentions within particular institutional and temporal settings (Feng et al., 2024; Jiang and Liu, 2016). This perspective aligns with a growing emphasis on analysing patterns and associations, not policy impacts, between gender role attitudes, socioeconomic conditions, and fertility intentions across different periods (Li et al., 2021; Zhou, 2019). Building on this literature, the present study adopts policy timing as an analytical reference to compare how the relationship between gender role attitudes and intentions to have two or more children is articulated across survey periods surrounding the implementation of the two-child policy.

2.5 Research Gap in the Existing Literature

This study systematically explores the gap in the existing literature concerning the relationship between gender role concepts and fertility intentions within the context of China's fertility policy adjustment (Li et al., 2021; Zhou, 2019). Current research has significant knowledge gaps in the following three dimensions, which urgently need to be further studied.

First, concerning the analytical focus of fertility decision-making, existing literature predominantly focuses on the mechanisms influencing first-childbearing behavior, while exhibiting substantial limitations in theorising second and higher-order fertility intentions (Bao et al., 2017; Qin, Padmadas and Falkingham, 2022). Specifically, the role of gender role attitudes in shaping fertility intentions beyond the first birth remains underexplored, and the mechanisms linking gender ideologies to multi-child fertility decision-making have not been systematically examined (Zhang et al., 2024; Yang et al., 2025). This limitation constrains a fuller understanding of fertility behaviour in the post-reform context and impedes a deeper understanding of the mechanisms linking post-policy fertility behavior changes and gender equality progression.

Second, regarding gender-differentiated analysis, while some studies have identified gender-differentiated characteristics in fertility intentions, the ways in which these differences are shaped by institutional and social contexts remains largely unexplored (Li and Jiang, 2019; Shen and Jiang, 2022). Notably, existing scholarship predominantly examines the macro-level effects of policies on overall fertility, while paying limited attention to how gender role attitudes may operate differently for women and men in shaping fertility intentions (Feng et al., 2024; Jing et al., 2022). More critically, the gendered pathways linking household roles, employment expectations, and fertility intentions remain insufficiently specified (Ji et al., 2017; Liu, 2023). Such theoretical deficiencies lead to significant gender-blind spots in policy effectiveness evaluations.

Third, while fertility policy reform, particularly the universal two-child policy, is frequently referenced in the literature, it is often treated as a descriptive background

condition rather than being systematically incorporated into empirical analyses (Zeng and Hesketh, 2016; Jiang and Liu, 2016). Many studies acknowledge policy change without examining whether the relationship between gender role attitudes and fertility intentions varies across policy periods, partly due to data constraints and the reliance on cross-sectional survey designs.

In summary, current research has not fully revealed the complex relationship between gender role attitudes, fertility policy context, and fertility intentions, especially the influencing mechanism in terms of gender differences and fertility number choices. Therefore, further exploring the associations of gender role attitudes with fertility intentions and their gender differences under the background of the universal two-child policy will not only help fill the gaps in existing research, but also provide theoretical support and empirical basis for the formulation of more gender-sensitive fertility policies.

2.6 Conceptual Framework and Hypotheses

This section develops the conceptual framework that guides the empirical analysis and specifies the research questions, key analytical dimensions, and hypotheses of the study. Building on the preceding literature review and identified research gaps, it clarifies how gender role attitudes are expected to be associated with fertility intentions, and how these associations may vary across gender groups and survey periods within the two-child policy implementation context.

2.6.1 Conceptual Framework

This section outlines the conceptual framework that informs the empirical analysis of the relationship between gender role attitudes and fertility intentions in the context of China's universal two-child policy .Previous research has consistently shown that fertility intentions are shaped not only by economic conditions or institutional arrangements, but also by normative expectations surrounding gender, paid work, and

family roles (Balbo et al., 2013; Mason, 2001; McDonald, 2000b). Gender role attitudes capture individuals' views about the appropriate division of responsibilities between men and women in both the household and the labour market (Boehnke, 2011; Goldscheider et al., 2015). These attitudes are therefore relevant to how individuals evaluate the perceived costs and constraints associated with having children.

In this study, fertility intentions are understood as subjective plans and expectations, rather than realised fertility behaviour. They reflect individuals' assessments of whether childbearing is compatible with their current and anticipated work–family arrangements under prevailing social and institutional conditions. Gender role attitudes are expected to shape these assessments by influencing how individuals interpret responsibilities for care, employment, and household labour, particularly in contexts where work–family tensions remain pronounced (Ji et al., 2017; Han et al., 2024).

The universal two-child policy is incorporated into the framework as an institutional background against which these evaluations take place. Existing studies suggest that policy change may alter the broader environment in which fertility intentions are formed, even when it does not directly determine reproductive decisions at the individual level (Zeng and Hesketh, 2016; Feng et al., 2024). For this reason, the pre-policy and two-child policy periods are treated as analytically distinct contexts, allowing for comparison of whether the association between gender role attitudes and fertility intentions differs across periods (Qin et al., 2022; Bao et al., 2017).

Gender is also central to the conceptual framework. A substantial body of research indicates that men and women experience gender norms, employment constraints, and family responsibilities in systematically different ways, which is reflected in gendered patterns of fertility intentions (Goldscheider et al., 2015; Shen and Jiang, 2022). The framework therefore allows for the possibility that associations between gender role attitudes and fertility intentions vary between men and women, and that these gender-specific patterns may themselves differ across policy periods.

Overall, the conceptual framework specifies gender role attitudes as the primary

explanatory dimension, fertility intentions to have two or more children as the key outcome, and policy period and gender as contextual and stratifying dimensions. This framework provides the analytical basis for the research questions, variable selection, and empirical strategy developed in the following sections.

2.6.2 Research Questions

Building on the conceptual framework outlined in the previous section, this study formulates research questions to examine the relationship between gender role attitudes and fertility intentions in the context of China's universal two-child policy. The focus is on assessing whether observed associations differ across policy periods and between men and women.

This study addresses the following research questions:

RQ 1: *To what extent do the pre-policy and two-child policy periods differ in the association between gender role attitudes and individuals' intentions to have two or more children?*

This question examines whether the statistical association between gender role attitudes and fertility intentions varies across institutional contexts. By comparing patterns observed before and during the implementation of the universal two-child policy, the analysis explores whether changes in the policy environment coincide with differences in how gender role attitudes are linked to intentions to have two or more children.

RQ 2: *To what extent do the pre-policy and two-child policy periods differ in Gender specific associations between gender role attitudes and individuals' intentions to have two or more children?*

This question focuses on gender heterogeneity in fertility intentions. It investigates whether the association between gender role attitudes and fertility intentions differs between men and women, and whether these gender-specific patterns vary across policy periods. This approach reflects existing research suggesting that fertility-related attitudes and decision-making processes are shaped by gendered roles and

expectations, which may operate differently under changing institutional conditions.

Together, these research questions define the analytical scope of the study by specifying the key association of interest, the role of policy periods as contextual markers, and the importance of gender differences. They provide a direct link between the conceptual framework developed in Chapter 2 and the empirical strategy implemented in the following methodological chapter.

2.6.3 Research Hypotheses

H1: Individuals holding more traditional gender role attitudes exhibit a higher likelihood of intending to have two or more children.

This hypothesis reflects findings in previous research suggesting that traditional gender norms, which emphasise women's primary responsibility for family and caregiving, are often associated with preferences for larger families.

H2: The association between gender role attitudes and intentions to have two or more children differs between the pre-policy and two-child policy periods.

This hypothesis addresses whether the institutional context defined by the universal two-child policy coincides with changes in the pattern linking gender role attitudes and fertility intentions. The policy period is treated as a contextual marker rather than as an exogenous intervention.

H3：The association between gender role attitudes and intentions to have two or more children differs between men and women.

This hypothesis captures gender heterogeneity in fertility-related attitudes and intentions, recognising that men and women may evaluate work–family arrangements and reproductive plans differently due to gendered roles and expectations.

H4：Gender specific associations between gender role attitudes and intentions to have two or more children differ between the pre-policy and two-child policy periods.

This hypothesis extends H2 and H3 by examining whether gender differences in the association between gender role attitudes and fertility intentions vary across policy periods. It allows for the possibility that institutional context and gender jointly shape observed patterns in fertility intentions.

Together, these hypotheses translate the conceptual framework and research questions into empirically testable propositions. They guide the variable construction and analytical strategy described in the following chapter, where the hypotheses are evaluated using survey based quantitative analysis.

2.6.4 Scope of Analysis and Link to the Empirical Chapter

Based on the conceptual framework and hypotheses outlined above, this study focuses on examining statistical associations between gender role attitudes and individuals' intentions to have two or more children. The universal two-child policy is treated as a contextual background that allows comparison of these associations across periods.

The hypotheses developed in Section 2.6.3 guide the empirical analysis by specifying whether gender role attitudes are associated with fertility intentions, whether these associations differ between men and women, and whether such patterns vary between the pre-policy and two-child policy periods. The next chapter translates this framework into an empirical research design, detailing the data, variables, and analytical methods used to test these hypotheses.

2.7 Conclusion

This chapter has reviewed the empirical literature on fertility intentions and gender role attitudes, with particular attention to first and higher-order birth decisions, household-level dynamics, and the broader institutional context shaped by China's fertility policy transition. This chapter has situated the universal two-child policy as a contextual marker within which gendered fertility intentions are formed and

expressed.

By identifying limitations in existing research, especially the limited attention to higher-order fertility intentions, gender-specific mechanisms, and period-based variation, this chapter has established the analytical focus of the study. The conceptual framework and hypotheses developed here provide the foundation for the empirical analysis in the following chapter, which examines how gender role attitudes are associated with intentions to have two or more children across policy periods and between men and women.

3. Research Methodology, Research Design and Analytical Strategy

3.1 Introduction

This chapter outlines the methodological and analytical approach used to examine how gender role attitudes are associated with individuals' intentions to have two or more children across different survey periods. The analysis adopts a positivist orientation, using standardised survey measurements and statistical modelling to identify observable associations in a systematic and replicable way (Bryman, 2021; Neuman, 2014). At the same time, the interpretation of results remains attentive to the broader sociocultural and institutional context in which attitudes and fertility intentions are situated (Sayer, 2010).

Building on the research questions and hypotheses established in Chapter 2, this chapter sets out how they are examined empirically using survey data and regression-based analysis. It then introduces the philosophical foundations of the study and presents the analytical framework, including the dataset, variables, variable operationalisation, and model specification. The empirical analysis is based on the Chinese General Social Survey (CGSS), a repeated cross-sectional national survey that provides consistent measurements and high-quality data suitable for examining statistical patterns across periods (Bian and Li, 2022). Binary logistic regression models are employed to assess how gender role attitudes relate to fertility intentions and how these associations vary across survey years, drawing on established approaches to modelling social phenomena.

The chapter concludes by identifying the key methodological limitations of the study, including the constraints of cross-sectional data and the simplification inherent in dichotomous measures of fertility intentions and gender role attitudes. These considerations frame the scope of the analysis and clarify the degree to which the findings can be interpreted within the two-child policy context.

3.2 Philosophical Foundation

Different philosophical foundations shape how reality is perceived, how knowledge is understood, and how research methods are chosen (Creswell and Creswell, 2023; Bryman, 2021). A clear philosophical basis is essential to ensure scientific rigor and logical consistency (Neuman, 2014).

This study examines gender role attitudes and fertility intentions in the context of the two-child policy implementation period, taking into account individual decision-making and broader sociocultural factors. Quantitative data allow the measurement of observable patterns, although these patterns operate within broader social structures, cultural norms, and individual perceptions (Sayer, 2010). While quantitative analysis provides valuable empirical insights, it is important to remain aware of the wider social context in which these patterns emerge (Creswell and Plano Clark, 2018). Accordingly, this study adopts a predominantly positivist orientation, emphasising objectivity, measurability, and replicability in the analysis of survey data, while remaining attentive to the sociocultural and institutional contexts within which gender norms and fertility intentions are formed.

3.2.1 Positivism

Positivism asserts that social reality exists independently of the researcher's perception and emphasises the identification of observable patterns in social phenomena through systematic observation, data measurement, and statistical analysis (Bryman, 2021). Originating from Comte, positivism argues that scientific knowledge should be based on empirical observation and logical reasoning, rather than speculation or metaphysics. Over time, positivist methodology has become a key foundation in policy studies, demography, economics, and social behaviour analysis (Neuman, 2014). This orientation aligns with the quantitative design adopted in this study.

However, positivism has certain limitations when applied to complex social phenomena. First, positivism assumes that social reality is objective and can be

measured and analysed. It often relies on statistical models to identify regularities and associationsbetween variables, making it a common approach in policy research and demography (Wooldridge, 2010). Nonetheless, quantitative approaches cannot fully account for the broader sociocultural environments within which attitudes and intentions are shaped (Sayer, 2010). For instance, gender role attitudes reflect not only individual characteristics but also wider cultural norms and socialisation processes, which may not be completely captured through survey measures (Boehnke, 2011; Podsakoff et al., 2003).

Second, positivism assumes that social phenomena can be quantified and that statistical associations can be examined through statistical methods (Neuman, 2023). This approach relies on empirical data collection and mathematical models to test theoretical hypotheses (Creswell and Creswell, 2023). However, quantitative data does not always guarantee objectivity. In social science research, variable measurement often depends on questionnaires and statistical records, which can be affected by measurement errors and social desirability bias (Podsakoff et al., 2012). For instance, when studying fertility intentions in the context of the two-child policy implementation period, respondents may modify their answers due to social pressures, which may be associated with variation in data validity (Qin et al., 2022). Additionally, the process of transforming abstract concepts (e.g., gender equality) into measurable variables involves researcher judgment, which may be associated with variation in the reliability of the measurements (Creswell and Plano Clark, 2018).

Additionally, positivist research emphasises that research methods and data analysis should be standardised to ensure the reproducibility of results (Gall, Gall and Borg, 2018). However, achieving reproducibility in social science research presents challenges. First, social phenomena are time-sensitive and context-dependent, meaning that the same analysis may produce different results at different times or in different social settings (Bryman, 2021). For example, fertility intentions observed during the early years of the two-child policy may differ from those in later years, even when the same analytical approach is applied (Feng et al., 2024). Second, the reproducibility of data collection is also constrained by practical limitations. In large-scale surveys, respondents' answers may be influenced by temporary attitudes, social

pressures or varying interpretations of questions, leading to inconsistencies even when the same items are administered across different waves (Podsakoff et al., 2003; Bian and Li, 2022).

3.2.2 Limitations of Positivism

While positivism has advantages in identifying statistical patterns and enabling systematic variable measurement (Bryman, 2021; Wooldridge, 2010), it also has methodological limitations. Firstly, positivist approaches may not fully capture the multiple factors that jointly shape complex social phenomena (Sayer, 2010). Social behaviours are associated with economic, familial and cultural conditions that interact in ways that may not be adequately represented within a single statistical model (Balbo et al., 2013).

Secondly, survey-based measures may not fully reflect the dynamic evolution of social and cultural expectations (Creswell and Plano Clark, 2018). Attitudes and norms shift over time and vary across social groups, and these contextual developments can be difficult to quantify using standardised instruments (Boehnke, 2011; Piotrowski et al., 2019). In addition, the interpretation of survey questions may differ among respondents, contributing to variability in responses across survey waves or demographic subgroups (Podsakoff et al., 2012).

Thirdly, quantitative data do not automatically guarantee objectivity. Variable measurement often depends on questionnaires and statistical records, which may be affected by measurement errors, non-sampling bias and social desirability pressures (Podsakoff et al., 2003). The process of operationalising abstract concepts into measurable indicators also involves researcher judgement, which may be associated with reliability and the consistency of variable construction (Creswell and Creswell, 2023).

Positivist research emphasises replicability, yet achieving full reproducibility in social research is challenging because social phenomena are time-sensitive and context-dependent (Neuman, 2014). Identical analytical procedures may produce different

results across periods, regions or demographic groups, reflecting contextual variation rather than methodological error (Bian and Li, 2022; Feng et al., 2024). Moreover, institutional data sources may be shaped by reporting practices or policy environments, which can further constrain reproducibility and comparability across survey waves (Qin et al., 2022).

3.3 Analytical Strategy Overview

This study adopts a positivist research framework to examine patterns in gender role attitudes and fertility intentions across the periods before and during the introduction of the universal two-child policy. Positivism provides a structured analytical foundation through which observable relationships between variables can be quantified using standardised measurement instruments and statistical techniques (Neuman, 2014; Wooldridge, 2010). This framework is aligned with the research questions set out in Chapter 3.2, which examine whether the statistical association between gender role attitudes and intentions to have two or more children varies across policy periods and between men and women.

Grounded in this framework, the analysis aims to identify and compare statistical patterns rather than to infer causal mechanisms. Accordingly, the two-child policy is treated as a temporal reference point for comparison, rather than as an intervention whose independent causal effect is estimated. This approach is consistent with large-scale survey research, where policy periods often serve as contextual markers for the interpretation of heterogeneous patterns in attitudes and intentions (Bian and Li, 2022).

This study does not aim to estimate the causal effect of the universal two-child policy. Instead, the policy period is treated as a contextual marker that coincides with observed changes in fertility intentions and their associations with gender role attitudes . All findings are therefore interpreted as associations derived from repeated cross-sectional survey data, rather than causal effects of policy intervention.

3.3.1 Application of Positivist Methodology

The positivist approach adopted in this study centres on the use of descriptive statistics, binary logistic regression models, and interaction-term analysis to assess observable patterns in the Chinese General Social Survey (CGSS) dataset. These methods allow the study to address the research questions in a systematic and replicable way, using standardised measurement and statistical procedures (Bryman, 2021; Neuman, 2014).

Examining differences across policy periods (RQ1)

To address RQ1, whether the statistical association between gender role attitudes and intentions to have two or more children differs between the pre-policy and two-child policy periods, this study employs both descriptive and multivariate techniques. Descriptive statistics illustrate broad differences in gender role attitudes and fertility intentions across the two periods. Binary logistic regression models are then used to test whether the relationship between gender role attitudes and fertility intentions varies across policy periods, incorporating a period indicator to distinguish between the two survey waves. These models are used to compare patterns across periods without attributing observed differences to direct policy effects.

Examining Gender specific patterns (RQ2)

To address RQ2, whether the association between gender role attitudes and fertility intentions differs between men and women, the analysis incorporates sex-specific interaction terms within the regression models. This approach makes it possible to evaluate whether observed patterns differ systematically across gender groups using standardised quantitative techniques (Bryman, 2021).

Examining whether Gender specific patterns vary across policy periods

To assess whether Gender specific patterns differ between the pre-policy and two-child policy periods, the models introduce three-way interactions between gender, gender role attitudes, and policy period. This allows the study to evaluate whether patterns observed among men and women shift across policy contexts, without

inferring that the policy itself produces these differences.

Across all analyses, the models control for key sociodemographic characteristics, including age, education, marital status, employment status, and number of children, reflecting established determinants of fertility intentions in demographic research.

3.3.2 Contextual Interpretation Within a Positivist Framework

While the analysis is grounded in a positivist approach, the interpretation of statistical results remains attentive to the broader sociocultural and institutional contexts in which gender norms and fertility intentions are embedded (Sayer, 2010; Creswell and Plano Clark, 2018). Existing research indicates that gender attitudes and reproductive expectations in China are shaped by diverse factors, including employment conditions, family support structures, regional socioeconomic differences and cultural norms, which may lead to variation in observed patterns between groups and across time (Ji et al., 2017; Balbo et al., 2013; Liu, 2023).

Accordingly, contextual awareness is incorporated at the interpretation stage to situate statistical associations within the broader demographic, economic and social transformations occurring in China during the period under study (Bian and Li, 2022; Feng et al., 2024). This does not constitute a separate epistemological framework but rather a recognition that quantitative findings must be interpreted with an understanding of the institutional and cultural environment relevant to the study (Bryman, 2021; Neuman, 2014).

3.4 Methodological Orientation

This study adopts a positivist quantitative framework and relies on large-scale survey data to examine statistical associations between gender role attitudes and fertility intentions across survey periods defined by policy context.

3.4.1 Methodological Orientation and Justification

This study employs a positivist approach in data analysis and interprets the statistical results with explicit attention to the sociocultural and institutional context in which gender norms and fertility intentions are formed. Within this framework, quantitative methods are used to estimate statistical models and to examine how observed associations vary across periods and demographic groups. In fertility policy research, previous studies have shown that fertility intentions are associated with institutional arrangements, economic conditions and prevailing gender norms, which can be examined using standardized survey data and regression-based analyses (Balbo et al., 2013; Li et al., 2021; Feng et al., 2024).

3.4.2 Structure and Contribution of the Quantitative Analytical Approach

The methodological contribution of this study lies in the development of a structured quantitative analytical strategy. Traditional research on fertility policy predominantly employs single-level statistical analysis, concentrating on aggregate trends and average patterns while paying relatively less attention to how patterns may differ across periods and between social groups (Balbo et al., 2013; Qin et al., 2022). This study extends existing approaches by examining whether statistical associations differ across survey periods and population subgroups.

At the macro level, this study employs descriptive statistical methods to assess differences in fertility related attitudes and intentions across the pre-policy and two-child policy periods. Additionally, it documents broad distributional differences across periods without attributing these differences to specific policy effects.

At the group level, this study applies group-specific regression models and interaction-term analysis to investigate whether statistical associations differ across distinct demographic subpopulations such as age cohorts, educational attainment, socioeconomic status, and urban-rural residency. This approach highlights the stratified nature of fertility related intentions and attitudes across different social groups.

3.4.3 Conclusion

This study adopts a positivist research framework, employing statistical methods to identify differences in statistical associations across the pre-policy and two-child policy periods on gender role attitudes and fertility. The analysis is structured to compare patterns across periods and between men and women, and the findings are interpreted with awareness of the broader social and institutional context in contemporary. With this methodological orientation established, the following section details the specific research design, data sources, variable construction, and analytical procedures used in the empirical analysis.

3.5 Quantitative Research Design and Methods

Quantitative research constitutes one of the three foundational paradigms in social science, distinguished by its theoretical underpinnings, data collection techniques, and analytical strategies (Creswell and Creswell, 2023; Bryman, 2021). Methodological selection is dictated by the research objectives, the inherent characteristics, the measurability of variables and resource feasibility (Neuman, 2023).

The objective of this study is to analysis the association between gender role attitudes and individuals' intentions to have two or more children, comparing these relationships across periods defined by the introduction of the two-child policy. Given that the core constructs are operationalised as quantifiable variables and the data derive from a large-scale, nationally representative survey, a quantitative research design is adopted.

To ensure methodological rigor, the subsequent sections will systematically evaluate the methodological characteristics and applicability of quantitative approaches. This discussion will ultimately justify the selection of quantitative methods as the most appropriate paradigm for addressing the research questions in this study.

Specifically, this design aims to identify statistical patterns and systematically compare the strength and direction of these associations across survey periods defined by the introduction of the policy. Crucially, the analysis focuses on observed statistical differences across periods, not on estimating the policy's causal effect.

The quantitative approach is justified becatse the variables of interenst, the fertility intentions, gender role attitudes, and sociodemographic characteristics, are measured consistently via standardised instruments within the large survey structure (Podsakoff et al., 2012). This standardisation facilitates the rigorous cross-period and cross-group comparison of statistical relationships using established analytical procedures (Wooldridge, 2010; Bryman, 2021).

3.5.1 Quantitative Research

Quantitative research is a widely employed methodological approach in the social sciences, aimed at identifying relationships between variables and numerically describing social phenomena through systematic data collection and statistical analysis (Bryman, 2021; Neuman, 2014). Grounded in positivist epistemology, this approach assumes that social reality exists independently of human perception and that researchers can examine statistical association through standardised measurement techniques (Creswell and Creswell, 2023; Wooldridge, 2010). However, despite its systematic analytical framework, quantitative research encounters challenges related to measurement objectivity and data representativeness (Podsakoff et al., 2003; Sayer, 2010).

3.5.2 Challenges in Quantitative Modelling

Quantitative research frequently employs statistical models to analyse variable relationships. For instance, in assessing differences in the two-child policy cross policy periods, researchers may utilise binary logistic regression to determine whether fertility intentions differ across periods while controlling for gender role perceptions,

economic conditions, and family support (Wooldridge, 2010; Qin et al., 2022). However, statistical analysis presents several challenges.

First, the complexity of social phenomena often results in nonlinear relationships among variables, making it difficult for a single statistical model to fully capture the intricate interactions shaping human behaviour (Sayer, 2010). For example, fertility intentions are also associated with economic constraints, cultural norms, and women's career aspirations, all of which may interact in unpredictable ways (Balbo et al., 2013; Liu, 2023).

Second, omitted variable bias is a persistent issue in quantitative research. When key explanatory factors, such as welfare provisions, healthcare accessibility, or urban-rural disparities, are excluded from the model, the estimated statistical associations may be systematically over or underestimated (Wooldridge, 2010). This limitation underscores the importance of comprehensive model specification to ensure the robustness of statistical findings (Podsakoff et al., 2003).

Additionally, model assumptions may diverge from social reality, raising concerns about the external validity of findings. For instance, in cross-cultural research, identical statistical models may yield substantially different results across countries or regions, indicating that model generalizability must be critically evaluated (Boehnke, 2011; Bian and Li, 2022). These limitations highlight the necessity of integrating contextual understanding with empirical modelling to enhance the validity and applicability of quantitative research in complex sociopolitical contexts (Creswell and Creswell, 2023; Feng et al., 2024).

3.5.3 Data Representativeness and Bias Issues

Ensuring data representativeness is critical for establishing the generalizability of research findings, particularly in quantitative studies, which often rely on random sampling and large-scale data collection (Bryman, 2021; Neuman, 2014). However, data representativeness can be compromised by several factors, including sampling methods, response bias, and data sources (Podsakoff et al., 2003).

First, sampling bias can undermine the external validity of findings, making them non-generalizable to broader populations. This issue is particularly salient in research involving socially sensitive topics, such as reproductive decision-making, where respondents may modify their answers due to social desirability pressures, leading to systematic distortions in the dataset (Podsakoff et al., 2012; Qin et al., 2022).

Second, the limitations of governmental statistical data must be acknowledged, as official fertility statistics may be subject to policy-driven reporting biases, which can introduce systematic errors and compromise the reliability of empirical findings (Liu et al., 2019). This issue underscores the need for critical evaluation of official data sources and, where possible, triangulation with independent survey datasets to mitigate institutional biases (Bian and Li, 2022).

Additionally, temporal effects pose a significant challenge in quantitative research, as statistical patterns may fluctuate over time in response to changing socio-economic conditions (Feng et al., 2024). Single wave studies may miss long-term changes, making longitudinal approaches useful for tracking broader demographic trends (Balbo et al., 2013; Gao and Wang, 2025).

These considerations highlight the inherent complexities of ensuring data reliability and validity in quantitative research and emphasise the importance of methodological rigor in sampling design, bias mitigation, and longitudinal analysis to strengthen the robustness of empirical conclusions (Creswell and Creswell, 2023; Wooldridge, 2010).

3.5.4 Advantages and Limitations of Quantitative Research

Despite its methodological challenges, quantitative research plays a crucial role in examining statistical associations, statistical reasoning, and empirical social analysis (Bryman, 2021; Creswell and Creswell, 2023). A key strength of quantitative methods is their ability to process large sample sizes, thereby generating statistically robust inferences and enhancing the external validity of research findings (Neuman, 2014; Wooldridge, 2010). Furthermore, quantitative methods also allow researcher to

investigate structured patterns in large datasets using statistical controls and regression-based approaches, thereby improving the precision and transparency of empirical analysis (Bian and Li, 2022).

However, the limitations of quantitative research must also be acknowledged. First, the simplification of complex social phenomena may lead to the exclusion of key variables, particularly those related to sociocultural influences, historical contexts, and individual subjective perceptions (Sayer, 2010; Balbo, Billari and Mills, 2013). Second, statistical significance does not necessarily equate to substantive significance; a variable may be statistically significant yet have only a minimal real-world relevance on social phenomena (Wooldridge, 2010). Moreover, quantitative research relies on pre-defined variables and theoretical assumptions, which may constrain researchers' ability to identify unexpected patterns and limit the exploratory potential of a study (Podsakoff et al., 2003; Creswell and Plano Clark, 2018).

3.5.5 Study-Specific Justification for Quantitative Methods

Given the research objectives, data characteristics, and methodological feasibility, a quantitative research design is the most appropriate choice for this study. First, this study aims to examine statistical relationships between variables, necessitating the use of standardised measurement tools and statistical models to ensure empirical rigor. Second, the analysis is based on nationally representative survey data with a large sample size, which enhances the external validity of the findings and supports their generalizability across different social groups. Furthermore, the application of regression analysis allows for the control of confounding variables, enabling comparison of statistical associations across policy periods.

In terms of statistical modeling, this study employs binary logistic regression to estimate associations involving fertility intentions and interaction-term analysis to examine whether associations differ across gender groups and policy periods. Regression analysis provides a systematic framework for hypothesis .

3.5.6 Conclusion

Quantitative research serves as a systematic, precise, and generalizable analytical framework in social science research, allowing scholars to examine variable relationships and empirically test hypotheses (Bryman, 2021; Neuman, 2014). However, limitations persist, particularly regarding measurement objectivity, model specification, and data representativeness (Podsakoff et al., 2003; Wooldridge, 2010). When analysing complex social phenomena, quantitative methods may fail to fully capture sociocultural contexts and individual subjective experiences (Sayer, 2010). Therefore, future studies may benefit from incorporating additional data sources or longitudinal designs to capture longer-term changes and contextual variation in fertility-related attitudes.

In summary, this study adopts a quantitative research design because it enables structured comparison of statistical associations across survey periods and population groups. By treating the two-child policy as a contextual marker and focusing on observable patterns rather than causal effects, the methodological approach remains aligned with the study's research questions and analytical scope. At the same time, the limitations of survey-based quantitative analysis are acknowledged, particularly with respect to causal inference and the interpretation of fertility intentions within broader social and institutional contexts.

3.6 Research Design and Data

This study examines how patterns differ between the pre-policy and two-child policy periods in gender role attitudes and gender equality within families. It focuses on how fertility intentions vary across these periods and whether these patterns differ between men and women. The goal is to understand gender differences in fertility related patterns across periods.

To achieve this, the study uses data from the Chinese General Social Survey (CGSS) from 2015, 2017, 2018, and 2021. A regression model is built, and interaction terms are included to test the research hypotheses systematically.

3.6.1 Dataset and Samples

This study uses the Chinese General Social Survey (CGSS), organised by the China Survey and Data Center (NSRC) at Renmin University of China since 2003 (Bian and Li, 2022). It is one of the most representative large-scale social surveys in China. CGSS aims to build a long-term social science database to support research on social structure and social change in China (Bian and Li, 2022). The survey employs a Multistage Stratified Random Sampling method, covering 31 provinces, municipalities, and autonomous regions (excluding Hong Kong, Macao, and Taiwan). It systematically collects data on social attitudes, family structure, economic status, and social behaviour among urban and rural residents (Bryman, 2021; Neuman, 2014).

CGSS data from 2015, 2017, 2018, and 2021 were selected for this study based on the following considerations. First, the 2015 data serve as a baseline before the period in which the two-child policy was introduced, providing a pre-policy reference point for attitudes and fertility intentions. Second, the 2017, 2018, and 2021 data cover different points in time allowing comparisons of statistical associations across multiple survey waves. Third, the CGSS data structure from 2015 to 2021 remains highly consistent, with no significant changes in the measurement of core variables (e.g., fertility intention, gender role attitudes). This ensures the horizontal comparability of the data.

Additionally, the adaptability of CGSS is enhanced by its systematic and consistent variable measurements. Key variables such as fertility intention, gender role attitudes, family structure, and socioeconomic status are included in the survey, allowing this study to control for multiple social factors and examine associations while accounting for relevant background characteristics. Notably, the Likert scale, used to measure gender role attitudes, enhances the clarity of variable definitions and improves the explanatory power of regression analysis (Bryman, 2021; Podsakoff et al., 2012).

Despite its advantages in representativeness and measurement accuracy, social

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desirability bias may affect responses to sensitive questions such as fertility and gender perceptions. Respondents may conform to social norms rather than express their true beliefs. To mitigate this issue, this study will assess potential bias through robustness checks, including alternative model specifications and diagnostic checks during the data analysis phase (v).

At the same time, CGSS employs rigorous data collection and management processes to ensure data quality and reliability. The survey is conducted by professional teams using standardised questionnaires and a multi-layered quality control mechanism, including investigator training, data verification, and multiple rounds of data cleaning (Bian and Li, 2022). These measures effectively reduce data entry errors and measurement inconsistencies, making statistical analysis more reliable (Bryman, 2021).

Although CGSS has significant advantages in national representativeness, comprehensive variable measurement, and data quality management, it is still necessary to consider potential limitations, including sampling errors, societal expectation bias, and missing data (Podsakoff et al., 2003; Podsakoff et al., 2012). To control for these issues, this study applies standard statistical procedures to ensure that results remain consistent across specifications.

In summary, CGSS's strengths in national representativeness, consistency in variable measurement, and data quality control make it an optimal data source for this study. By applying rigorous statistical methods and appropriate data processing strategies, this study will fully utilise CGSS data while minimising the impact of its limitations, ensuring the robustness of the research findings across different specifications and data checks.

3.6.2 Measures and Variables

This study constructs a variable measurement system based on two core research questions. Firstly, it examines how gender role attitudes are associated with fertility intentions (RQ1). Secondly, it investigates whether these associations differ across

periods and between men and women (RQ2).

To ensure scientific rigor and measurement validity, this study operationalises variables at four levels: dependent variables, independent variables, control variables, and interaction terms. The variable system is informed by prior studies and CGSS measurement structure.

Dependent Variable

The first core question explores the association between gender role attitudes and fertility intentions. The fertility intention variable (Expected_children) is derived from the CGSS questionnaire item:

'If there were no policy restrictions, how many children would you want to have?'

Respondents could select a numeric value between 0 and 10, a widely used measure in fertility studies (Feng et al., 2024).

For binary logistic regression analysis, this study converted fertility intention into a dichotomous variable:

1 = planning for two or more children

0 = planning for one or no children

This classification aligns with the dominant belief in Chinese society that 'two children are ideal' (Sobotka and Beaujouan, 2014; Testa, 2012) and reflects demographic patterns emphasising two-child preferences (Jing et al., 2022; Ning et al., 2022).

Additionally, this classification method improves consistency, minimises the effect of uneven sample distribution on regression estimation, and suits binary logistic regression models for examining statistical associations in fertility intentions (Additionally, this classification method improves consistency, minimises the effect of uneven sample distribution on regression estimation, and suits binary logistic regression models for examining statistical associations in fertility intentions (Lutz

and Skirbekk, 2014; Zhang and Zhao, 2023; Stock and Watson, 2012; Wooldridge, 2010).

Independent Variable

The first core question analyses whether gender role attitudes are associated with fertility intentions. To measure gender role attitudes, this study uses Likert scale items from the CGSS questionnaire. Respondents rated multiple statements about gender role division (1 = strongly disagree, 5 = strongly agree). To simplify analysis and enhance variable interpretability, responses were dummy-coded:

- Gender_role1: Men prioritise careers, women families (0 = disagree, 1 = agree).

- Gender_role2: Men are more capable than women (0 = disagree, 1 = agree).

- Gender_role3: Marrying well over career success for a woman (0 = disagree, 1 = agree).

- Gender_role4: Female employees should be dismissed first in economic downturns (0 = disagree, 1 = agree).

- Gender_role5: Spouses should equally share household chores (0 = disagree, 1 = agree).

These variables distinguish individuals with traditional gender beliefs from those with egalitarian beliefs, enabling examination of how gender role attitudes relate to fertility intentions to have two or more children.

The second core question investigates whether these associations differ across policy periods and gender groups.

Control Variables

To reduce confounding influences and ensure the robustness of regression analyses, this study controls for demographic characteristics, reproductive background, family structure, and social attitudes.

- Demographic variables:

  - Gender: Female (0), Male (1).

  - Birth cohort: 1970s (1), 1980s (2), 1990s (3).

  - Education level (applies to both respondent and spouse):

    - 1 = Pre-secondary education

    - 2 = Secondary education

    - 3 = Higher education

  - Work status (applies to both respondent and spouse):

    - 1 = Non-agricultural work

    - 2 = Agricultural work

    - 3 = Unemployed

Education Level and Work status provide indicators of socioeconomic background.

- Fertility background variables:

  - Number of existing children (Current_children):

    - 1 = No children

    - 2 = One child

    - 3 = Two or more children

Prior research notes that the number of existing children is closely related to fertility preferences (Becker and Lewis, 1973; Feng et al., 2024; Tong et al., 2024).

- Family structure variables:

  - Marital status (Marital_Status):

- 0 = First marriage with spouse

- 1 = Other marital status

- Social attitude variables:

  - Perceived fairness: 0 = Unfair, 1 = Fair.

  - Perceived well-being: 0 = Unhappy, 1 = Happy.

  - Perceptions of government intervention in fertility policy (Govt_intervene_children): 0 = Disagree, 1 = Agree.

These control variables span multiple levels, including socioeconomic factors, family background, and subjective attitudes, helping reduce potential confounders and ensuring that the regression model appropriately examines the associations between gender role attitudes and fertility.

Interaction Terms

To further explore whether associations differ between gender role attitudes and fertility intentions, this study introduces interaction terms in the regression model:

- Gender and Time Interaction (Year * Gender):

  - Examines whether patterns differ between men and women across periods (H3).

- Time and Gender Role Attitudes Interaction (Year * Gender_roleX):

  - Explores whether associations differ across periods (H2).

- Gender and Gender Role Attitudes Interaction (Gender * Gender_roleX):

  - Analyses whether associations differ between men and women (H3).

- Triple Interaction (Year * Gender * Gender_roleX):

  - Examines whether the gender specific patterns differ differ across

periods (H4).

Through this variable system, this study examines associations between gender role attitudes and fertility intentions, while controlling for key socioeconomic factors to ensure robustness. A complete table of variables is provided in Appendix 1.

3.6.3 Data Processing and Preparation

This study adopted systematic data processing and model construction standards to ensure data consistency and analytical clarity. Data cleaning focused on maintaining key variable integrity, optimising measurement methods, and ensuring data consistency for regression analysis. Variables were classified logically, and regression strategies were designed to maintain interpretability (Creswell and Creswell, 2023).

Listwise deletion was applied for observations with missing values in key variables. This approach is commonly used in survey-based regression analyses to maintain comparability across model specifications (Wooldridge, 2010). However, the possibility of non-random missingness cannot be fully ruled out and is acknowledged as a limitation of this study (Bryman, 2021).

To further ensure data quality, descriptive statistics (mean, standard deviation, minimum, maximum) were calculated for all variables to verify data distribution consistency (Neuman, 2014). To improve estimation stability, key variables were dichotomised. The fertility intention variable was classified into two categories based on distributional patterns and fertility behaviour patterns. Similarly, gender role attitude variables were recoded as binary values to ensure clarity and consistency in measurement (Podsakoff et al., 2012).

Given the inclusion of multiple interaction terms, multicollinearity may inflate standard errors (Wooldridge, 2010). For this reason, the analysis prioritises the direction and consistency of associations across model specifications rather than the precise magnitude of individual coefficients.

3.6.4 Analytical Methods

To examine patterns in fertility intention across different survey periods, this study first conducted a descriptive analysis of CGSS data from 2015, 2017, 2018, and 2021. After controlling for relevant variables, the sample sizes of interviews with complete data in 2015, 2017, 2018, and 2021 were 2,998, 3,649, 3,756, and 1,586, respectively. This analysis explored distribution trends in fertility intention and gender role attitudes over time. A chi-square test was used to investigate differences in gender role attitudes across different years. This provides an overview of how distributions vary across periods. For more details on variables, please see Appendix 1,2,3.

Based on these findings, a basic regression analysis was conducted to test the association of gender role attitudes with fertility intention (H1). To ensure model robustness, categorical regression was applied. Control variables were divided into binary controls and categorical dummy variables to examine their specific associations.

Regression Analysis Strategy and Model

To address the research question, this study used a stepwise regression analysis. Data from 2015 (before the two-child policy) and 2021 (during the two-child policy period) were combined to construct the regression model. Each step introduced basic and categorical regression, as well as interaction terms, to test:

- Whether associations between gender role attitudes and fertility intention differ across periods.(H2)

- Whether these associations differ between men and women and across periods. (H3, H4)

This step-by-step regression approach provides a structured way to examine period differences and gender differences in the associations of interest, laying the foundation for further analysis.

Data Analysis Strategy and Rationale

This study ensures systematic and rigorous analysis in four key areas.

Temporal Trends Across Survey Periods

To capture these temporal dynamics, regression analyses were conducted using data from 2015 (pre-policy), 2017, 2018, and 2021 (post-policy). This approach enables comparisons of patterns in fertility intentions across survey waves (Lutz and Skirbekk, 2014).

Associations Involving Gender Role Attitudes (H1 and H2)

Gender role attitudes are closely related to fertility intentions in prior research (Goldscheider et al., 2015; Li et al., 2021; Yang et al., 2025). To examine differences in fertility intentions among individuals with different gender beliefs, this study categorised gender role attitudes and introduced an interaction term (Gender × Gender Role). This approach examines whether associations differ across periods.

Before-and-After Comparison (H2 and H4)

A regression model was built using data from 2015 (pre-policy) and 2021 (post-policy). An interaction term (Year × Gender Role) was introduced to examine whether associations differ across periods on people with varying gender perceptions. This comparative analysis highlights how statistical relationships vary between periods.

Gender Differences (H3 and H4)

This study further examines whether patterns differ between gender groups by conducting binary logistic regression separately for men and women. Previous studies suggest that fertility decisions are shaped by the gendered policy environment, career pressures, and family responsibilities (Ji et al., 2017; Liu, 2023; Zhang et al., 2024).

In summary, this study examines associations involving fertility intentions across survey periods using binary logistic regression, combined with time trend analysis, interaction terms, and gender-stratified regression. These methods ensure analytical clarity and consistency.

Specific Analysis Steps and Model Settings

First step, descriptive analysis was conducted. Before running regression models, descriptive statistical analysis was conducted to examine the distribution of fertility intention, gender role attitudes, and key demographic variables over different years. This provided an overview of cross-period variation. The study calculated mean, median, and standard deviations for fertility intention (Expected_children), gender role attitudes (Gender_role1-5), and demographic variables such as gender, age, education, marital status, and number of children. Data from 2015, 2017, 2018, and 2021 were compared to detect shifts in fertility intentions and gender role attitudes, informing subsequent regression modelling.

Second step, single-year binary logistic regression was conducted. To assess the association between gender role attitudes and fertility intention, this study applied binary logistic regression separately for each year. This approach examined period-specific associations between gender role attitudes and fertility intentions across survey waves. The findings serve as a baseline reference for later regression models using interaction terms with combined data.

Model 3.1 Baseline Model – Gender Role Attitudes and Fertility Intention

$$logit\left(\frac{P(Y=1)}{1-P(Y=1)}\right) = \beta_0 + \sum_{i=1}^{5} \beta_{1i}\, Gender\_role_i + \sum_{j=1}^{m} \gamma_j\, Control_j + \varepsilon$$

Where:

$Y = 1$ represents the probability of intending to have two or more children.

$Gender\_role_i$ is the i-th gender role attitude variable (out of five).

β_{1i} reflects the association between gender role attitudes and fertility intention.

$Control_j$ represents the j-th control variable.

γ_j captures the partial association between control variables and fertility intention.

ε *is the random error term.*

This model examines whether gender role attitudes are statistically associated with fertility intentions. Prior studies suggest that cultural and gender norms are closely related to fertility behaviour, along with economic and policy factors (Balbo et al., 2013; Mason, 2001). Traditional gender beliefs, which emphasise family responsibilities, are often associated with preferences for larger families (Goldscheider et al., 2015; Kan and Hertog, 2017). However, socio-economic factors (e.g., employment opportunities, social welfare) also correlate with fertility preferences (McDonald, 2006; Han et al., 2024).

Model 3.2: Expanded Model – Controlling for Individual Characteristics

$$
\begin{aligned}
logit\left(\frac{P(Y=1)}{1-P(Y=1)}\right) \\
= \beta_0 \\
+ \sum_{i=1}^{5} \beta_{1i}\, Gender\_role_i + \sum_{j=1}^{5} \gamma_j\, Binary\_Control_j \\
+ \sum_{m=1}^{p} \gamma_m\, Categorical\_Dummy_m + \varepsilon
\end{aligned}
$$

This model refines the control variables by categorising them as binary controls (e.g., gender, marital status, parental status) and categorical dummy variables (e.g., education, occupation). The introduction of dummy variables reduces multicollinearity and enhances model interpretability. By distinguishing individual characteristics, this model allows a more stable estimation of associations between gender role attitudes and fertility intention.

Model 3.3: Policy Moderation Model – Interaction Between Policy and Gender Role

Attitudes

$$logit\left(\frac{P(Y = 1)}{1 - P(Y = 1)}\right)$$

$$= \beta_0 + \beta_1 Year$$

$$+ \sum_{i=1}^{5} \beta_{2i} \, Gender\_role_i + \sum_{i=1}^{5} \beta_{3i} \, (Year \times Gender\_role_i)$$

$$+ \sum_{j=1}^{m} \gamma_j \, Control_j + \varepsilon$$

This model introduces Year to examine whether associations between gender role attitudes and fertility intention differ across periods. The interaction term (Year × Gender Role) captures whether the association between gender role attitudes and fertility intention varies between the pre-policy and two-child-policy periods.

Model 3.4: Policy Moderation with Individual Controls

$$logit\left(\frac{P(Y = 1)}{1 - P(Y = 1)}\right)$$

$$= \beta_0 + \beta_1 Year$$

$$+ \sum_{i=1}^{5} \beta_{2i} \, Gender\_role_i + \sum_{i=1}^{5} \beta_{3i} \, (Year \times Gender\_role_i)$$

$$+ \sum_{j=1}^{5} \gamma_j \, Binary\_Control_j + \sum_{m=1}^{p} \gamma_m \, Categorical\_Dummy_m + \varepsilon$$

Building on Model 3.3, this model controls for individual characteristics to account for observable individual differences when examining period-specific associations.

Model 3.5: Gender Moderation Model – The Role of Gender in Fertility Decisions

$$logit\left(\frac{P(Y = 1)}{1 - P(Y = 1)}\right)$$

$$= \beta_0 + \beta_1 Gender$$

$$+ \sum_{i=1}^{5} \beta_{2i} \, Gender\_role_i + \sum_{i=1}^{5} \beta_{3i} \, (Gender \times Gender\_role_i)$$

$$+ \sum_{j=1}^{m} \gamma_j \, Control_j + \varepsilon$$

This model examines whether associations between gender role attitudes and fertility intentions differ for men and women. Studies show that men and women face different social expectations in reproductive decision-making (Shen and Jiang, 2022; Tong et al., 2024). Women are often more exposed to family responsibilities (Ji et al., 2017; Liu, 2023), while men's fertility decisions are often discussed in relation to economic considerations (Zhu, 2019; Zheng et al., 2016).

Model 3.6: Gender Moderation with Individual Controls

$$logit\left(\frac{P(Y = 1)}{1 - P(Y = 1)}\right)$$

$$= \beta_0 + \beta_1 Gender$$

$$+ \sum_{i=1}^{5} \beta_{2i} \, Gender\_role_i + \sum_{i=1}^{5} \beta_{3i} \, (Gender \times Gender\_role_i)$$

$$+ \sum_{j=1}^{5} \gamma_j \, Binary\_Control_j + \sum_{m=1}^{p} \gamma_m \, Categorical\_Dummy_m + \varepsilon$$

This model builds on Model 3.5 by controlling for individual characteristics, allowing gender differences in associations to be examined while accounting for socioeconomic disparities.

Model 3.7: Triple Interaction Model – Policy, Gender, and Gender Role Attitudes

$$logit\left(\frac{P(Y=1)}{1-P(Y=1)}\right)$$

$$= \beta_0 + \beta_1 Year + \beta_2 Gender$$

$$+ \sum_{i=1}^{5} \beta_{3i}\, Gender\_role_i + \sum_{i=1}^{5} \beta_{4i}\, (Year \times Gender\_role_i)$$

$$+ \sum_{i=1}^{5} \beta_{5i}\, (Gender \times Gender\_role_i) + \sum_{i=1}^{5} \beta_{6i}\, (Year \times Gender)$$

$$+ \sum_{i=1}^{5} \beta_{7i}\, (Year \times Gender \times Gender\_role_i) + \sum_{j=1}^{m} \gamma_j\, Control_j + \varepsilon$$

This model introduces triple interactions to examine whether patterns involving gender role attitudes and fertility intentions differ by period and gender. This allows a comparison of how associations vary across gender groups and survey years.

Model 3.8: Full Model – Controlling for Policy, Gender, and Individual Characteristics

$$logit\left(\frac{P(Y=1)}{1-P(Y=1)}\right)$$

$$= \beta_0 + \beta_1 Year + \beta_2 Gender$$

$$+ \sum_{i=1}^{5} \beta_{3i}\, Gender\_role_i + \sum_{i=1}^{5} \beta_{4i}\, (Year \times Gender\_role_i)$$

$$+ \sum_{i=1}^{5} \beta_{5i}\, (Gender \times Gender\_role_i) + \sum_{i=1}^{5} \beta_{6i}\, (Year \times Gender)$$

$$+ \sum_{i=1}^{5} \beta_{7i}\, (Year \times Gender \times Gender\_role_i)$$

$$+ \sum_{j=1}^{5} \gamma_j\, Binary\_Control_j + \sum_{m=1}^{p} \gamma_m\, Categorical\_Dummy_m + \varepsilon$$

This model adds full individual controls to Model 3.7, allowing comparisons of period and gender specific associations while accounting for individual differences.

3.6.5 Limitations of the Research Methodology

Although this study uses national data (CGSS 2015, 2017, 2018, 2021) and applies a binary logistic regression model to explore the associations involving gender role attitudes, fertility intentions and survey periods, there are still some limitations.

First, the data covers only a few years across different survey periods, which makes it difficult to observe long-term patterns in fertility intentions. However, this study relies on cross-sectional data, which cannot track longitudinal variation within the same group. This limits the ability to observe within-individual developments across years. Future research could use longitudinal data (e.g., China Household Longitudinal Survey (CFPS)) to examine longer-term trajectories in fertility intentions.

Second, this study measures fertility intention and gender role attitudes using dichotomous variables. While this simplifies the analysis, it may not fully reflect subtle differences in individual fertility planning. For example, some respondents may remain undecided about having a second child, but this is not captured due to the data structure. Future studies could capture finer accuracy by using continuous variables or multi-level categorical variables to measure fertility intentions in more detail.

Third, although CGSS data is nationally representative, fertility intentions may still vary across regions due to contextual factors such as economic development, public services, and housing policies. The applicability of the study's conclusions in different socioeconomic contexts should be interpreted with caution.For example, urban and rural populations face different childbearing incentives. Factors such as childcare costs and access to childcare services may be associated with different contextual patterns across groups. Future research could use hierarchical regression analysis or propensity score matching (PSM) to more fully account for regional differences.

3.6.6 Conclusion

Despite these limitations, this study employs a systematic quantitative approach to maintain analytical clarity and consistency. It systematically considers variable measurement, data processing, and model construction, providing a structured for examining associations survey periods and groups.

4. Fertility Intentions and Gender Role Attitudes: Descriptive and Regression Results

4.1 Introduction

This study analyses data from the Chinese General Social Survey (CGSS) in 2015, 2017, 2018, and 2021. It uses descriptive statistical analysis and a binary logistic regression model to examine how gender role attitudes are associated with fertility intentions across different survey periods that include the implementation period of the two-child policy. The study also compares differences across social groups. The findings show that overall fertility intentions have varied across periods rather than showing a consistent upward trend. Multiple factors are associated with this trend, including gender, education level, age, number of children, and attitudes towards government fertility policies. indicates that the cross-sectional surveys do not show a consistent increase in fertility intentions across the observed periods. Instead, the descriptive patterns differ across social groups. The study also finds that the role of gender attitudes differs between the survey periods. This suggests that reproductive decisions are associated not only with institutional contexts but also by social norms and personal values.

This chapter presents the descriptive findings and regression results, focusing on statistical patterns across survey periods. The chapter avoids causal interpretations and instead highlights how attitudes, sociodemographic characteristics, and contextual factors align with fertility intentions in the years surrounding the introduction of the two-child policy.

4.2 Descriptive Findings

4.2.1 Overall Trends in Fertility Intentions

CGSS data from 2015 to 2021 (Table 4.1) shows variation in the proportion of

respondents expressing intentions to have two or more children across survey periods. In 2015, 79.3 per cent of families planned to have two or more children. This figure decreased to 76.6 per cent in 2017 and further to 75.2 per cent in 2018. These figures indicate that respondents' stated intentions fluctuated rather than showing a continuous upward trend during the years subsequent to the policy introduction. By 2021, the percentage of families planning two or more children slightly increased to 76.5 per cent, but it remained lower than in 2015.

Meanwhile, the percentage of people choosing to have only one child or none rose from 20.7 per cent in 2015 to 23.4 per cent in 2017 and 24.8 per cent in 2018. In 2021, this figure fell slightly to 23.5 per cent but remained higher than in 2015. This reflects a modest rise in the proportion of respondents expressing lower fertility intentions over time, despite a small rebound in 2021.

Between 2017 and 2018, the decline in second-child intentions was most pronounced. The percentage of families planning for two or more children dropped by 1.4 percentage points within a year, while those opting for one or none increased by the same margin. Although these survey years fall within the period following the policy change, the descriptive patterns do not allow attribution of these fluctuations to the policy itself. The cross-sectional data indicate changing stated intentions rather than causal policy effects.

Overall, even with a modest increase in 2021, the proportion intending two or more children remained below 2015 levels, suggesting continued variation in fertility intentions across survey periods without implying policy-induced changes.

4.2.2 Gender Differences in Fertility Intentions

The results indicate that men had a slightly higher desire to have a second child than women, but the difference was not statistically significant ($p > 0.05$) (Table 4.1). In 2015, 79.6 per cent of men and 79.2 per cent of women had two or more children. This small gap indicates that stated fertility intentions were broadly similar across genders in this period.

Table 4.1 CGSS 2015-2021 Chi-Square Test of Intentions to Have Two or More Children

		2015			2017			2018			2021		
		% intending to have two or more children	Total number of respondents	P	% intending to have two or more children	Total number of respondents	P	% intending to have two or more children	Total number of respondents	P	% intending to have two or more children	Total number of respondents	P
Gender	Female	79.2%	1371	0.797	76.6%	1591	0.875	75.2%	1601	0.151	76.5%	727	0.203
	Male	79.6%	1007		76.9%	1209		77.2%	1255		79.2%	504	
Birth cohort	1970s	79.5%	1317		79.3%	1448		78.5%	1497		82.6%	584	
	1980s	78.8%	881	0.829	73.9%	1101	0.001**	74.7%	1078	0.000***	74.3%	474	0.000***
	1990s	80.4%	180		75.1%	251		69.6%	277		71.8%	173	
Education level	Pre-Secondary education	84.8%	497		82.3%	573		83.7%	649		87.5%	251	
	Secondary education	79.7%	1351	0.000***	77.5%	1481	0.000***	76.8%	1499	0.000***	79.6%	692	0.000***
	Higher education	74.0%	530		71.6%	746		68.8%	708		67.0%	288	
Work status	Non-agriculture work	77.1%	1441		74.8%	1807		73.8%	1839		75.4%	757	
	Agriculture work	85.7%	433	0.000***	85.8%	422	0.000***	85.5%	435	0.000***	89.8%	176	0.000***
	Unemployed	80.9%	504		77.0%	571		77.0%	582		77.3%	298	
Existing number of children	No children	68.6%	181		69.0%	196		66.1%	170		67.9%	72	
	One child	70.4%	1148	0.000***	63.6%%	1182	0.000***	62.1%	1139	0.000***	63.6%	457	0.000***
	Two and more children	95.1%	1049		94.4%	1422		93.2%	1538		92.1%	702	

		%	N	p	%	N	p	%	N	p	%	N	p
Marital status	First Married with spouse	79.3%	2297	0.863	77.1%	2667	0.046*	76.0%	2715	0.954	77.9%	1192	0.145
	Other	78.6%	81		70.7%	133		76.2%	141		69.6%	39	
Partner's education level	Pre-Secondary education	85.3%	482		83.5%	547		83.9%	596		90.6%	250	
	Secondary education	79.6%	1380	0.000***	77.6%	1528	0.000***	77.3%	1553	0.000***	78.9%	695	0.000***
	Higher education	73.8%	516		70.7%	725		68.1%	707		66.7%	286	
Partner's work status	Non-agriculture work	78.0%	1576		74.9%	1980		74.3%	2051		75.3%	915	
	Agriculture work	85.6%	370	0.002**	85.0%	329	0.000***	80.3%	309	0.000***	92.6%	126	0.000***
	Unemployed	79.3%	432		79.3%	491		81.4%	496		80.9%	190	
Perceived fairness	Unfair	79.2%	1304	0.828	76.0%	1603	0.225	75.9%	1533	0.820	75.3%	504	0.063
	Fair	79.5%	1074		77.7%	1197		76.2%	1323		79.3%	727	
Perceived happiness	Unhappy	77.8%	428	0.336	76.8%	526	0.970	74.0%	493	0.179	76.8%	195	0.724
	Happy	79.7%	1950		76.7%	2274		76.5%	2363		77.8%	1036	
Opinion on government intervention in number of children	Disagree	79.4%	1626	0.821	77.9%	1861	0.018	77.7%	1904	0.001**	81.8%	771	0.000***
	Agree	79.1%	752		74.5%	939		72.8%	952		71.4%	460	
Men prioritise careers, women families	Disagree	76.6%	1058	0.001**	73.1%	1419	0.000***	73.0%	1555	0.000***	71.6%	670	0.000***
	Agree	81.7%	1320		80.8%	1381		80.0%	1301		86.3%	561	

		2015 %	N	p	2017 %	N	p	2018 %	N	p	2021 %	N	p
Men are more capable than women	Disagree	79.4%	1446	0.941	74.9%	1774	0.000***	74.5%	1897	0.001**	74.3%	810	0.000***
	Agree	79.3%	932		80.2%	1026		79.4%	959		84.9%	421	
Marrying well over career success for a woman	Disagree	77.5%	1327	0.005**	76.0%	1630	0.184	73.9%	1734	0.000***	75.4%	757	0.005**
	Agree	81.7%	1051		77.8%	1170		79.5%	1122		81.4%	474	
Female employees should be dismissed first in economic downturns	Disagree	79.0%	2127	0.265	76.6%	2576	0.662	76.0%	2677	0.866	76.9%	1137	0.015*
	Agree	81.8%	251		77.8%	224		76.5%	179		87.0%	94	
Spouses should equally share household chores	Disagree	79.3%	623	0.963	74.6%	697	0.077	76.8%	743	0.500	80.2%	219	0.257
	Agree	79.3%	1755		77.5%	2103		75.8%	2113		77.1%	1012	

Data source: CGSS 2015, 2017, 2018 and 2021.

Between 2017 and 2018, fertility intentions declined for both men and women. In 2017, 76.9 per cent of men and 76.6 per cent of women had two or more children, with no significant difference between them. However, in 2018, men's fertility intentions rebounded slightly to 77.2 per cent, while women's continued to decline to 75.2 per cent. This reflects a somewhat sharper decline among women, although differences remain statistically insignificant.

Following the introduction of the three-child policy in 2021, the intention to have a second child increased for both genders. The proportion rose to 79.2 per cent among men and 76.5 per cent among women, yet the difference remained statistically insignificant (p = 0.203). Overall, men consistently reported slightly higher fertility intentions than women, but these differences were not statistically significant across all years. The descriptive data therefore indicate boadly comparable patterns of stated fertility intentions between genders across survey periods**.**

4.2.3 Cohort Differences in Fertility Intentions

Birth year was significantly associated with fertility intentions, with some birth cohorts reaching a high level of statistical significance ($p < 0.001$) (Table 4.1).

Individuals born in the 1970s exhibited relatively high fertility intentions. In 2015, 79.5 per cent intended to have a second child. This figure dropped slightly to 78.5 per cent in 2018 but rebounded to 82.6 per cent in 2021. This pattern indicates relatively stable and comparatively high intentions among this cohort across periods. In contrast, fertility intentions among those born in the 1980s declined steadily. The proportion decreased from 78.8 per cent in 2015 to 74.7 per cent in 2018 and further to 74.3 per cent in 2021 ($p < 0.001$), indicating a continuous downward trend.

The decline was most significant among individuals born in the 1990s and later. In 2015, 80.4 per cent intended to have a second child, but this dropped sharply to 69.6 per cent in 2018, a decline of over ten percentage points in just three years. Although there was a slight recovery to 71.8 per cent in 2021 ($p < 0.001$), fertility intentions remained well below 2015 levels. These findings illustrate notable generational

differences in stated fertility intentions, with younger cohorts expressing lower intentions across periods.

4.2.4 Educational Differences in Fertility Intentions

Education level, both of individuals and their partners, showed a significant association with fertility intentions, with strong statistical significance across all survey years ($p < 0.001$) (Table 4.1).

Individuals with lower education levels had the highest fertility intentions, which were higher in later survey years. In 2021, 87.5 per cent of individuals with low education (pre-secondary education) planned to have a second child. Moreover, those with partners of low education showed even higher fertility intentions, reaching 90.6 per cent. The secondary education group exhibited slightly lower fertility intentions than the low-education group. Their fertility intentions declined between 2015 and 2018 but showed a slight recovery in 2021. In contrast, individuals with higher education and their partners had the lowest fertility intentions, which continued to decline from 2015 to 2021. By 2021, only 67.0 per cent of highly educated individuals intended to have a second child, while the figure for those with highly educated spouses was even lower at 66.7 per cent. These rates were significantly lower than those of the low-education group.

These results indicate a clear negative association between education level and fertility intentions across survey periods. Individuals with lower education levels consistently showed high fertility intentions, which increased after policy adjustments. Meanwhile, those with higher education had the lowest fertility intentions, which continued to decline over time.

4.2.5 Work Status Differences in Fertility Intentions

This study found that the work status of individuals and their partners showed a

significant association with the intention to have a second child, reaching statistical significance (p < 0.01) in all survey years (Table 4.1). This indicates that employment type is an important factor influencing fertility decisions.

Agricultural workers had the highest willingness to have a second child, which increased after the policy adjustment. In 2021, 89.8 per cent of agricultural workers planned to have two or more children, while 92.6 per cent of those with agricultural worker partners showed the same intention. These patterns highlight systematically higher stated fertility intentions among agricultural work across observed periods. Additionally, traditional childbearing values may be linked to consistently high fertility intentions in this group.

In contrast, non-agricultural workers had the lowest desire to have a second child. In 2021, 75.4 per cent of non-agricultural workers and 75.3 per cent of those with non-agricultural worker partners intended to have a second child. These figures were significantly lower than those of agricultural workers. Furthermore, from 2015 to 2018. This indicates a consistent contrast between agricultural and non-agricultural groups.

The unemployed showed higher fertility intentions than non-agricultural workers but lower than agricultural workers. In 2021, 77.3 per cent of unemployed individuals and 80.9 per cent of those with unemployed partners intended to have two or more children. These results indicate that employment status is associated with different level of stated fertility intentions.

4.2.6 Parity Difference in Fertility Intentions

The number of children was strongly associated with fertility intentions, with a very high level of statistical significance ($p < 0.001$) in all survey years (Table 4.1). This indicates that the the number of existing children is consistently related to respondents' stated intentions in the descriptive data.

Childless individuals had the lowest fertility intention, with a declining trend between

2015 and 2018. In 2015, 68.6 per cent of childless individuals intended to have two or more children. This dropped to 66.1 per cent in 2018 but slightly increased to 67.9 per cent in 2021, remaining below 2015 levels. These figures show that childless respondents report comparatively lower intentions to have two or more children across the survey years.

In contrast, individuals with two or more children were significantly more likely to have additional children compared to those with no children or only one child. This reflects a clear gradient, with respondents in larger families more frequently reporting intentions for two or more children.

Individuals with one child exhibited intermediate fertility intentions. Their desire to have a second child was higher than that of childless individuals but lower than those with two or more children. This pattern is consistent with a stepwise difference in stated intentions by parity.

4.2.7 Marital Status Difference in Fertility Intentions

The influence of marital status on second-child fertility intention fluctuated across survey years. In 2017, the effect was statistically significant ($p = 0.046$), but in 2015, 2018, and 2021, it did not reach statistical significance ($p > 0.05$) (Table 4.1).

Married individuals living with their spouses were more likely to have a second child than other marital groups. Their fertility intentions were consistently higher than those of divorced, widowed, or unmarried individuals. This pattern appears consistently in the descriptive data, even where the statistical association is not significant. However, the statistical significance of this variable varied across years, suggesting that fertility decisions are associated not only with marital status but also by economic conditions, social support, and personal beliefs about fertility.

Due to the inconsistent effect of this variable, the findings suggest that marital status alone is insufficient to account for variation in fertility intention. This highlights the need to consider marital status alongside other demographic and socioeconomic

characteristics when interpreting fertility related patterns.

4.2.8 Perceived Fairness and Subjective Well-Being Associations with Fertility Intentions

The study found that individuals with a stronger sense of social fairness and well-being generally had a higher intention to have a second child. However, from 2015 to 2021, the p-value for this variable did not reach statistical significance ($p > 0.05$) (Table 4.1). This indicates that, in this dataset, the association between perceived social equity, subjective well-being and fertility intentions is weak and statistically unstable.

In theory, higher social equity may be associated with greater confidence in the economic and social environment (McDonald, 2000b; Fraser, 1994), while greater well-being may coincide with higher reported fertility intentions (Balbo et al., 2013). However, the data did not confirm this hypothesis. The descriptive results therefore point to limited empirical support for a strong direct association between these subjective indicatiors and intentions to have two or more children.

Additionally, social equity and well-being may interact with other variables such as income, education, and marital status. Future research should explore these potential moderating factors to better understand the role of psychosocial influences in fertility decision-making.

4.2.9 Attitudes Toward Government Intervention and Fertility Intentions

Individuals who supported government intervention were more likely to have a second child than those who opposed it. In 2015, 79.1 per cent of supporters and 79.4 per cent of opponents had two or more children (Appendix 4).

Between 2017 and 2021, the willingness to have a second child among government policy supporters declined to 71.4 per cent, whereas it increased to 81.8 per cent

among opponents. These figures indicate diverging descriptive patterns between supporters and opponents over time. However, the cross-sectional nature of the data does not allow firm conclusions about the mechanisms underlying these differences.

4.2.10 Gender Role Attitudes and Fertility Intentions: Descriptive Associations

The study found that individuals with traditional gender role attitudes consistently showed higher second-child fertility intentions than those with gender equality beliefs. This association was statistically significant ($p < 0.01$) (Table 4.1).

The group that agreed with the statement *'Men prioritise careers, women families'* had significantly higher fertility intentions than those who disagreed ($p < 0.01$). Although fertility intentions in this group declined between 2015 and 2018, they were higher in the 2021 survey. Meanwhile, fertility intentions among those who disagreed continued to decline, widening the gap between the two groups ($p < 0.001$). This pattern indicates that respondents endorsing this traditional division of labour consistently reported higher intentions to have two or more children across survey years.

In 2015, the statement *'Men are more capable than women'* had no significant effect on second-child fertility intention ($p = 0.941$). However, from 2017 onwards, the p-value became significant, indicating a strengthening association with fertility intentions. By 2021, individuals who agreed with this statement had significantly higher fertility intentions than those who disagreed ($p < 0.001$). These results point to a strengthening association between this traditional belief and higher stated fertility intentions in later survey years.

Those who agreed with the statement *'Marrying well over career success for a woman'* consistently showed higher fertility intentions across all survey years ($p < 0.01$). The effect briefly diminished in 2017 ($p = 0.184$) but rebounded in 2018 and returned to 2015 levels in 2021 ($p = 0.005$).

From 2015 to 2018, the belief *'In times of economic recession, women should be laid*

off first' had no significant effect on fertility intention (p > 0.05). However, by 2021, the p-value dropped to 0.015, reaching statistical significance for the first time. This indicates that by 2021, endorsement of this belief was more clearly associated with higher stated intentions to have two or more children.

4.3 Binary Logistic Regression: Main and Interaction Effects

Using a binary logistic regression model, this section examines how gender role attitudes are statistically associated with intentions to have two or more children across different survey periods and gender groups. The study assesses the association of gender role attitudes with fertility intention (H1), whether these associations differ between the pre-policy and two-child policy periods (H2), whether they differ between men and women (H3), and whether gender-specific associations vary across periods (H4).

The results indicate that the association of gender role attitudes wirh fertility intention was not stable, with significance varying across models and years. Additionally, interaction terms involving survey year and gender role attitudes point to changes in the strength of these associations over time. However, the models do not show large or consistent differences in overall fertility intentions between men and women (Table 4.5), and the cross-sectional design does not allow causal inferences about policy effects.

4.3.1 H1 Main Associations Between Gender Role Attitudes and Fertility Intentions

The findings show significant differences in fertility intentions between individuals with different gender role attitudes (Table 4.2, Table 4.3).

Specifically, those who supported the statement *'Men prioritise careers, women families' (*Gender_role1) exhibited significantly higher fertility intentions in 2017 (OR = 1.23, p < 0.05) and 2021 (OR = 1.71, p < 0.01) compared to those who

disagreed. However, in 2015 (OR = 1.18, p > 0.1) and 2018 (OR = 1.14, p > 0.1), this association was not statistically significant. These results indicate that, particularly in 2017 and 2021, respondents endorsing this traditional division of labour were more likely to report intentions to have two or more children, while in 2015 and 2018 the association was weaker and not statistically significant.

Similarly, those who agreed with the statement *'Marrying well over career success for a woman'* (Gender_role3) exhibited significantly higher fertility intentions in 2015 (OR = 1.24, p < 0.05). However, this effect was not significant in 2017 (OR = 0.93, p > 0.1), 2018 (OR = 1.19, p < 0.1), or 2021 (OR = 1.06, p > 0.1). This pattern indicates that the positive association between this belief and fertility intentions was strongest in 2015 and became weaker and less robust in later years.

Conversely, individuals who supported the belief *'Men are more capable than women'* (Gender_role2) exhibited significantly lower fertility intentions in 2015 (OR = 0.78, p < 0.05). However, this effect was no longer significant in 2017 (OR = 1.16, p > 0.1), 2018 (OR = 1.10, p > 0.1), and 2021 (OR = 1.11, p > 0.1). This indicates that the initially negative association observed in 2015 did not persist in later years, where no statistically significant relationship was detected.

For individuals who agreed with *'Female employees should be dismissed first in economic downturns'* (Gender_role4), there was no significant association with fertility intention across all survey years (p > 0.1). This suggests that this belief had no clear statistical relationship with intentions to have two or more children in the models estimated.

Table 4.2 CGSS 2015-2021 Binary Logistic Regression results of Intentions to Have Two or More Children

	2015	2017	2018	2021
Gender	1.16 (0.94 - 1.43)	1.02 (0.85 - 1.22)	1.16 (0.97 - 1.39)	1.29 (0.96 - 1.73) *
Birth	1.50 (1.27 - 1.76) ***	1.18 (1.03 - 1.34) **	1.10 (0.97 - 1.24)	1.08 (0.90 - 1.30)
Education	1.12 (0.91 - 1.38)	1.07 (0.90 - 1.27)	0.98 (0.83 - 1.15)	0.93 (0.70 - 1.24)
Work	1.01 (0.89 - 1.15)	0.97 (0.87 - 1.08)	1.01 (0.91 - 1.13)	0.93 (0.79 - 1.10)
Current_children	3.74 (3.10 - 4.50) ***	3.59 (3.06 - 4.20) ***	3.44 (2.96 - 3.98) ***	2.88 (2.29 - 3.61) ***
Marital_status	1.36 (0.82 - 2.28)	1.10 (0.77 - 1.59)	1.30 (0.89 - 1.89)	1.19 (0.61 - 2.30)
Education_partner	0.92 (0.75 - 1.13)	0.97 (0.82 - 1.16)	0.95 (0.81 - 1.13)	0.69 (0.53 - 0.91) **
Work_partner	0.96 (0.84 - 1.09)	1.05 (0.93 - 1.19)	1.07 (0.95 - 1.21)	0.96 (0.78 - 1.17)
Fairness	0.97 (0.80 - 1.18)	1.12 (0.94 - 1.32)	0.98 (0.83 - 1.16)	1.26 (0.96 - 1.65) *
Happiness	1.19 (0.93 - 1.53)	1.09 (0.88 - 1.36)	1.27 (1.03 - 1.58) **	1.30 (0.91 - 1.90)
Govt_intervene_children	1.01 (0.83 - 1.24)	0.83 (0.70 - 0.98) **	0.79 (0.67 - 0.93) ***	0.58 (0.45 - 0.75) ***
Gender_role1	1.18 (0.95 - 1.46)	1.23 (1.02 - 1.49) **	1.14 (0.94 - 1.37)	1.71 (1.25 - 2.34) ***
Gender_role2	0.80 (0.64 - 0.99) **	1.15 (0.94 - 1.40)	1.09 (0.90 - 1.33)	1.15 (0.82 - 1.60)
Gender_role3	1.24 (1.01 - 1.52) **	0.93 (0.77 - 1.11)	1.19 (0.99 - 1.42) *	1.06 (0.80 - 1.42)
Gender_role4	1.04 (0.75 - 1.45)	0.90 (0.65 - 1.23)	0.78 (0.55 - 1.10)	1.32 (0.70 - 2.49)
Gender_role5	0.98 (0.80 - 1.22)	1.24 (1.03 - 1.49) **	0.99 (0.82 - 1.20)	0.97 (0.68 - 1.39)

*p<0.1, **p<0.05, ***p<0.01

Data source: CGSS 2015, 2017, 2018 and 2021.

Table 4.3 CGSS 2015-2021: Binary Logistic Regression Analysis of Categorical Variables on Intentions to Have Two or More Children

	2015	**2017**	**2018**	**2021**
Female (ref: male)	1.12 (0.91 - 1.39)	0.97 (0.80 - 1.16)	1.12 (0.93 - 1.34)	1.14 (0.84 - 1.55)
Birth cohort (ref: 1970s)				
1980s	1.22 (1.00 - 1.51) *	0.78 (0.65 - 0.94) ***	0.89 (0.74 - 1.06)	0.68 (0.50 - 0.92) **
After 1990s	1.94 (1.31 - 2.87) ***	1.16 (0.85 - 1.59)	0.90 (0.68 - 1.18)	0.88 (0.58 - 1.33)
Education level (ref: Pre-Secondary education)				
Secondary education	1.27 (0.92 - 1.75)	1.20 (0.91 - 1.59)	0.89 (0.68 - 1.17)	1.23 (0.76 - 2.00)
Higher education	1.43 (0.93 - 2.19)	1.38 (0.95 - 1.99) *	0.95 (0.67 - 1.35)	1.00 (0.55 - 1.83)
Work status (ref: Non- agriculture work)				
Agriculture work	1.12 (0.78 - 1.62)	1.17 (0.81 - 1.69)	1.45 (0.99 - 2.11) *	0.99 (0.53 - 1.83)
Unemployed	0.94 (0.72 - 1.22)	0.92 (0.73 - 1.16)	0.98 (0.78 - 1.22)	0.81 (0.58 - 1.14)
Existing number of children (ref: No children)				
One child	1.36 (1.00 - 1.86) *	0.76 (0.56 - 1.03) *	0.79 (0.59 - 1.06)	0.67 (0.40 - 1.12)
Two and more children	12.07 (7.90 - 18.44) ***	7.85 (5.39 - 11.43) ***	6.38 (4.51 - 9.04) ***	4.28 (2.40 - 7.60) ***
Marital status (ref: First marriage with spouse)	1.03 (0.62 - 1.73)	0.66 (0.46 - 0.96) **	1.05 (0.72 - 1.53)	0.77 (0.40 - 1.50)
Partner's education level (ref: Pre-Secondary education)				
Secondary education	0.81 (0.59 - 1.12)	1.01 (0.76 - 1.35)	1.00 (0.75 - 1.32)	0.49 (0.29 - 0.82) ***

Higher education	0.84 (0.55 - 1.28)	1.05 (0.72 - 1.52)	0.91 (0.64 - 1.30)	0.46 (0.25 - 0.87) **
Partner's work status (ref: Non-agriculture work)				
Agriculture work	1.05 (0.71 - 1.55)	1.11 (0.75 - 1.65)	0.60 (0.41 - 0.87) ***	1.71 (0.77 - 3.79)
Unemployed	0.86 (0.66 - 1.13)	1.05 (0.81 - 1.35)	1.14 (0.89 - 1.48)	0.80 (0.53 - 1.21)
Perceived fairness (ref: Fair)	0.98 (0.81 - 1.19)	1.13 (0.95 - 1.35)	0.98 (0.83 - 1.16)	1.25 (0.95 - 1.65)
Perceived happiness (ref: Happy)	1.18 (0.92 - 1.52)	1.11 (0.88 - 1.38)	1.35 (1.08 - 1.68) ***	1.39 (0.95 - 2.02) *
Opinion on government intervention in number of children (ref: Agree)	1.00 (0.82 - 1.23)	0.83 (0.70 - 0.99) **	0.80 (0.67 - 0.94) ***	0.59 (0.45 - 0.76) ***
Men prioritise careers, women families. (ref: Agree)	1.19 (0.96 - 1.48)	1.18 (0.97 - 1.43) *	1.12 (0.92 - 1.35)	1.73 (1.25 - 2.38) ***
Men are more capable than women. (ref: Agree)	0.78 (0.63 - 0.97) **	1.16 (0.95 - 1.42)	1.10 (0.90 - 1.35)	1.11 (0.78 - 1.56)
Marrying well over career success for a woman. (ref: Agree)	1.22 (0.99 - 1.49) *	0.91 (0.76 - 1.10)	1.15 (0.96 - 1.39)	1.05 (0.78 - 1.41)
Female employees should be dismissed first in economic downturns. (ref: Agree)	1.03 (0.74 - 1.44)	0.91 (0.66 - 1.27)	0.80 (0.56 - 1.15)	1.24 (0.65 - 2.38)
Spouses should equally share household chores. (ref: Agree)	1.00 (0.80 - 1.24)	0.80 (0.66 - 0.97) **	0.99 (0.82 - 1.20)	0.95 (0.66 - 1.37)

*p < 0.1, **p < 0.05, ***p < 0.01

Data source: CGSS 2015, 2017, 2018 and 2021.

Further analysis of gender role attitudes in Table 4.3 reveals similar trends. For example, individuals supporting Gender_role1 had the highest fertility intentions in 2021 (OR = 1.73, p < 0.01), which was significantly stronger than in 2015 (OR = 1.19, p > 0.1) and 2017 (OR = 1.18, p < 0.1).

Additionally, those supporting Gender_role5 had significantly higher fertility intentions in 2017 (OR = 1.24, p < 0.05), but the effect was not statistically significant in 2015 (OR = 0.98, p > 0.1), 2018 (OR = 0.99, p > 0.1), or 2021 (OR = 0.97, p > 0.1). This pattern indicates that the positive association with the belief *'Spouses should equally share household chores'* appears only in 2017 and is not consistently observed in other years.

In contrast, those who supported Gender_role3 had higher fertility intentions in 2015 (OR = 1.24, p < 0.05), but this effect weakened significantly after 2017. Meanwhile, Gender_role4 had no significant association with fertility intentions from 2015 to 2021, indicating that this belief does not show a robust statistical link with intentions to have two or more children in any observed period.

In summary, H1 is partially supported. Gender role attitudes are associated with fertility intentions, but the magnitude and direction of this association vary across years. Traditional gender role beliefs (particularly Gender_role1) show a stronger positive association with fertility intentions in later survey years, while some other gender stereotypes (such as Gender_role2 and Gender_role3) present weaker or less stable associations. Given the cross-sectional design, these patterns should be interpreted as temporal differences in associations rather than evidence of causal change.

4.3.2 H2 Period Differences: Interaction Between Survey Year and Gender Role Attitudes

Regression analysis results show that in later survey years, respondents with traditional gender role beliefs were more likely to report intentions to have two or more children than in earlier years (Table 4.4, Table 4.5).

Table 4.4 CGSS 2015 and 2021: Binary Logistic Regression Analysis of Categorical Variables on Intentions to Have Two or More Children

	Model 1.2a	**Model 2.1a**	**Model 2.2a**
Gender	1.19 (1.00 - 1.41) **	0.99 (0.69 - 1.41)	0.84 (0.54 - 1.28)
Birth cohort	1.28 (1.13 - 1.44) ***	1.22 (1.09 - 1.38) ***	1.27 (1.13 - 1.43) ***
Education level	1.05 (0.89 - 1.24)	1.04 (0.88 - 1.23)	1.05 (0.88 - 1.24)
Work status	0.98 (0.88 - 1.08)	0.97 (0.88 - 1.08)	0.98 (0.89 - 1.09)
Existing number of children	3.26 (2.82 - 3.75) ***	3.13 (2.72 - 3.60) ***	3.27 (2.83 - 3.77) ***
Marital status	1.30 (0.87 - 1.93)	1.25 (0.84 - 1.87)	1.27 (0.85 - 1.89)
Partner's education level	0.82 (0.70 - 0.97) **	0.82 (0.70 - 0.97) **	0.83 (0.70 - 0.98) **
Partner's work status	0.95 (0.85 - 1.06)	0.96 (0.86 - 1.07)	0.95 (0.85 - 1.06)
Perceived fairness	1.06 (0.90 - 1.23)	1.02 (0.88 - 1.19)	1.06 (0.90 - 1.23)
Perceived happiness	1.25 (1.02 - 1.53) **	1.24 (1.01 - 1.51) **	1.26 (1.03 - 1.54) **
Opinion on government intervention in number of children	0.81 (0.69 - 0.94) ***	0.79 (0.68 - 0.92) ***	0.81 (0.69 - 0.95) ***
Men prioritise careers, women families.	1.15 (0.93 - 1.42)	1.25 (1.00 - 1.57) *	0.99 (0.75 - 1.30)
Men are more capable than women.	0.79 (0.64 - 0.98) **	0.96 (0.76 - 1.21)	0.84 (0.63 - 1.12)
Marrying well over career success for a woman.	1.25 (1.02 - 1.54) **	1.23 (1.00 - 1.53) *	1.17 (0.90 - 1.52)
Female employees should be dismissed first in economic downturns.	1.02 (0.73 - 1.42)	1.11 (0.75 - 1.63)	1.13 (0.72 - 1.77)
Spouses should equally share household chores.	1.00 (0.81 - 1.24)	0.86 (0.67 - 1.11)	0.91 (0.67 - 1.22)
Year of survey	0.62 (0.41 - 0.93) **		0.46 (0.25 - 0.84) **

	Model 1	Model 2	Model 3
Interaction: Year × Gender_role1	1.65 (1.14 - 2.37) ***		1.85 (1.14 - 3.01) **
Interaction: Year × Gender_role2	1.52 (1.02 - 2.25) **		1.53 (0.92 - 2.54)
Interaction: Year × Gender_role3	0.86 (0.61 - 1.22)		1.12 (0.71 - 1.76)
Interaction: Year × Gender_role4	1.32 (0.65 - 2.69)		0.87 (0.36 - 2.12)
Interaction: Year × Gender_role5	0.94 (0.63 - 1.41)		1.06 (0.59 - 1.92)
Interaction: Gender × Gender_role1		1.25 (0.89 - 1.76)	1.42 (0.93 - 2.16)
Interaction: Gender × Gender_role2		0.87 (0.60 - 1.24)	0.88 (0.57 - 1.36)
Interaction: Gender × Gender_role3		0.93 (0.66 - 1.30)	1.18 (0.78 - 1.78)
Interaction: Gender × Gender_role4		0.98 (0.55 - 1.76)	0.80 (0.41 - 1.54)
Interaction: Gender × Gender_role5		1.21 (0.85 - 1.74)	1.20 (0.78 - 1.84)
Interaction: Year × Gender			1.88 (0.83 - 4.24)
Interaction: Year × Gender × Gender_role1			0.73 (0.35 - 1.53)
Interaction: Year × Gender × Gender_role2			0.95 (0.43 - 2.14)
Interaction: Year × Gender × Gender_role3			0.52 (0.25 - 1.06) *
Interaction: Year × Gender × Gender_role4			2.98 (0.66 - 13.47)
Interaction: Year × Gender × Gender_role5			0.83 (0.36 - 1.90)

*p < 0.1, **p < 0.05, ***p < 0.01

Data source: CGSS 2015 and 2021.

Table 4.5 CGSS 2015 and 2021 Binary Logistic Regression Analysis of Categorical Variables on Intentions to Have Two or More Children

	Model 1.2b	**Model 2.1b**	**Model 2.2b**
Female (ref: male)	1.12 (0.94 - 1.33)	0.91 (0.64 - 1.31)	0.80 (0.52 - 1.22)
Birth cohort (ref: 1970s)			
1980s	0.99 (0.83 - 1.17)	0.96 (0.82 - 1.14)	0.99 (0.83 - 1.17)
After 1990s	1.33 (1.01 - 1.76) **	1.21 (0.92 - 1.59)	1.32 (1.00 - 1.75) **
Education level (ref: Pre-Secondary education)			
Secondary education	1.27 (0.97 - 1.65) *	1.24 (0.95 - 1.62)	1.26 (0.96 - 1.65) *
Higher education	1.26 (0.89 - 1.78)	1.24 (0.88 - 1.75)	1.24 (0.88 - 1.76)
Work status (ref: Non- agriculture work)			
Agriculture work	1.09 (0.80 - 1.49)	1.08 (0.79 - 1.48)	1.09 (0.80 - 1.50)
Unemployed	0.90 (0.73 - 1.10)	0.89 (0.73 - 1.10)	0.91 (0.74 - 1.11)
Existing number of children (ref: No children)			
One child	1.04 (0.80 - 1.35)	0.98 (0.76 - 1.28)	1.04 (0.80 - 1.35)
Two and more children	7.51 (5.41 - 10.43) ***	6.84 (4.95 - 9.46) ***	7.54 (5.42 - 10.48) ***
Marital status(ref: Other)	0.95 (0.64 - 1.41)	0.91 (0.61 - 1.35)	0.93 (0.62 - 1.39)
Partner's education level (ref: Pre-Secondary education)			
Secondary education	0.68 (0.52 - 0.89) ***	0.68 (0.52 - 0.90) ***	0.68 (0.52 - 0.89) ***
Higher education	0.67 (0.48 - 0.95) **	0.68 (0.48 - 0.95) **	0.68 (0.48 - 0.96) **

Partner's work status (ref: Non- agriculture work)			
Agriculture work	1.11 (0.79 - 1.57)	1.15 (0.82 - 1.62)	1.10 (0.78 - 1.54)
Unemployed	0.84 (0.67 - 1.05)	0.86 (0.69 - 1.08)	0.83 (0.67 - 1.04)
Perceived fairness (ref: Fair)	1.06 (0.91 - 1.24)	1.03 (0.88 - 1.20)	1.06 (0.91 - 1.24)
Perceived happiness (ref: Happy)	1.27 (1.03 - 1.56) **	1.25 (1.02 - 1.54) **	1.27 (1.03 - 1.56) **
Opinion on government intervention in number of children (ref: Agree)	0.81 (0.69 - 0.94) ***	0.78 (0.67 - 0.92) ***	0.81 (0.69 - 0.95) ***
Men prioritise careers, women families. (ref: Agree)	1.16 (0.94 - 1.44)	1.23 (0.98 - 1.55) *	0.98 (0.74 - 1.29)
Men are more capable than women. (ref: Agree)	0.77 (0.62 - 0.96) **	0.94 (0.74 - 1.20)	0.83 (0.62 - 1.10)
Marrying well over career success for a woman. (ref: Agree)	1.23 (1.00 - 1.51) **	1.24 (1.00 - 1.54) *	1.17 (0.90 - 1.53)
Female employees should be dismissed first in economic downturns. (ref: Agree)	1.02 (0.73 - 1.42)	1.07 (0.72 - 1.59)	1.11 (0.70 - 1.75)
Spouses should equally share household chores. (ref: Agree)	1.01 (0.82 - 1.25)	0.86 (0.66 - 1.11)	0.91 (0.67 - 1.23)
Year of survey (ref: 2021)	0.61 (0.41 - 0.93) **		0.49 (0.26 - 0.89) **
Interaction: Year × Gender_role1(ref: 2021 and supports traditional gender roles)	1.63 (1.13 - 2.36) ***		1.85 (1.13 - 3.04) **
Interaction: Year × Gender_role2 (ref: 2021 and supports traditional gender roles)	1.51 (1.01 - 2.25) **		1.52 (0.90 - 2.57)

Interaction: Year × Gender_role3 (ref: 2021 and supports traditional gender roles)	0.87 (0.61 - 1.24)		1.12 (0.70 - 1.77)
Interaction: Year × Gender_role4 (ref: 2021 and supports traditional gender roles)	1.27 (0.62 - 2.62)		0.82 (0.33 - 2.06)
Interaction: Year × Gender_role5 (ref: 2021 and supports traditional gender roles)	0.93 (0.61 - 1.40)		1.01 (0.55 - 1.86)
Interaction: Gender × Gender_role1 (ref: Male and supports traditional gender roles)		1.32 (0.94 - 1.86)	1.50 (0.98 - 2.28) *
Interaction: Gender × Gender_role2 (ref: Male and supports traditional gender roles)		0.85 (0.59 - 1.23)	0.86 (0.56 - 1.33)
Interaction: Gender × Gender_role3 (ref: Male and supports traditional gender roles)		0.89 (0.63 - 1.24)	1.10 (0.73 - 1.67)
Interaction: Gender × Gender_role4 (ref: Male and supports traditional gender roles)		1.03 (0.57 - 1.86)	0.83 (0.42 - 1.61)
Interaction: Gender × Gender_role5 (ref: Male and supports traditional gender roles)		1.23 (0.86 - 1.77)	1.22 (0.80 - 1.88)
Interaction: Year × Gender (ref: 2021 and males)			1.69 (0.74 - 3.87)
Interaction: Year × Gender × Gender_role1 (ref: 2021 and male and supports traditional gender roles)			0.72 (0.34 - 1.52)

Interaction: Year × Gender × Gender_role2 (ref: 2021 and male and supports traditional gender roles)	0.95 (0.42 - 2.15)
Interaction: Year × Gender × Gender_role3 (ref: 2021 and male and supports traditional gender roles)	0.54 (0.26 - 1.12) *
Interaction: Year × Gender × Gender_role4 (ref: 2021 and male and supports traditional gender roles)	3.05 (0.66 - 14.15)
Interaction: Year × Gender × Gender_role5 (ref: 2021 and male and supports traditional gender roles)	0.86 (0.37 - 2.00)

*$p < 0.1$, **$p < 0.05$, ***$p < 0.01$

Data source: CGSS 2015 and 2021.

To further examine H2, interaction effects across different years were analysed. In 2021, the interaction term between year and traditional gender role beliefs (Year × Gender_role1) was significant (OR = 1.63, p < 0.01). This indicates that the positive association between Gender_role1 and fertility intentions was stronger in 2021 than in the reference year, suggesting that the association between this traditional belief and stated intentions was stronger in later survey years. However, this statistical interaction cannot be interpreted as a direct causal effect of policy change.

Additionally, the interaction term between year and the belief that 'Men are more capable than women' (Year × Gender_role2) was statistically significant in 2021 (OR = 1.51, p < 0.05). This suggests that the previously negative association observed for Gender_role2 in earlier years became less pronounced or reversed in 2021. The models indicate a change in the strength and direction of this association across survey periods rather than a clearly identifiable policy effect.

However, some gender role beliefs did not show statistically significant year interactions. For example, the interaction term for year and the belief that 'Marrying well over career success for a woman' (Year × Gender_role3) was not statistically significant in 2021 (OR = 1.27, p > 0.1), suggesting that this perception did not exhibit a substantial period-specific change in its association with fertility intentions. Similarly, the interaction for year and the belief that 'Female employees should be dismissed first in economic downturns' (Year × Gender_role4) was not significant in 2021 (OR = 1.27, p > 0.1). This indicates that the association between this belief and fertility intentions remained relatively stable and statistically weak across years.

The interaction term between year and 'Spouses should equally share household chores' (Year × Gender_role5) was also not significant in 2021 (OR = 0.93, p > 0.1). This indicates that the association between this egalitarian belief and fertility intentions did not change significantly across survey years. Further analysis of interactions involving gender is discussed under H3 and H4.

Overall, the findings for H2 indicate that some associations between gender role attitudes and fertility intentions are stronger in later survey years, particularly for traditional beliefs such as Gender_role1, whereas other beliefs show little or no

period-specific change. These results document temporal variation in statistical associations but do not provide definitive evidence that policy reforms themselves caused these changes.

4.3.3 H3 Gender Differences: Interaction Between Gender and Gender Role Attitudes

Regression analysis results indicate that the associations between certain gender role perceptions and fertility intentions differ between men and women, and that these differences vary by survey year (Table 4.4, Table 4.5).

Men with traditional gender role beliefs were more likely to have children in later survey years. In 2021, the Gender × Gender_role1 interaction term was significant (OR = 1.50, p < 0.1), indicating that the perception *'Men prioritise careers, women families'* was more strongly associated with higher fertility intentions among men than among women in that year. This suggests that the positive association between this traditional belief and fertility intentions is more pronounced for men than for women in the later survey period.

Conversely, men who endorsed the belief *'Marrying well over career success for a woman'* experienced a significant decline in fertility intentions in 2021. The Year × Gender × Gender_role3 interaction term was significant in 2021 (OR = 0.54, p < 0.1), indicating that among individuals with this belief, men were significantly less likely to have children than women. This triple interaction points to a gender-specific pattern in the association between this belief and fertility intentions in 2021, with men showing lower stated intentions than women within this attitudinal group. Given the p-value threshold and cross-sectional design, this result should be interpreted cautiously.

However, the models do not show strong gender differences for other gender role perceptions. For example, the Gender × Gender_role2 interaction term was not significant in 2021 (OR = 0.95, p > 0.1), indicating that the belief 'Men are more capable than women' did not significantly alter fertility intentions between men and

women before or after the policy. Similarly, neither Gender × Gender_role4 nor Gender × Gender_role5 reached statistical significance in 2021 (p > 0.1), indicating that the beliefs *'Female employees should be dismissed first in economic downturns'* and *'Spouses should equally share household chores'* did not significantly moderate fertility intentions across gender groups before or after the policy.

Overall, H3 is partially supported. Some traditional gender role beliefs, particularly Gender_role1 and Gender_role3, show gender-differentiated associations with fertility intentions in the later survey period, while other beliefs do not exhibit significant gender differences. The results suggest that gender moderates certain attitude–intention relationships, but the evidence is not uniform across all beliefs or years.

A number of gender role perceptions did not show statistically significant year interactions, indicating that their associations with fertility intentions remained relatively similar across survey periods. For some traditional beliefs, gender differences were more pronounced in 2021. For example, individuals endorsing *'Marrying well over career success for a woman'* exhibited different association patterns for men and women, with men showing comparatively lower intentions than women in that year. For other beliefs, such as those related to gender equality in domestic labour or employment during economic downturns, no clear year–gender differences were observed, suggesting that the associations between these attitudes and fertility intentions were relatively stable across periods.

Overall, the results point to nuanced variations in how gender role attitudes relate to fertility intentions across years and between gender groups, but do not indicate uniform or systematic changes over time.

4.3.4 H4 Three-Way Interactions: Period, Gender and Gender Role Attitudes

Regression analysis results indicate that there were year–gender–attitude differences in the relationship between gender, gender role attitudes, and fertility intentions. Significant differences were observed among individuals with different gender role beliefs across gender groups and survey periods (Table 4.5).

To further test H4, this study examines differences in fertility intentions among different genders in 2015 and 2021 and assesses whether gender specific associations differed across survey years under varying gender role beliefs.

Regression results show that the Year × Gender × Gender_role3 interaction term was significant in 2021 (OR = 0.54, p < 0.1). This suggests that among individuals who held the belief *'Marrying well over career success for a woman'*, men had significantly lower fertility intentions than women. This indicates a gender-specific pattern in 2021 for this belief, with comparatively lower stated intentions among men than women. The cross-sectional design does not allow attribution of this difference to policy effects, but it highlights a notable year-specific gender divergence.

In contrast, the Year × Gender × Gender_role5 interaction term did not reach statistical significance (OR = 0.83, p > 0.1). This indicates that for individuals who believed *'Spouses should equally share household chores'*, gender differences in fertility intentions did not materially differ between 2015 and 2021.

Although some triple interaction terms did not reach statistical significance, it is noteworthy that the Year × Gender × Gender_role4 term had a relatively large effect size (OR = 2.98, p > 0.1). Although not statistically significant, the sizeable coefficient suggests a possible year gender difference in the association for this group; however, the estimate is imprecise and should be interpreted cautiously.

However, neither Year × Gender × Gender_role1 (OR = 0.72, p > 0.1) nor Year × Gender × Gender_role2 (OR = 0.95, p > 0.1) were statistically significant. This indicates that for these traditional gender role beliefs, gender differences in the association with fertility intentions did not vary substantially across survey years.

Overall, H4 is partially supported. Some gender role beliefs, particularly Gender_role3, show stronger gender differences in 2021 compared with 2015, while other beliefs show relatively stable gender patterns across periods.

Additionally, the lack of significant three-way interactions for several beliefs suggests that gender differences in their associations with fertility intentions were generally stable across survey periods.

Overall, the findings point to nuanced gender–period variations in how specific gender role attitudes relate to fertility intentions, rather than uniform or systematic shifts over time.

5. Discussion: Gender Role Attitudes, Fertility Intentions, and Structural Constraints

5.1 Introduction

This chapter examines how the associations between gender role attitudes and fertility intentions vary across survey periods. The findings in Chapter 4 suggest that overall fertility intentions did not increase across the survey years, and notable differences were observed across demographic and attitudinal groups. These results highlight the relevance of social, economic and normative structures for understanding patterns in fertility intentions in China during the period surrounding the implementation of the two-child policy. This chapter will discuss these aspects in detail.

Throughout this chapter, the discussion focuses on interpreting the observed associations between gender role attitudes and fertility intentions within the two-child policy period. These interpretations are not intended to establish policy causality, but to identify plausible social and institutional mechanisms that are consistent with the empirical patterns observed across survey years. The two-child policy is thus discussed as part of a broader socio-institutional context rather than as an exogenous intervention whose effects can be isolated.

5.2 The Association between Gender Role Attitudes and Fertility Intentions

This study analysed the association of five core gender role variables with fertility intentions. The results indicate that individuals with traditional gender beliefs have significantly higher fertility intentions than those who support gender equality. This suggests that reproductive decisions are closely associated not only with personal choices but also by the gender division of labour. Gender role attitudes are closely aligned with fertility expectations and correspond with how reproductive responsibilities are distributed in society. The following sections provide a detailed analysis of key variables.

5.2.1 Gender Role 1: Men Prioritise Careers and Women Prioritise Family

The study found that individuals who agreed that *'men should focus on their careers and women should focus on their families'* showed higher fertility intentions than those who disagreed. This supports the H1 hypothesis, which suggests that traditional gender perceptions are associated with higher fertility intentions. Regression analysis also indicated that the association between this belief and higher fertility intentions was stronger in some later survery years, whereas the association remained weaker among respindents endorsing egalitarian views, partially supporting H2 as a period related difference rather than a policy effect. This suggests that patterns over time align more strongly with traditional gender role role orientations than with egalitarian ones.

This pattern has significant sociological implications. McDonald (2000b) argued that fertility might decline if gender equality is limited to education and employment without extending to the family sphere. The findings of this study are consistent with this theoretical proposition, despite women's growing participation in education and employment (Ministry of Education of the People's Republic of China, 2022), traditional family level gender expectations continue to be associated with higher fertility intentions (Ji et al., 2017; Hanet al., 2024). Thus, disparities in work–family expectations are associated with differences in fertility intentions among those accepting traditional roles and lower intentions among those seeking more egalitarian arrangements (Zhou, 2019; Liu, Y., 2023).

Contrary to findings in earlier literature, this study revealed that traditional domestic divisions of labour remain strongly associated with higher fertility intentions in the Chinese context (Kan and Hertog, 2017; Kim, 2018). This indicates that these patterns reflect interactions between gender norms, labour market pressures, and household expectations rather than clearly identifiable policy effects (Balbo et al., 2013; Feng et al., 2024). This situation differs from that in Western societies and reflects China's unique gender culture, economic structure, and policy logic (Ji et al., 2017; McDonald, 2000b).

The persistence of traditional gender roles might be due to perceptions of family structure, resource allocation, and the cost of childbearing (Becker and Lewis, 1973). In traditional families, women often bear primary responsibility for childcare, while men are the main earners (Ji et al., 2017; Song and Lai, 2020). This is associated with lower perceived opportunity costs for women, with childbearing more commonly viewed as socially acceptable (Budig and England, 2001; Han et al., 2024). Moreover, men's stable economic roles are often perceived as corresponding with lower financial concern about having children (Zhu, 2019; Zheng et al., 2016). Additionally, the grandparent childcare support system in China has been associated with lower perceived childcare burdens (Deng et al., 2023; Zhang and Emery, 2023), with traditional family models appearing more viable across the survey period (Su-Russell and Sanner, 2023).

This trend relates to the second gender revolution theory, which argues that increasing fertility requires gender equality in the family and social support from the government, such as parental leave for men and flexible work policies (Goldscheider et al., 2015; Esping-Andersen, 2009). However, existing institutional arrangements in China have not achieved the level of family-level gender equality envisioned in this framework (Ji et al., 2017; McDonald, 2013).

Established theoretical perspectives on social norms and the gender system may also be used to analyse the link between gender role attitudes and fertility intentions within the larger cultural framework covered in earlier chapters. According to social norm theory, people's behavioral intentions are closely patterned by expectations that are ingrained in their social context, especially when such expectations are rooted in long-standing cultural traditions (Ajzen, 1991; Mason, 1992). Confucian gender ideology, which prescribes distinct roles for men and women in the household, continues to have a significant impact in China (Rosker, 2015; Li, 2000). These normative expectations are consistent with the persistence of a gendered division of labor that is still ingrained in institutions and culture by placing women in the role of primary caretakers and assigning males to duties as financial providers (Ji et al., 2017; Kan and Hertog, 2017). According to the gender system concept, these cultural norms function by organising rights, obligations, and responsibilities along gendered lines

through institutionalised arrangements (Connell, 2011; Lowndes, 2019). People's personal orientations are more in line with these dominant normative frameworks when they support conventional gender role ideas (Boehnke, 2011). Higher reported reproductive goals among people with conventional beliefs may be observed in conjunction with this alignment, which can make bigger family sizes seem more socially cohesive and congruent with anticipated home duties (Li et al., 2021; Yang et al., 2025).

However, there is a gap between the government's policy discourse and social reality (Zhang et al., 2024). On one hand, the policy promotes childbearing rhetorically without offering comprehensive childcare benefits or gender-friendly workplace policies (General Office of the State Council of the People's Republic of China, 2019; McDonald, 2006). On the other hand, social expectations still focus on women's family responsibilities (Ji et al., 2017; Cooke and Zhao, 2021). Even if policies do not explicitly require women to leave the workforce, societal norms continue to be consistent with this behaviour (Liu, 2023; Du, 2023).

This situation contrasts with findings on fertility in Europe, which suggest that increasing fertility requires a combination of social welfare, workplace support, and shared family responsibilities (Daly, 2020; Fraser, 1994). In China, however, people with diverse gender role orientations may have differing fertility goals due to a lack of institutional support for work-family balance (Zhou, 2019; Han et al., 2024).

Summary

The study found no significant increase in fertility intentions among those who support gender equality. This can be interpreted through the gender equality paradox, which suggests that fertility declines when women gain power in the public sphere but the gender division of labour at home does not change (McDonald, 2000b; Goldscheider et al., 2015). In China, despite women's progress in education and employment, they still bear most of the childcare responsibilities (Ji et al., 2017; Liu and Marois, 2024). This is associated with greater perceived trade-offs between career development and childbearing (Du, 2023; Brinton and Oh, 2019).

Unlike those with traditional gender views, women who support gender equality are more focused on their careers (Blair and Madigan, 2021; Liu, 2023). Without policy support, their reproductive decisions are influenced by higher economic and social pressures (He et al., 2023; Zhou, 2019). In contrast, Nordic countries, through government childcare support and parental leave for men, have lessened the gendered division of childcare responsibilities (Esping-Andersen, 2009; Daly, 2020). As a result, fertility intentions among those supporting gender equality in these countries do not decline due to high childbearing costs (Fraser, 1994; Petersen et al., 2014). In China, however, existing institutional and workplace frameworks do little to redistribute reproductive responsibilities across genders (Cooke and Zhao, 2021; Zhang et al., 2024).

Overall, this study shows that higher fertility intentions during the two-child policy period are more evident among individuals with traditional gender beliefs (Li et al., 2021; Yang et al., 2025), while intentions remain lower among those who support gender equality (Han et al., 2024). Without supporting social policies, the two-child policy may have limited effectiveness across a broader population (McDonald, 2006; Zeng and Hesketh, 2016) and may be associated with longer-term declines in fertility due to the persistence of traditional gender roles (Jiang et al., 2023; Feng et al., 2024).

5.2.2 Gender Role 2: Men Are More Capable Than Women

This study found that individuals who agreed with the statement *'men are more capable than women'* had significantly higher fertility intentions than those who disagreed. This trend was more pronounced among men. This finding supports the H1 hypothesis and indicates that gendered perceptions of competence remain closely associated with fertility preferences across survey years (Li et al., 2021; Boehnke, 2011).

This pattern can be interpreted through the gender system framework, which highlights how cultural and institutional norms prescribe differentiated expectations for men and women within families (Connell, 2011; Lowndes, 2019). Beliefs that

men are inherently more capable reinforce traditional assumptions about men's role as primary earners and women's responsibilities for caregiving (Ji et al., 2017; Adisa et al., 2019). These normative expectations are associated with differences in how men and women evaluate the feasibility and desirability of having additional children (Shen and Jiang, 2022; Tong et al., 2024). Men who hold this view often align more strongly with conventional divisions of labour and may perceive fewer conflicts between work and family roles (Kan and Hertog, 2017; Kato et al., 2018). Women, in turn, may experience these expectations as part of the broader normative environment that associates femininity with caregiving (Budig and England, 2001; Han et al., 2024). This corresponds with H3, which proposes that the association between gender role attitudes and fertility intentions differs between men and women (Yang et al., 2025; Zhang et al., 2024).

Traditional Gender Perceptions and Reproductive Decision-Making

The results suggest that gender power structures are closely linked to expectations surrounding family roles in ways that are linked to fertility intentions (Connell, 2011; Adisa et al., 2019). Those who believe that men are more capable than women are more likely to accept the traditional model of men as breadwinners and women as caregivers (Ji et al., 2017; Kan and Hertog, 2017). This is associated with more positive attitudes towards childbearing (Li et al., 2021).

As discussed in earlier chapters, Confucian gender ideology continues to frame caregiving as a naturalised part of women's familial responsibilities, which may make traditional gender arrangements appear legitimate and socially appropriate (Rosker, 2015; Li, 2000). Individuals who internalise these norms are more likely to report viewing larger families as compatible with expected household roles (Yang et al., 2025; Goldscheider et al., 2015).

Additionally, the study found no strong evidence of substantial gender differences in the association between this belief and fertility intentions across survey years, which provides limited support for H4. This suggests that structural and economic considerations continue to be closely associated with reproductive intentions alongside gender norms (Zhu, 2019; Balbo et al., 2013; Han et al., 2024).

Traditional Gender Concepts and the Limits of Policy Context

This study finds that, contrary to earlier findings on the gender equality paradox, promoting gender equality does not necessarily increase fertility (McDonald, 2000b; Goldscheideret al., 2015). In contrast, individuals who accept gender hierarchies have higher fertility intentions. This indicates that traditional gender power relations remain salient during the two-child policy period, rather than being weakened by changes in fertility regulation (Li et al., 2021; Feng et al., 2024). As a result, higher fertility intentions are observed among those with traditional gender beliefs. Temporal differences in these associations provide partial support for H2 (Qinet al., 2022).

Under traditional gender power structures, men's economic capacity is seen as essential for childbearing (Becker, 1985; Zhu, 2019). Individuals who endorse these views may prioritise men's financial contributions and women's caregiving roles (Ji et al., 2017; Kan and Hertog, 2017). This corresponds with higher reported fertility intentions among those with traditional gender views (Yanget al., 2025). Meanwhile, childbearing is perceived as a social duty for women (Adisaet al., 2019). Even if women achieve workplace success, they cannot easily escape societal expectations about their maternal roles (Liu, 2023; Cooke and Zhao, 2021). This reflects the fact that family gender power structures still favour men (Connell, 2011; Lowndes, 2019).

Patriarchy influences women primarily through cultural and normative structures that guide expectations about reproductive behaviour (Adisaet al., 2019; Mason, 1992). When individuals believe that men are more capable than women, they are more likely to accept the idea that childbearing is a woman's duty (Rosker, 2015; Li, 2000). Under this gender division of labour, women's reproductive decisions are more closely aligned with societal expectations than by personal choice (Shen and Jiang, 2022; Qian and Jin, 2018). The unequal burden of childbearing costs leads society to rationalise the time and career sacrifices made by women (Budig and England, 2001; Du, 2023), corresponding with lower reported resistance to having children (Hanet al., 2024).

The Reinforcing Role of Policy Discourse

Government discourse surrounding family and childrearing often emphasises the importance of familial stability and maternal responsibility (Zhang et al., 2024; Milwertz, 1996). These discursive elements may resonate more strongly with individuals who already hold traditional gender role beliefs, further aligning their attitudes with socially valued representations of family life (Boehnke, 2011; Mason, 1992).

In contrast, individuals who support gender equality are more likely to focus on career advancement (Blair and Madigan, 2021; Liu, 2023). However, the entrenched gender division of labour in society poses practical challenges for these individuals, corresponding with lower reported willingness to have children (Zhou, 2019; Han et al., 2024). First, workplace discrimination makes it difficult for women to balance careers and childbearing (He et al., 2023; Gao et al., 2024). Many employers avoid hiring or promoting women of childbearing age to reduce childcare-related costs (Cooke and Zhao, 2021; Leng and Kang, 2022). Second, there is a lack of effective parenting support systems. Without social support such as childcare services and flexible work policies, women often have to sacrifice their careers to take on childcare responsibilities (Deng et al., 2023; General Office of the State Council of the People's Republic of China, 2019). As a result, individuals who support gender equality are more likely to delay or avoid having children (Du, 2023; Jiang et al., 2023).

Summary

This study found that individuals who believe that men are more capable than women have significantly higher fertility intentions than those who disagreed, with this trend being more pronounced among men. Associations between this belief and fertility intentions remained evident across survey years, with limited evidence of substantial gender-based moderation (Liet al., 2021; Yanget al., 2025). These findings suggest that traditional gender perceptions continue to play an important role in shaping fertility intentions, whereas egalitarian gender orientations are associated with lower intentions (Hanet al., 2024; Zhou, 2019).

If future population policies aim to raise the overall fertility rate, they need to move away from dependence on traditional gender roles and focus on promoting gender

equality and social support systems (McDonald, 2013; Goldscheideret al., 2015). International experience shows that fertility can only increase steadily if multiple reforms are implemented simultaneously (Esping-Andersen, 2009; Daly, 2020). These include the socialisation of childcare responsibilities, gender-friendly workplace policies, and encouraging men to share childcare duties (Fraser, 1994; Katoet al., 2018). If China continues with the current model, broader reforms that address work-family balance and redistribute caregiving responsibilities may be required to support fertility intentions sustainably (McDonald, 2006; Zhanget al., 2024).

5.2.3 Gender role 3: Marrying Well Over Career Success for a Woman

This study found that individuals who agreed with the statement 'Marrying well over career success for a woman' had significantly higher fertility intentions than those who disagreed. This finding supports the H1 hypothesis and suggests that traditional views of marriage are closely associated with reproductive decision-making (Blair and Madigan, 2021; Ye, 2023). When individuals believe that a woman's happiness depends more on marriage than on career success, childbearing is seen as an essential part of maintaining family happiness (Mason, 1992; Rosker, 2015). This perception is associated with higher reported willingness to have children (Li et al., 2021; Yang et al., 2025).

Variations across survey years suggest that this association is stronger among respondents who endorse traditional marital values, while remaining weaker among those who hold more egalitarian views, providing partial support for H2 as a temporal rather than policy-driven pattern (Feng et al., 2024; Qin et al., 2022).

The Influence of Marital Concepts on Fertility Intentions

The results suggest that marriage is still considered a core element of women's happiness in Chinese society (Blair and Madigan, 2021; Zhou, 2019). This perception is strongly associated with reproductive decisions. As noted in the early chapter, social norm theory highlights that individuals tend to align their behaviours with prevailing expectations within their family and community environments (Ajzen,

1991). Within the Chinese context, Confucian gender ideology continues to link women's social value to marriage and caregiving roles (Li, 2000; Rosker, 2015; Ye, 2023). These normative structures contribute to making childbearing appear an integral part of marital fulfilment for individuals who support traditional marital arrangements (Su-Russell and Sanner, 2023; Shen and Jiang, 2022).

For those with traditional views of marriage, childbearing is not only a personal choice but also a family duty. It is seen as a way for women to fulfil their social roles and to maintain marital stability (Qian and Jin, 2018; Liu, 2023). These normative expectations are consistent with the gender system framework, which conceptualises marriage as an institution that organises gendered rights and responsibilities and is closely linked to reproductive intentions (Mason, 2001; McDonald, 2000a; 2000b). However, while marital concepts may influence male and female fertility decisions differently, the study did not find strong evidence of substantial gender differences in how this belief is associated with fertility intentions across survey years, offering limited support for H4 (Tong et al., 2024). This suggests that gender role attitudes affect reproductive decisions differently based on gender, but these differences are not clearly patterned by policy context (Li and Jiang, 2019; Han et al., 2024).

How Traditional Views of Marriage Reduce the Opportunity Cost of Childbearing

For individuals with traditional views of marriage, women's career development is seen as a secondary goal. As a result, childbearing is perceived as less disruptive to their career plans (Hakim, 2000; Hakim, 2003). This is different from trends in Western countries. For instance, in the Nordic countries, the link between marriage and childbearing is weak due to strong social welfare systems that allow women to pursue personal goals outside of marriage (Esping-Andersen, 2009; Goldscheider et al., 2015). However, in China, marriage remains a vital source of social identity (Gu, 2022; Blair and Madigan, 2021), with those holding traditional marriage views more likely to report having children to meet social expectations (Su-Russell and Sanner, 2023; Ye, 2023).

Additionally, the economic stability symbolised by marriage can also influence fertility decisions (Zheng et al., 2016). In China, marriage is often linked to a

reallocation of family resources, such as housing support and help from extended family networks (Deng et al., 2023; Zhang et al., 2022). This makes those with traditional views believe that marriage provides not only emotional support but also economic security, corresponding with lower perceived risks of childbearing (Qian and Jin, 2018; Feng et al., 2024).

Limitations of Traditional Views of Marriage and Challenges of Modernity

However, this traditional view faces challenges in modern society. The regression analysis in this study shows that highly educated women have lower fertility intentions, and this pattern persists across survey years (Chen, 2022; Zhang and Zhao, 2023). This suggests that, although marriage remains symbolically linked to childbearing within cultural norms, factors such as job pressures and workplace discrimination continue to constrain the range of reproductive options available to women (Cooke and Zhao, 2021; He et al., 2023; Du, 2023).

Government policy discourse forms part of the institutional context in which the relationship between marriage and childbearing is articulated (Lowndes, 2019). The two-child policy's advocacy not only highlights the importance of childbearing for national development but also subtly links happy families with having children (Zeng and Hesketh, 2016; Zhang et al., 2024). Policy messaging emphasises women's roles as mothers but neglects issues such as workplace support and shared childcare responsibilities (Huang and Jin, 2022; Leng and Kang, 2022). This focus makes those with traditional views of marriage see childbearing as a vital part of marital happiness, corresponding with higher reported fertility intentions (Zhou, 2019; Li and Jiang, 2019).

In China, the two-child policy does not rely on coercion but frames childbearing as part of marital happiness through the promotion of traditional marriage values (Jiang and Liu, 2016; Milwertz, 1996). This ideological shaping makes those with traditional views of marriage more likely to respond positively to policy incentives (Shen and Jiang, 2022), corresponding with higher reported fertility intentions (Feng et al., 2024; Jing et al., 2022).

The Fertility Dilemma for Modern Marriage Perspectives

In contrast, individuals who support a modern view of marriage tend to see it as a personal choice rather than a social duty (Van de Kaa, 2002; Lesthaeghe, 2014). This study found no significant increase in fertility intentions among this group, suggesting that they do not necessarily link marriage with childbearing (Sobotka and Beaujouan, 2014; Bernhardt et al., 2016).

Firstly, for those with modern views of marriage, childbearing is no longer seen as an inevitable outcome of marriage but rather as part of individual life planning (Zaidi and Morgan, 2017; Han and Brinton, 2022). Without adequate social support, these individuals are more likely to delay or forgo childbearing to focus on personal development (Brinton and Oh, 2019; Fleckenstein et al., 2023). Secondly, the conflict between workplace demands and family responsibilities further reduces their desire to have children (Liu, 2023; Xiao and Wu, 2022). Women who support gender equality in marriage tend to prioritise career development (Hakim, 2000; Qing, 2020). In the absence of effective workplace support policies, they are more cautious in making reproductive decisions (McDonald, 2006; Han et al., 2024).

Summary

This study found that those who hold traditional views of marriage have significantly higher fertility intentions than those with modern views (Blair and Madigan, 2021; Li and Jiang, 2019). This suggests that the concept of marriage remains a crucial factor in influencing fertility intentions (Qian and Jin, 2018; Zhou, 2019). Temporal differences in these associations provide partial support for H2, although the patterns appear more strongly linked to underlying cultural norms than to identifiable policy effects (Ye, 2023; Su-Russell and Sanner, 2023).

However, the sustainability of this approach is questionable. Experience in Western countries suggests that the close link between marriage and childbearing may weaken as societies evolve (Lesthaeghe, 2014; Van de Kaa, 2002; Goldscheider et al., 2015). If societal views on marriage change in China without corresponding social support policies, it may become difficult to sustain higher fertility rates (McDonald, 2006;

Balbo et al., 2013). Moreover, approaches that rely solely on traditional marital expectations may worsen gender inequality, forcing women to choose more starkly between marriage and career (Cooke and Zhao, 2021; Liu, 2023; Blau and Kahn, 2017).

Therefore, if future population policies aim to raise fertility rates, they must go beyond relying on traditional marriage concepts. Policies need to focus on promoting gender equality and building social support systems (McDonald, 2000a; McDonald, 2013; Fraser, 1994). For instance, better childcare support policies (Deng et al., 2023; Zhang and Emery, 2023), gender-friendly workplace environments (He et al., 2023; Huang and Jin, 2022), and encouraging men to take on more childcare responsibilities are essential (Kan and Hertog, 2017; Kato et al., 2018). Only when marriage is no longer seen as the sole source of women's happiness can childbearing become a voluntary choice for a wider range of people, rather than a decision driven by societal expectations (Esping-Andersen, 2009).

5.2.4 Gender Role 4: Female employees should be dismissed first in economic downturns

This study found that individuals who agreed with the notion that women should be laid off first during economic downturns had significantly higher fertility intentions than those who disagreed (Blau and Kahn, 2017; Gao et al., 2024). This finding supports the H1 hypothesis and highlights how workplace gender inequality is associated with distinct reproductive attitudes. When people accept that women hold a secondary position in the job market, childbearing is often seen as more compatible with traditional divisions of labour (Becker, 1985; Ji et al., 2017). This reflects the reality that, despite progress in women's education and employment, society still prioritises men's job opportunities to maintain the existing economic and gender order (Cooke and Zhao, 2021; Liu and Zuo, 2023).

This finding aligns with Marxist feminist theory, which argues that women's reproductive and childcare roles are structurally marginalised in capitalist economies,

corresponding with a higher likelihood of withdrawal into domestic roles during economic crises (England, 1992; England, 1993). Also, Confucian gender ideology and gender system theory emphasise the persistence of norms that associate men with breadwinning roles and women with caregiving roles (Li, 2000; Mason, 2001; Kan and Hertog, 2017). These frameworks help explain why beliefs favouring men's job protection during downturns correspond with higher fertility intentions (Adisa et al., 2019; Shaopeng, 2016).

However, the regression results show that employment status does not significantly affect fertility intentions, suggesting that reproductive decisions reflect interactions between gender norms and broader structural constraints (Šobot, 2021; Balbo et al., 2013; Liu and Marois, 2024).

Economic Crises and Gendered Reproductive Choices

Earlier chapters discussed how labour market structures and gender norms shape subjective norms related to work and family (Becker, 1985; Ji et al., 2017; Adisa et al., 2019). When individuals believe that women are more vulnerable to job loss, they may view childbearing as more compatible with women's expected social roles (Geng, 2022; Gao et al., 2024). During economic recessions, society tends to exclude women from the workforce to reduce competition (Cooke and Zhao, 2021; Liu and Zuo, 2023). This not only undermines women's economic independence but also reinforces the idea that childbearing is the default option for women (Budig and England, 2001; Correll et al., 2007). Thus, instead of reducing gender inequality in the workplace, policies may be associated with patterns in which women orient towards childbearing as a reasonable exit strategy during times of economic hardship (Shaopeng, 2016; Liu, 2023). These patterns may provide an interpretive context for understanding why individuals who endorse this belief report higher fertility intentions, providing partial support for H2 as a period difference rather than a policy effect (Feng et al., 2024; Hudde, 2016).

However, this finding contradicts Becker's human capital theory, which suggests that as women gain more education and economic status, their willingness to have children should decrease due to the direct conflict between childbearing and career

advancement (Becker and Lewis, 1973; Becker and ebrary, 1991). In contrast, this study found that those who believe women should be laid off first during economic crises are more likely to have children. This suggests that in China, women's reproductive choices are associated not only with career development but also by deeper structural gender inequalities (England, 1992; Blau and Kahn, 2017). When the workplace becomes more hostile to women, childbearing is perceived by society and individuals as a reasonable fallback option rather than something that competes with career advancement (Du, 2023; He et al., 2023; Wu and Yan, 2025). In the Chinese context, cultural norms that link women's value to family roles may outweigh economic opportunity costs for those who endorse traditional gender beliefs (Li, 2000; Ye, 2023; Zhang et al., 2024).

Structural Sexism and Fertility Intentions

With the solidification of gender structures, women's career development is constrained by both marriage and childbearing decisions (Cooke and Zhao, 2021; Liu, 2023). Fertility decisions are associated not only with personal choices but also by systemic factors in labour market institutions and social norms (McDonald, 2000a; Mason, 1997). When the idea that 'Female employees should be dismissed first in economic downturns' prevails, it implies that women's value in the workplace is more precarious than men's (Gao et al., 2024; He et al., 2023). As a result, childbearing is seen as a more socially acceptable pathway within prevailing gender norms (Ye, 2023; Ji et al., 2017).

This phenomenon illustrates how gendered labour market expectations can shape individual assessments of reproductive choices (Brinton and Oh, 2019; Fleckenstein et al., 2023). This study suggests that these associations persist across survey years and remain embedded in broader structural constraints (Goldscheider et al., 2015). China's two-child policy does not directly engage with this structural contradiction and operates in ways that are more compatible with traditional gender views, under which childbearing is more readily regarded as an alternative to career development during times of economic uncertainty (Huang and Jin, 2022; Zhang et al., 2024).

The government's fertility policies operate within these gendered labour market

structures but have not been accompanied by substantial changes in institutional conditions that shape work-family conflicts, ensuring an equal distribution of childcare responsibilities (McDonald, 2006; Esping-Andersen, 2009). In contrast, China's two-child policy relies mainly on women to bear childbearing and childcare responsibilities, while men's roles as economic providers remain unchanged (Leng and Kang, 2022; Sun and Zhou, 2022; Zhang et al., 2024).

How Those Who Identify with Gender Equality Adjust Fertility Strategies

Unlike those with traditional gender attitudes, individuals who support gender equality tend to focus more on career advancement (Brinton and Oh, 2019; Qing, 2020). However, constraints in workplace practices and persistent gendered expectations may make this group more cautious about childbearing (Han et al., 2024; Goldscheider et al., 2015).

Firstly, the motherhood penalty in the workplace creates significant barriers for women seeking promotions (Correll et al., 2007; Budig and England, 2001). Studies show that women often face lower incomes and limited career progression after having children (Budig, 2014; Du, 2023; Sun and Zhou, 2022). Secondly, economic uncertainty intensifies women's concerns about career prospects. When individuals realise that 'Female employees should be dismissed first in economic downturns' they may respond by reducing childbearing to enhance their workplace competitiveness (He et al., 2023; Gao et al., 2024). This strategic adjustment reflects a strategic response to structural constraints behind fertility decisions rather than merely personal preferences (Mason, 1997; McDonald, 2000a).

Structural Contradictions and Policy Sustainability

This study found significant differences in how fertility intentions differ among individuals with different gender views. Fertility intentions increased among those with traditional gender attitudes, while there was no significant change among those who support gender equality (Li and Jiang, 2019; Li et al., 2021; Zhang et al., 2024). This trend may be associated with the persistence of existing gender inequalities if broader labour market structures remain unchanged (Goldscheider et al., 2015;

England, 2010). If women continue to be the primary group targeted for layoffs during economic downturns, childbearing will become increasingly gendered (He et al., 2023; Gao et al., 2024), making women less competitive in the job market (Budig and England, 2001; Du, 2023).

Moreover, the sustainability of these patterns is questionable. If the government does not take measures to reduce workplace gender discrimination and address structural constraints (Cooke and Zhao, 2021; Geng, 2022), maintaining high fertility rates may become increasingly challenging in the long term (McDonald, 2006; Balbo et al., 2013).

Summary

This study found that individuals who agreed that women should be laid off first during economic downturns had significantly higher fertility intentions than those who disagreed (He et al., 2023; Gao et al., 2024). This suggests that workplace gender inequality is associated with attitudes that make traditional family roles appear more viable, thereby shaping fertility intentions (Brinton and Oh, 2019; Ji et al., 2017). Economic crises make it easier for society to push women towards childbearing and childcare roles rather than keeping them in the workforce (Budig and England, 2001; Liu and Marois, 2024). This trend aligns with Marxist feminist theory, which argues that women's reproductive choices are shaped not only by personal preferences but also by the capitalist economic system and structural gender inequality (England, 1992; Fraser, 1994).

The two-child policy has not effectively reduced workplace gender discrimination but has remained closely aligned with the traditional gender division of labour (Huang and Jin, 2022; Leng and Kang, 2022). As a result, those with traditional gender beliefs are more likely to report childbearing intentions as a response to economic instability (Li and Jiang, 2019; Han et al., 2024). These findings reflect enduring gender norms and labour market conditions that continue to influence reproductive decision-making (Goldscheider et al., 2015; McDonald, 2000a). While this approach may correspond with higher fertility intentions for some groups, its long-term sustainability is doubtful if gender inequality is not addressed (McDonald, 2006; Balbo et al., 2013).

For future population policies to succeed in raising fertility rates, the government should adopt more proactive measures. This includes promoting parental leave for men, encouraging shared childcare responsibilities (Kato et al., 2018; Kim, 2018), and reducing workplace gender discrimination (Cooke and Zhao, 2021; Geng, 2022). Relying solely on traditional gender roles will not achieve lasting increases in fertility (Esping-Andersen, 2009; Rindfuss and Choe, 2016). Addressing gender inequality in both the workplace and family sphere is essential for creating an environment where childbearing is a voluntary choice rather than a fallback option during economic crises (Fraser, 1994; McDonald, 2013).

5.2.5 Gender Role 5: Spouses should share household chores equally

This study found that individuals who agreed that 'Spouses should equally share household chores' had significantly lower fertility intentions than those who disagreed. This result suggests that, although gender equality has progressed in the public sphere (such as education and employment) (Liu, 2017; Ministry of Education, 2022), the gender division of labour within families remains strongly associated with reproductive decisions (Kan and Hertog, 2017; Ji et al., 2017). Those who support an equal division of household chores not only did not show a higher desire to have children but actually had lower fertility intentions compared to those who disagreed (Kim, 2018). This contradicts the assumption that gender equality promotes fertility (McDonald, 2000a; Goldscheider et al., 2015).

Furthermore, temporal differences in the association between egalitarian attitudes and fertility intentions do not show substantial changes across survey years (Li et al., 2021). This suggests that gender equality has not penetrated family structures deeply enough to positively impact fertility rates (Esping-Andersen, 2009; England, 2010). In the absence of institutional support, individuals who support gender equality continue to face higher childcare costs and thus report lower fertility intentions (Balbo et al., 2013; Rindfuss and Choe, 2016). Without addressing the gender division of labour within families, it is challenging to increase fertility rates through simple policy measures (McDonald, 2006; Hudde and Engelhardt, 2020).

How the Gender Imbalance in Household Chores Affects Reproductive Decisions

This study supports a key theory: while those who support gender equality may enjoy greater autonomy in the workplace (Liu, 2017; Blau and Kahn, 2017), they still face higher reproductive costs at home due to the unequal distribution of childcare responsibilities (Ji et al., 2017; Kan and Hertog, 2017). Even in families with strong gender equality values, women still perform most of the unpaid childcare work (Song and Lai, 2020; Deng et al., 2023). This makes those who support gender equality more cautious about having children, as they must consider not only the impact of childbearing on their careers (Budig and England, 2001; Du, 2023) but also the additional burden from the unequal division of household chores (Kim, 2018; Hudde and Engelhardt, 2020).

This phenomenon is particularly evident in East Asian societies. For example, in South Korea and Japan, despite rising female labour force participation, women still bear most housework and childcare responsibilities, with many reporting delayed or avoided childbearing (Brinton and Oh, 2019; Kato et al., 2018; Kim, 2018). This study also suggests that although some individuals expect a more equal division of household chores, the persistence of traditional gender roles is associated with a greater inclination to report fewer children (Han et al., 2024; Li et al., 2021).

This trend aligns with the theory of the second gender revolution (Goldscheider et al., 2015). According to this theory, the first gender revolution involved women's progress in education and employment, while the second requires gender equality within families (Esping-Andersen, 2009; England, 2010). When the second revolution is incomplete, fertility rates are likely to remain low or continue declining (Lesthaeghe, 2014; Zaidi and Morgan, 2017). This study supports the view that China has made progress towards gender equality in the public sphere but has not achieved true equity in the gender division of labour at home (Ji et al., 2017; Song and Lai, 2020), which aligns with the lower fertility intentions observed among those who endorse equal sharing of household tasks (Kan and Hertog, 2017; Han et al., 2024).

Policy Context and Gendered Constraints on Fertility Intentions

Government policies promoting childbearing may operate within existing gendered family structures without substantially changing them (Fraser, 1994; Daly, 2020). In China, despite policies encouraging childbearing, there has been insufficient support for sharing childcare responsibilities more equally (Leng and Kang, 2022; Wu and Yan, 2025). For instance, after the introduction of the two-child policy, there was no better workplace support (Huang and Jin, 2022; Xiao and Wu, 2022). As a result, childcare responsibilities still fall disproportionately on women (Wang et al., 2022; Liu and Marois, 2024). This policy design may discourage childbearing among individuals who prioritise fairness in the distribution of household labour, as they are more aware of the unfair burden of childcare (Bernhardt et al., 2016; Hudde, 2016).

Those who support an equal division of household chores tend to be more concerned about fairness and resource distribution within the family compared to those with traditional gender views (Qing, 2020; Boehnke, 2011). In the absence of adequate policy support, they are more likely to recognise the unfair burden of childcare and thus make more cautious reproductive decisions (Berrington and Pattaro, 2014). Additionally, a gender-equal approach to childcare often requires higher economic and social resources, such as high-quality childcare services and flexible work arrangements, which are not sufficiently provided in practice (Beijing Municipal People's Government, 2020; General Office of the State Council, 2019).

In Western countries, those with higher fertility rates tend to have stronger social support systems (Rindfuss and Choe, 2016; Sobotka and Beaujouan, 2014). For instance, public childcare services in France and Sweden allow families to share childcare responsibilities more equitably (Esping-Andersen, 2009; Petersen et al., 2014). However, in China, the lack of a robust social support system makes it difficult for those who support gender equality to decide to have children (Zhang and Emery, 2023; Deng et al., 2023). The shortage of childcare resources and flexible work arrangements puts greater pressure on women, even when both spouses want to share childcare equally (Prickett and Augustine, 2021; Baker and Milligan, 2016). This structural inequality leads to more cautious decision-making among those who support gender equality (Fleckenstein et al., 2023; Lowndes, 2019).

How Gender Equality Affects Fertility Intentions

This study found that although gender role attitudes influence reproductive decisions differently for men and women, the study did not observe substantial gender differences across survey periods in the association between this belief and fertility intentions. This suggests that under the current policy framework, any increase in fertility is more closely associated with traditional gender orientations than with egalitarian ones (Han et al., 2024; Hudde and Engelhardt, 2020).Unlike those with traditional gender views, individuals who support gender equality are more likely to consider long-term childcare responsibilities when making reproductive decisions (Bernhardt et al., 2016; Kato, 2018). Given the current socio-economic environment, the lack of public support means that childbearing continues to pose significant barriers to women's career advancement (Correll et al., 2007; Budig, 2014). As a result, they are more likely to have fewer children to maintain their quality of life and competitiveness at work (Brinton and Oh, 2019; Liu and Marois, 2024).This phenomenon contrasts with studies of fertility rates in Europe (Sobotka and Beaujouan, 2014; Testa, 2012). It is argued that fertility can only increase when social benefits, workplace support, and shared family responsibilities are improved simultaneously (McDonald, 2013; Daly, 2020). In Nordic countries, those who support gender equality still have a high desire to have children because men are legally required to share childcare responsibilities, such as mandatory parental leave for men (Petersen et al., 2014; Fraser, 1994). However, in China, existing institutional arrangements continue to reflect gendered expectations regarding caregiving (Walby, 2005; Lowndes, 2019), making those who support gender equality more likely to have fewer children to safeguard their career development and quality of life (Zhang et al., 2024; Du, 2023).

Summary

This study found that individuals who agree that 'Spouses should equally share household chores' have significantly lower fertility intentions than those who disagreed. This suggests that gender equality within families has not been truly achieved and remains constrained by traditional gender roles (Ji et al., 2017; Song and

Lai, 2020; Shaopeng, 2016). Fertility incentives under the current policy appear more closely aligned with traditional gender norms than with egalitarian orientations (Zhang et al., 2024; Milwertz, 1996).

This finding implies that without changing the gender division of labour at home, it will be difficult to raise fertility rates through policy incentives alone (McDonald, 2006; McDonald, 2013). In the future, if population policies aim to increase fertility rates, they must move beyond reinforcing traditional gender roles and focus on promoting gender equality and social support systems (Fraser, 1994; Walby, 2005; UN Women, 2019).

For instance, better childcare support policies (General Office of the State Council, 2019; Qijiang District Health Commission, 2022), more gender-friendly workplace environments (National People's Congress, 2022; Gao et al., 2024), and encouraging men to share childcare responsibilities (Kato et al., 2018; Baker and Milligan, 2016) are crucial. Only when gender equality within families is fully realised can childbearing become a voluntary choice for a wider range of people rather than a decision constrained by structural inequalities (Crenshaw, 1991; Walby et al., 2012; United Nations, 2015).

5.3 Fertility Intentions under Structural and Policy Constraints

5.3.1 Why Fertility Intentions Remained Low during the Two-Child Policy Period

The two-child policy did not coincide with a sustained increase in fertility rates and was accompanied by declines in fertility intentions in some groups (Feng et al., 2024; Jing et al., 2022). High childcare costs, intense workplace competition, and a shortage of childcare resources are associated with delayed or avoided childbearing (Balbo et al., 2013; Zeng and Hesketh, 2016). Earlier chapters highlighted that women continue to shoulder a disproportionate share of unpaid domestic labour, which is associated with higher perceived opportunity costs of childbearing (Ji et al., 2017; Kan and Hertog, 2017). These structural constraints provide an interpretive explanation for why fertility intentions have not consistently risen following the introduction of the

policy (Jiang and Liu, 2016; Quan, 2023). Therefore, the two-child policy has not reduced the cost of childbearing but has been associated with a higher perceived burden on individual families, particularly women, by raising the opportunity costs of having children (Liu and Marois, 2024; Sun and Zhou, 2022).

Countries with high fertility rates generally have strong social welfare systems (Esping-Andersen, 2009; Rindfuss and Choe, 2016). However, China's two-child policy lacks adequate economic support, placing the responsibility for childbearing primarily on individuals, especially women (Leng and Kang, 2022; Zhang et al., 2024). This stands in contrast to the more comprehensive institutional frameworks observed in high-fertility welfare states, where childcare costs are partly socialised rather than borne entirely by families (Petersen et al., 2014; Daly, 2020).

Additionally, the two-child policy operated within existing gender and socioeconomic inequalities rather than reducing them (Li and Bian, 2022; Walby et al., 2012). Individuals with fewer resources may find childbearing more compatible with their circumstances; for instance, unemployed women are often forced to return to domestic roles due to economic instability (Xiao and Wu, 2022; Shaopeng, 2016). Whereas those facing higher career penalties or childcare burdens may be more cautious; for instance, middle-class women delay having children because of workplace competition and childcare conflicts (Correll et al., 2007; Brinton and Oh, 2019). These patterns reflect the differentiated ways structural conditions shape fertility intentions across groups, with women affected by both gender and class inequalities (Crenshaw, 1991; Cooke and Zhao, 2021). Rather than providing real freedom of choice, the two-child policy is associated with differentiated decision-making patterns among women based on their circumstances (Qian and Jin, 2018; Shen and Jiang, 2022).

As a result, the two-child policy has not increased fertility rates overall and the distribution of fertility intentions continues to reflect underlying gender and class differences (National Bureau of Statistics of China, 2022; Jiang et al., 2023). Women with traditional gender views, the unemployed, or agricultural workers report higher intentions to have additional children (Li and Jiang, 2019; Zhu, 2019), while middle-

class and gender-equal individuals tend to have fewer children under current structural constraints (Chen, 2022; Fleckenstein et al., 2023). This highlights both the limitations of the policy and the broader structural context in which fertility intentions are formed (McDonald, 2006; Šobot, 2021).

5.3.2 The Paradox of Education and Childbearing

This study found that highly educated individuals, especially women, have lower fertility intentions compared to those with lower education levels (Berrington and Pattaro, 2014; Zhang and Zhao, 2023). The two-child policy has not significantly increased the fertility intentions of highly educated women (Chen, 2022; Gao and Wang, 2025). This suggests that while education improves women's career choices and social independence (Liu, 2017; Blau and Kahn, 2017), the lack of corresponding institutional support for work-family balance contributes to lower fertility intentions among this group (Brinton and Oh, 2019; Han and Brinton, 2022).

In China, although women's education levels have risen (Ministry of Education, 2022), the gender division of labour within families has not changed accordingly (Ji et al., 2017; Kan and Hertog, 2017). As a result, highly educated women still face difficulties in making reproductive decisions (Liu and Marois, 2024; Qin et al., 2022). The two-child policy encourages childbearing but does not offer corresponding social support, leaving fertility decisions shaped by employment structures and family responsibilities (Wu and Yan, 2025; Leng and Kang, 2022). This makes those who support gender equality more likely to delay or reduce childbearing (Bernhardt et al., 2016; Anderson and Kohler, 2013).

The study shows that the two-child policy did not correspond with higher fertility intentions among highly educated respondents. The policy's incentives fail to reach highly educated women, reflecting a lack of solutions for the fertility challenges faced by this group (Zheng et al., 2016; Nie et al., 2023). Without achieving gender equality within families, higher education levels alone cannot raise fertility rates (McDonald, 2013; Esping-Andersen, 2009). To balance gender equality with higher fertility rates,

policies should focus on family-level reforms, promoting shared childcare responsibilities for men (Kato et al., 2018; Baker and Milligan, 2016), and improving social childcare support systems (Zhang and Emery, 2023; Deng et al., 2023).

5.3.3 Intergenerational Differences in Fertility Intentions

This study found significant differences in fertility intentions among different age groups. Younger generations show a continuous decline in fertility intentions, and the two-child policy has not effectively improved their fertility rates (Jiang et al., 2023; Feng et al., 2024). This phenomenon is consistent with the Second Demographic Transition (SDT) theory (Van de Kaa, 2002; Lesthaeghe, 2014). According to this theory, as societies modernise, individual values shift from traditional family and fertility priorities to self-fulfilment and improved quality of life (Zaidi and Morgan, 2017; Van de Kaa, 2004).

The younger generation in China is more focused on career development, personal freedom, and consumer experiences, viewing childbearing as a high-cost and high-risk decision (Blair and Madigan, 2021; Su-Russell and Sanner, 2023). Those born in the 1990s and later tend to delay marriage and childbearing, prioritising personal growth and quality of life (Gu, 2022; Eurostat, 2026). This shift in values makes it difficult for traditional family-oriented policies to motivate them (Han and Brinton, 2022; Feeney, 1994).

In contrast, those born in the 1970s have relatively higher fertility intentions. This could be because they are in a more stable economic phase, face less financial pressure from raising children, and can benefit from some policy advantages (Zheng et al., 2016; Bao et al., 2017). However, the post-90s generation faces a tougher socio-economic environment, with high housing prices, high childcare costs, and unstable employment (Fleckenstein et al., 2023; Lim, 2021). This makes them more likely to delay or forgo childbearing to reduce financial and lifestyle pressures (Nie et al., 2023; Xu et al., 2023).

Intergenerational differences in attitudes towards marriage and childbearing also

contribute to declining fertility intentions among young people (Piotrowski et al., 2019; Takeuchi and Tsutsui, 2016). The younger generation, especially women, is more likely to accept gender equality and be critical of traditional family structures (Wang et al., 2024; Ye, 2023). Since the two-child policy operated within existing gender norms, young people tend to avoid the additional family responsibilities and workplace risks associated with having children (Liu, 2023; He et al., 2023).

Therefore, the two-child policy has limited effects on improving fertility intentions among the younger generation (Zeng and Hesketh, 2016). Addressing intergenerational differences in fertility intentions requires deeper reforms, such as financial support (Shanghai Municipal People's Government, 2016), workplace-friendly policies (National People's Congress, 2022; Guangdong Provincial People's Congress Standing Committee, 2016), and gender equality measures (United Nations, 2015; Walby, 2005), rather than relying solely on traditional cultural appeals or administrative orders (Ren, 2020; Quan, 2023).

5.3.4 The Two-Sided Nature of Government Intervention

This study found that the two-child policy was associated with higher fertility intentions in some subgroups but did not correspond with higher intentions overall. In theory, government fertility policies should serve as tools for population regulation and social support by reducing the costs of childbearing (McDonald, 2006; Rindfuss and Choe, 2016). However, the two-child policy has not strengthened public trust in the government's support system or provided substantial institutional guarantees (Zeng and Hesketh, 2016; Jiang and Liu, 2016). Instead, it may have been viewed by some respondents with caution (Wang et al., 2022; Liu et al., 2023).

The study found that individuals who supported government intervention in fertility policies actually had lower fertility intentions, which is contrary to the policy's goals. This suggests that the public perceives the government's fertility policy as insufficient to address the structural barriers that shape reproductive decisions (Qian and Jin, 2018; Tong et al., 2024). This disconnect between policy intent and public response

reflects a broader pattern in which top-down demographic interventions fail to engage with the lived realities of individuals navigating gendered labour markets and family responsibilities (Milwertz, 1996; Zhang et al., 2024).

For instance, South Korea's persistently low fertility rate illustrates this problem (Anderson and Kohler, 2013; Fleckenstein et al., 2023). Despite government incentives for childbearing, workplace gender discrimination has made women reluctant to have children (Brinton and Oh, 2019; Chung and Gupta, 2007). Similarly, the short-term stimulus effects of the two-child policy in China are limited (BBC News, 2021; Ren, 2020). Without accompanying social support measures, fertility rates are likely to continue to decline (Balbo et al., 2013).

Future fertility policies should focus on social structural reforms. Economic incentives (Shanghai Municipal People's Government, 2016; Guangdong Provincial People's Congress Standing Committee, 2016), workplace-friendly policies (He et al., 2023; Huang and Jin, 2022), and gender equality measures (Walby, 2005; United Nations, 2015) are needed to reduce the costs of childbearing. Improving public childcare (General Office of the State Council, 2019; Beijing Municipal People's Government, 2020), flexible work systems, and encouraging men to take on more childcare responsibilities (Kato et al., 2018; Zhang and Emery, 2023) could help to mitigate the economic and career impacts of childbearing on women (Budig and England, 2001; Petersen et al., 2014), thus promoting sustainable fertility growth (Esping-Andersen, 2009; Daly, 2020).

5.4 Conclusion

This study shows that the two-child policy did not correspond with substantial increases in fertility intentions overall. The associations observed in this study indicate that fertility intentions remain closely linked to gender role attitudes and structural conditions rather than to policy incentives alone. The short-term effects of the policy are limited, and in the absence of broader structural reforms, fertility rates are likely to remain low in the long term.

Future fertility policies should prioritise building comprehensive social support systems to ensure sustainable fertility growth. This includes better childcare support, gender-friendly workplace policies, and encouraging a more equal division of childcare responsibilities between men and women. Only through these reforms can fertility decisions become a voluntary choice for a wider range of individuals rather than a decision constrained by economic pressures and structural inequalities.

6. Conclusion: Gender Role Attitudes and Fertility Intentions in the Two-Child Policy Context

6.1 Introduction

This chapter concludes the thesis by synthesising the empirical findings and theoretical discussions presented in the preceding chapters. Rather than assessing the causal impact of the universal two-child policy, this study has examined how fertility intentions and gender role attitudes are patterned across survey years during the policy implementation period. By situating fertility intentions within broader cultural norms, gender ideologies, and socio-economic constraints, the thesis highlights how reproductive decision-making in contemporary China is closely associated with and embedded within enduring structural and normative factors rather than policy incentives alone.

Building on the descriptive and regression analyses in Chapter 4 and the interpretive discussion in Chapter 5, this chapter revisits the central research questions and hypotheses, summarising how gender role attitudes are associated with fertility intentions across different social groups and survey periods. Particular attention is paid to the selective alignment between traditional gender norms and higher fertility intentions, as well as the consistently lower intentions observed among individuals with more egalitarian views. These patterns highlight potential limitations of fertility policies that operate without addressing gendered divisions of labour in both the household and the labour market.

This concluding chapter proceeds in four steps. First, it summarises the main empirical findings concerning the relationship between gender role attitudes and fertility intentions during the two-child policy period. Second, it discusses how these findings contribute to existing theoretical debates on gender systems, fertility transitions, and policy effectiveness. Third, it reflects on the structural constraints, such as work–family conflict, labour market inequality, and limited childcare provision, that continue to shape reproductive intentions. Finally, the chapter outlines

the key contributions, limitations, and policy implications of the study, emphasising the need for gender-responsive institutional reforms to support sustainable fertility outcomes in China.

6.2 Fertility Intentions Across Survey Years During the Two-Child Policy Period

The main objective of this study was to examine how fertility intentions and gender role attitudes vary across the periods in which the two-child policy was implemented. The findings suggest that the two-child policy period did not coincide with a consistent rise in fertility intentions and that individuals with traditional gender beliefs reported higher intentions across survey years. In contrast, respondents with more egalitarian attitudes consistently reported lower fertility intentions.

This finding supports the H1 hypothesis, which states that gender role attitudes influence fertility intentions, with those holding traditional gender beliefs being more likely to have two or more children. The study provides partial support for H2, as some associations between gender role attitudes and fertility intentions differ across survey years. However, these temporal patterns are not uniform across all attitudes.

Moreover, the study reveals that patterns of association between egalitarian attitudes and fertility intentions remained broadly stable across years. Individuals who support gender equality in the division of labour within families show lower fertility intentions, suggesting that gender equality has not yet been effectively integrated into family structures in China and these attitudes continue to correspond with lower stated fertility intentions.

Regarding the H4 hypothesis on whether patterns differ for men and women across survey years, the study found no strong evidence of substantial gender-based differences. This suggests that variation in intentions appears more closely related to gender role attitudes than to gender alone. This finding implies that fertility intentions remain closely patterned by structural conditions, irrespective of policy periods.

6.3 Gender Role Attitudes and Reproductive Decision-Making

Regarding the H3 hypothesis about gender differences in the association between gender role attitudes and fertility intentions, the study found only modest variation, and gender differences were generally not statistically significant. However, traditional attitudes such as the belief that *'men are more capable than women'* were consistently associated with higher fertility intentions across multiple survey years.

This finding aligns with the broader literature on gender systems, which highlights how gendered expectations continue to shape attitudes toward family formation and the perceived feasibility of having additional children .

6.4 Socio-Economic Structural Constraints on Fertility Decision-Making

This study examines how gender role attitudes and structural conditions are associated with stated fertility intentions across survey years. However, fertility intentions are not only related to gender perceptions but are also constrained by broader socio-economic factors.

In modern society, fertility decisions are influenced by multiple factors, including housing costs, workplace competition, and social security (Balbo et al., 2013; Fleckenstein et al., 2023; Rindfuss and Choe, 2016). The findings suggest that structural pressures such as financial costs, work–family conflicts and limited childcare provision continue to be closely associated with fertility intentions in ways that are not easily shifted by changes in birth policy. Thus, future fertility policies should focus on economic incentives, workplace-friendly reforms, and measures to promote gender equality to ensure sustainable fertility growth.

6.5 Structural Constraints Observed During the Two-Child Policy Period

The study highlights that structural conditions, including unequal caregiving responsibilities and limited institutional support, continue to shape fertility intentions

during the two-child policy period. For instance, the lack of comprehensive childcare services and flexible work arrangements is associated with a continued disproportionate burden of childbearing on women.

Moreover, patterns of fertility intentions remained higher among respondents with traditional attitudes and lower among egalitarian respondents, suggesting that policies operating without broader social reforms may have limited effects. This outcome reflects enduring gendered structures within households and the labour market, which continue to influence reproductive planning regardless of policy context.

6.6 Conclusion

This study concludes that fertility intentions remained relatively stable across survey years, with traditional gender role attitudes consistently associated with higher intentions and egalitarian views associated with lower intentions. In the absence of progress on these underlying issues, changes in stated intentions are likely to remain limited.

To achieve sustainable fertility growth, future policies must focus on building comprehensive social support systems that promote gender equality both at home and in the workplace. Reductions in the financial and social burdens of childbearing, alongside institutional reforms, may contribute to conditions under which a balance between fertility and social equity can be pursued.

6.7 Research contributions

Drawing upon the findings of this study, several key contributions emerge, highlighting its conceptual and empirical insights. These contributions advance understanding of how gender role attitudes are associated with fertility intentions during the period in which the two-child policy was implemented but also provide a foundation for future research and policy development. The main innovations of this

study are as follows:

6.7.1 Understanding Gendered Patterns in Fertility Intentions

Previous research on fertility policies has primarily focused on economic incentives (e.g., childcare subsidies, tax benefits) and demographic determinants (e.g., age, education, income) (Becker and Lewis, 1973; Blake, 1981; Zheng et al., 2016), while overlooking the role of gender ideology in shaping fertility-related attitudes (Mason, 1997; McDonald, 2000a). This study reveals that traditional gender role attitudes are consistently associated with higher fertility intentions, whereas egalitarian attitudes correspond to lower fertility intentions across survey years (Li and Jiang, 2019; Li et al., 2021; Han et al., 2024). This finding highlights the value of incorporating gender ideology into analyses of fertility intentions, extending earlier work that emphasises structural and economic determinants.

Furthermore, the findings indicate that associations between gender attitudes and fertility intentions remain differentiated, suggesting that analyses of fertility behaviour benefit from integrating normative and structural perspectives. The limits of policies operating in context of unequal domestic and professional gender roles highlight that individuals with egalitarian attitudes express consistently lower fertility intentions, while those endorsing more traditional attitudes report higher intentions. These findings contribute to scholarship stressing the relevance of gender-fertility analyses and align with calls for a broader understanding of how workplace protections, parental leave reforms and childcare support interact with gender norms.

6.7.2 Differentiated Associations between Gender Attitudes and Fertility Intentions

The study documents variation in fertility intentions across gender role attitudes, indicating that respondents who endorse traditional norms report higher intentions across survey years, whereas those who support gender equality do not show comparable levels.

These findings challenge the assumption that fertility policies are 'gender-neutral' or 'universally effective' (Lowndes, 2019; Verloo, 2007), instead demonstrating that policies function selectively in ways that are consistent with pre-existing gender structures (Fraser, 1994; Daly, 2020). The lower intentions among egalitarian respondents highlight the continued relevance of gender norms in shaping fertility preferences, where household labour expectations and work–family pressures remain significant considerations (Kan and Hertog, 2017; Hudde and Engelhardt, 2020). By embedding reproductive responsibility within traditional gendered labour divisions, the policy does not directly engage with many of the structural factors commonly identified as underlying declining fertility rates, including workplace discrimination (He et al., 2023; Gao et al., 2024), economic instability (Fleckenstein et al., 2023; Correll et al., 2007), and unequal domestic labour distribution (Ji et al., 2017; Song and Lai, 2020).

As a result, this study contributes empirical evidence showing differentiated patterns of fertility intentions across normative groups (Šobot, 2021; Goldscheider et al., 2015), highlighting the need for fertility interventions that are not only economically viable but also socially inclusive (United Nations, 2015; UN Women, 2019). Without gender-responsive policymaking (Walby, 2005; Walby et al., 2012), future fertility policies are unlikely to achieve sustained demographic growth, as they will continue to alienate individuals who reject traditional gender roles (McDonald, 2013; Han and Brinton, 2022). To enhance policy effectiveness, future research may explore how institutional reforms, childcare resources and workplace conditions interact with gender norms (Esping-Andersen, 2009; Rindfuss and Choe, 2016; Zhang and Emery, 2023), reflecting suggestions in prior scholarship (Balbo et al., 2013; McDonald, 2000a).

6.7.3 A Multi-Level Perspective on Policy Context, Cultural Norms and Individual Attitudes

This study draws on a three-level analytical perspective, specifically policy, culture and individual, to interpret variations in fertility intentions observed across the survey

years.

At the policy level, the two-child policy relies heavily on institutional arrangements relevant to work–family balance, such as childcare availability and parental leave structures, remain important contextual factors shaping how individuals evaluate the feasibility of childbearing. Measures such as mandatory paternity leave, workplace-friendly policies, and expanded public childcare resources are largely absent, placing the primary responsibility for child-rearing on families, particularly women (General Office of the State Council, 2019; Leng and Kang, 2022; Wu and Yan, 2025). This is consistent with a family-based approach to childcare, within which women may continue to experience tensions between employment and caregiving roles (Esping-Andersen, 2009; Liu and Marois, 2024; Deng, Zhou and Hu, 2023).

At the cultural level, norms associated with Confucian gender ideology and culturally persistent expectations surrounding motherhood continue to inform attitudes toward reproductive behaviour. This provides a useful interpretive context for understanding why caregiving remains strongly gendered in social expectations, with implications for how individuals perceive the compatibility of childbearing with other life aspirations (Su-Russell and Sanner, 2023; Zhou, 2019).

At the individual level, the study found significant variations in fertility responses based on gender role attitudes. Individuals with traditional gender beliefs reported higher fertility intentions, whereas those who support gender equality were consistently less likely to express intentions for additional children across the survey periods. This suggests that fertility intentions differ systematically across normative orientations (Hudde, 2016; Hudde and Engelhardt, 2020), which may help explain lower intentions among highly educated respondents (Zhang and Zhao, 2023; Gao and Wang, 2025) and those with egalitarian attitudes (Bernhardt et al., 2016; Brinton and Oh, 2019).

This framework offers a conceptual lens for understanding why fertility intentions remained relatively stable overall despite policy changes, and provides theoretical guidance for future policy design. To ensure effectiveness, future policies may benefit from incorporating broader gender equality and work–family support measures,

including increasing men's participation in childcare (Kato et al., 2018; Baker and Milligan, 2016), enhancing workplace protections for women (National People's Congress, 2022; He et al., 2023), and expanding public childcare services (Beijing Municipal People's Government, 2020; Zhang and Emery, 2023). Only when childcare responsibilities are equitably distributed within society can individuals evaluate reproductive decisions with reduced opportunity costs and constraints (Fraser, 1994; Daly, 2020), as highlighted in comparative research on family policy and fertility (Petersen et al., 2014; Fleckenstein et al., 2023).

6.7.4 The 'Paradox' of Gender Equality in China

This study found that individuals who identify with gender equality in China tend to have lower fertility intentions, which differs from some expectations associated with the Second Gender Revolution theory. According to this theory, as gender equality expands into the domestic sphere, men's participation in household and childcare duties should increase, which may support higher fertility intentions (England, 2010; Bernhardt et al., 2016). However, this study reveals that gender equality progress in China remains confined to the public sphere (Liu, 2017; Ministry of Education, 2022), while household labour distribution remains largely unchanged (Ji et al., 2017; Song and Lai, 2020).

Individuals who support gender equality are more aware of the unequal division of family responsibilities, which is associated with a more cautious approach to reproductive decisions (Kan and Hertog, 2017; Kim, 2018). Moreover, China's lack of institutional support for working parents exacerbates these concerns (Leng and Kang, 2022; Deng et al., 2023), which may help explain the lower fertility intentions observed among individuals with egalitarian attitudes (Li et al., 2021; Han et al., 2024).

This finding challenges simplistic assumptions about a uniform positive association between gender equality and fertility intentions. Instead, it suggests that if gender equality does not extend into the household and is not accompanied by broader social

support structures, fertility intentions may remain low among individuals who prioritise equitable divisions of domestic labour. Only when childbearing responsibilities are fairly shared at the societal level can gender equality contribute to conditions in which fertility intentions are not constrained by unequal caregiving burdens (Fraser, 1994; Petersen et al., 2014; Daly, 2020).

In conclusion, this study contributes to research on gender, family roles and fertility by providing empirical evidence on how gender role attitudes correspond to fertility intentions during the two-child policy period. Addressing the gendered nature of fertility incentives (Zhang et al., 2024; Milwertz, 1996) and promoting a more balanced distribution of domestic responsibilities (Kato et al., 2018; Baker and Milligan, 2016) may be important considerations for future policy discussions (McDonald, 2006; United Nations, 2015).

6.8 Research Limitations

Although this study provides a systematic examination of fertility intentions and their associations with gender role attitudes during the period of the two-child policy, several limitations remain:

6.8.1 Data Limitations

While this study utilises data from the China General Social Survey (CGSS), which is highly representative, its data collection period is limited, covering only 2015, 2017, 2018, and 2021. As a result, it is difficult to describe longer-term trends in fertility intentions beyond the years observed. Moreover, the CGSS data relies on cross-sectional surveys, preventing the study from tracking dynamic changes in individual fertility intentions over time. To address this issue, future research should incorporate longitudinal data to analyse fertility intention trends over an extended period.

6.8.2 Limitations of Variable Measurement

This study adopts gender role attitudes as the core explanatory variable, but its measurement may be influenced by the social desirability bias, this means that some respondents might provide socially acceptable answers rather than their true beliefs. Furthermore, while fertility intention is an important prospective indicator of reproductive decision-making, it does not perfectly predict actual fertility behavior. The gap between stated intentions and actual fertility outcomes suggests that future research should integrate fertility behavior data to examine how reported intentions are translated into subsequent childbearing and to deepen understanding of the relationship between policy context, attitudes and realised fertility.

6.8.3 Complexity of the Policy Implementation Context

The impaction of the two-child policy need to be understood in relation not to is shaped not only by policy design but also by broader socioeconomic factors, family structure changes, and population mobility. This study does not fully explore regional disparities in policy implementation, particularly regarding differences in economic development, social welfare systems, and childcare support policies across local governments. Such variations may be associated with differing fertility intentions and behaviours in different provinces and cities. Future studies should analyse provincial- or city-level data to examine regional differences in fertility intentions and their association with gender role attitudes across diverse socioeconomic environments.

6.9 Policy Recommendations

Based on the findings of this study, the following policy recommendations are proposed:

First, promoting gender equality in family and childcare responsibilities. To promote gender equality within the family and alleviate the burden of childcare, the

government should expand men's participation in childcare through institutional reforms (Kato et al., 2018; Baker and Milligan, 2016; Connell, 2011). One effective measure would be legislating mandatory and non-transferable paternity leave, following the Nordic model, to ensure the redistribution of childcare responsibilities (Petersen et al., 2014) and reduce the negative impact of childbearing on women's career development (Budig and England, 2001; Du, 2023).Additionally, flexible working systems should be encouraged, including remote work policies and flexible working hours, allowing parents to better balance career development and family responsibilities (Prickett and Augustine, 2021; Blau and Kahn, 2017). Expanding childcare services for infants aged 0-3 is also crucial to reducing childcare time costs for families, particularly for highly educated and working women (Zhang and Emery, 2023; Deng et al., 2023), preventing them from lowering fertility intentions due to childcare burdens (Balbo et al., 2013; Gao and Wang, 2025).

Second, reducing the negative impact of childbearing on women's careers. The government should improve workplace environments by strengthening gender equality legislation and strictly enforcing anti-discrimination regulations, ensuring that companies cannot refuse to hire, lower wages, or dismiss women due to childbirth (He et al., 2023; Gao et al., 2024; Geng, 2022). Furthermore, 'childbirth-friendly business' certifications could incentivise companies to provide better job security for mothers (Leng and Kang, 2022; Huang and Jin, 2022).Support for mothers returning to work should also be enhanced through vocational training programs and career advancement opportunities, mitigating the 'motherhood penalty' in employment (Budig and England, 2001; Correll et al., 2007; Sun and Zhou, 2022). The government can also offer tax incentives or subsidies to encourage companies to establish in-house childcare centers, improving childcare accessibility for working women (Deng et al., 2023; Liu and Marois, 2024; Xiao and Wu, 2022).

Third, reforming public discourse on fertility policies. Existing fertility policy debates have often been criticised for paying insufficient attention to gender equality and reproductive rights (Zhang et al., 2024; Milwertz, 1996; Palmer, 2007). The government should shift its fertility promotion strategies to highlight men's childcare responsibilities (Connell, 2011; Kato et al., 2018), workplace support (He et al.,

2023), and social welfare (Esping-Andersen, 2009; Fraser, 1994) to attract a broader group of individuals to consider childbearing (McDonald, 2013; Walby, 2005).Additionally, diverse family structures should be recognised within fertility policies (Crenshaw, 1991; Walby et al., 2012), ensuring that dual-income, single-parent, and non-traditional families receive equal support (Daly, 2020; Lowndes, 2019). Avoiding a narrow link between fertility and traditional marriage models (Gu, 2022; Blair and Madigan, 2021) will increase policy inclusivity.

Finally, establishing a long-term and stable population policy framework. Frequent adjustments to fertility policies create uncertainty and negatively impact individual fertility decisions (Jiang and Liu, 2016; Bao et al., 2017; Yang, 2023). The government should develop a long-term population development strategy (Ren, 2020), avoiding short-term economic or political-driven policy shifts. Furthermore, fertility policies should not operate in isolation but should be coordinated with social welfare programs (Esping-Andersen, 2009; Daly, 2020), housing policies (Fleckenstein et al., 2023; Lim, 2021), and education reforms (Veeck et al., 2003) to establish a comprehensive childbirth-friendly environment (McDonald, 2006; Rindfuss and Choe, 2016), thereby lowering structural barriers to childbearing (Balbo et al., 2013; Šobot, 2021).

Appendices

Appendix 1 Detailed information on variables used in this study (Based on CGSS 2015, 2017, 2018 and 2021)

Variables	Descriptions	Old Values	New Values	Type
		Dependent Variable		
Expected_children A37_1. If there are no policy restrictions, how many children would you want to have?	Expected number of children	Range from 0 to 100 97: No preference 98: Don't know 99: Refuse to answer	Range from 0 to 100 0: One or no children 1: Two or more children	Binary
		Independent Variables		
Gender_role1 A42_1. Do you agree that men should prioritise their careers, while women should prioritise their families?	Men prioritise careers, women families.	1: Strongly disagree 2: Somewhat disagree 3: Neither agree nor disagree 4: Somewhat agree 5: Strongly agree 98: Don't know 99: Refuse to answer	1: Disagree *(1: Strongly disagree; 2: Somewhat disagree; 3: Neither agree nor disagree)* 2: Agree *(4: Somewhat agree; 5: Strongly agree)*	Binary
Gender_role2 A42-2 Do you agree that men are inherently more capable than women?	Men are more capable than women.	1: Strongly disagree 2: Somewhat disagree 3: Neither agree nor disagree 4: Somewhat agree	1: Disagree *(1: Strongly disagree; 2: Somewhat disagree; 3: Neither agree nor disagree)*	Binary

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		5: Strongly agree	2: Agree *(4: Somewhat agree; 5: Strongly agree)*	
		98: Don't know		
		99: Refuse to answer		
Gender_role3 A42-3 Do you agree that marrying well over career success for a woman?	Marrying well over career success for a woman.	1: Strongly disagree 2: Somewhat disagree 3: Neither agree nor disagree 4: Somewhat agree 5: Strongly agree 98: Don't know 99: Refuse to answer	1: Disagree *(1: Strongly disagree; 2: Somewhat disagree; 3: Neither agree nor disagree)* 2: Agree *(4: Somewhat agree; 5: Strongly agree)*	Binary
Gender_role4 A42-4 Do you agree that in times of economic downturn, female employees should be dismissed first?	Female employees should be dismissed first in economic downturns.	1: Strongly disagree 2: Somewhat disagree 3: Neither agree nor disagree 4: Somewhat agree 5: Strongly agree 98: Don't know 99: Refuse to answer	1: Disagree *(1: Strongly disagree; 2: Somewhat disagree; 3: Neither agree nor disagree)* 2: Agree *(4: Somewhat agree; 5: Strongly agree)*	Binary
Gender_role5 A42-5 Do you agree that household chores should be equally shared between spouses?	Spouses should equally share household chores.	1: Strongly disagree 2: Somewhat disagree 3: Neither agree nor disagree 4: Somewhat agree 5: Strongly agree 98: Don't know 99: Refuse to answer	1: Disagree *(1: Strongly disagree; 2: Somewhat disagree; 3: Neither agree nor disagree)* 2: Agree *(4: Somewhat agree; 5: Strongly agree)*	Binary

Control Variables

Gender A2. What is your gender?	Gender	1: Male 2: Female	0: Female 1: Male	Binary
Birth A3_1. What year were you born?	Birth cohort	18 years old and above	1: 19790s 2: 1980s 3: After 1990s	Categorical
Education A7a. What is your current highest educational level?	Education level	1: No formal education 2: Old style private school 3: Primary school 4: Junior middle school 5: Vocational high school 6: High school 7: Secondary technical school 8: Technical school 9: Specialised college (adult higher education) 10: Specialised college (regular higher education) 11: University (adult higher education) 12: University (regular higher education) 13:Graduate and higher 14: Other (Specify_____)	1: Pre-Secondary education *(1: No formal education; 2: Old style private school; 3: Primary school)* 2: Secondary education *(4: Junior middle school; 5: Vocational high school; 6: High school; 7:Secondary technical school; 8: Technical school)* 3: Higher education *(9: Specialised college (adult higher education); 10: Specialised college (regular higher education); 11: University (adult higher education); 12:University (regular higher education); 13: Graduate and higher)*	Categorical
	Work status	1: Engaged in non agriculture work		Categorical

Variable / Question	Description	Original categories	Recoded categories	Type
Work A58. What is your working experience or employment status?		2: Engaged in agriculture now, but used to do non agriculture work 3: Engaged in agriculture now, never do non agriculture work 4: Unemployed now, and only engaged in agriculture before 5: Unemployed now, but used to do non agriculture work 6: Never get a job	1: Non-agriculture work *(1: Engaged in non agriculture work)* 2: Agriculture work *(2: Engaged in agriculture now, but used to do non agriculture work; 3: Engaged in agriculture now, never do non agriculture work)* 3: Unemployed *(4: Unemployed now, and only engaged in agriculture before; 5: Unemployed now, but used to do non agriculture work; 6: Never get a job)*	
Current_children A68: How many children do you have (including stepchildren, if no, please fill in zero)?	Existing number of children	0: None 99: Refuse to answer	Range from 0 to 100 1: No children 2: One child 3: Two or more children	Categorical
Marital_status A69: What's your marital status now?	Marital status	1: Unmarried 2: Cohabiting 3: First marriage with spouse 4: Remarried with spouse 5: Separated, not divorced 6: Divorced 7: Widowed	1: First marriage with spouse *(3: First marriage with spouse)* 2: Other *(1: Unmarried; 2: Cohabiting; 4: Remarried with spouse; 5: Separated, not divorced; 6: Divorced; 7: Widowed)*	Binary
Education_partner A72. What is the highest educational level of your spouse or partner currently (Including that you are attending now)?	Education level	1: No formal education 2: Old style private school 3: Primary school 4: Junior middle school	1: Pre-Secondary education *(1: No formal education; 2: Old style private school; 3: Primary school)*	Categorical

		5: Vocational high school 6: High school 7: Secondary technical school 8: Technical school 9: Specialised college (adult higher education) 10: Specialised college (regular higher education) 11: University (adult higher education) 12: University (regular higher education) 13:Graduate and higher 14: Other (Specify_____) 98: Don't know 99: Refuse to answer	2: Secondary education *(4: Junior middle school; 5: Vocational high school; 6: High school; 7:Secondary technical school; 8: Technical school)* 3: Higher education *(9: Specialised college (adult higher education); 10: Specialised college (regular higher education); 11: University (adult higher education); 12:University (regular higher education); 13: Graduate and higher)*	
Work_partner A81. What is the working experience or employment status of your spouse or partner?	Partner's work status	1: Engaged in non agriculture work 2: Engaged in agriculture now, but used to do non agriculture work 3: Engaged in agriculture now, never do non agriculture work 4: Unemployed now, and only engaged in agriculture before 5: Unemployed now, but used to do non agriculture work 6: Never get a job 98: Don't know 99: Refuse to answer	1: Non-agriculture work *(1: Engaged in non agriculture work)* 2: Agriculture work *(2: Engaged in agriculture now, but used to do non agriculture work; 3: Engaged in agriculture now, never do non agriculture work)* 3: Unemployed *(4: Unemployed now, and only engaged in agriculture before; 5: Unemployed now, but used to do non agriculture work; 6: Never get a job)*	Categorical

Fairness A35: Generally speaking, do you think the contemporary society is fair or not?	Perceived fairness	1: Completely unfair 2: Somewhat unfair 3: Neither fair nor unfair 4: Somewhat fair 5: Completely fair 98: Don't know 99: Refuse to answer	0: Unfair *(1: Completely unfair; 2: Somewhat unfair; 3: Neither fair nor unfair)* 1: Fair *(4: Somewhat fair; 5: Completely fair)*	Binary
Happiness A36. Generally speaking, do you think your life is happy or not?	Perceived happiness	1: Completely unhappy 2: Somewhat unhappy 3: Neither happy nor unhappy 4: Somewhat happy 5: Completely happy 98: Don't know 99: Refuse to answer	0: Unhappy *(1: Completely unhappy; 2: Somewhat unhappy; 3: Neither happy nor unhappy)* 1: Happy *(4: Somewhat happy; 5: Completely happy)*	Binary
Govt_intervene_childrenA47. The number of children one has is a personal matter, and the government should not intervene. Do you agree?	Opinion on government intervention in number of children	1: Strongly disagree 2: Somewhat disagree 3: Neither agree nor disagree 4: Somewhat agree 5: Strongly agree 98: Don't know 99: Refuse to answer	0: Disagree *(1: Strongly disagree; 2: Somewhat disagree; 3: Neither agree nor disagree)* 1: Agree *(4: Somewhat agree; 5: Strongly agree)*	Binary

Data source: CGSS 2015, 2017, 2018 and 2021.

Appendix 2 CGSS 2015-2021: Descriptive Analysis of Fertility Expectations

Variables	2015 Mean	N=2998 Std. Dev.	2017 Mean	N=3649 Std. Dev.	2018 Mean	N=3756 Std. Dev.	2021 Mean	N=1586 Std. Dev.	Min	Max
Expected number of children	0.793	0.405	0.767	0.423	0.760	0.427	0.776	0.417	0	1
Gender	0.422	0.494	0.431	0.495	0.433	0.496	0.401	0.490	0	1
Birth cohort	1.522	0.632	1.591	0.652	1.597	0.673	1.706	0.715	1	3
Education level	2.043	0.658	2.095	0.684	2.068	0.690	2.090	0.667	1	3
Work status	1.584	0.812	1.542	0.809	1.538	0.807	1.610	0.851	1	3
Existing number of children	2.280	0.615	2.335	0.615	2.367	0.614	2.414	0.614	1	3
Marital status	1.034	0.182	1.052	0.221	1.049	0.216	1.035	0.185	1	2
Partner's education level	2.045	0.648	2.102	0.671	2.087	0.677	2.096	0.660	1	3
Partner's work status	1.508	0.783	1.445	0.766	1.427	0.754	1.382	0.730	1	3
Perceived fairness	0.451	0.498	0.422	0.494	0.462	0.499	0.578	0.494	0	1
Perceived happiness	0.817	0.387	0.812	0.391	0.823	0.382	0.840	0.367	0	1
Opinion on government intervention in number of children	0.317	0.465	0.346	0.476	0.348	0.476	0.406	0.491	0	1
Men prioritise careers, women families.	0.539	0.499	0.468	0.499	0.433	0.496	0.410	0.492	0	1
Men are more capable than women.	0.392	0.488	0.351	0.477	0.322	0.467	0.313	0.464	0	1
Marrying well over career success for a woman.	0.429	0.495	0.412	0.492	0.376	0.484	0.367	0.482	0	1
Female employees should be dismissed first in economic downturns.	0.102	0.303	0.079	0.270	0.062	0.242	0.068	0.252	0	1
Spouses should equally share household chores.	0.262	0.440	0.256	0.436	0.257	0.437	0.172	0.378	0	1

Data source: CGSS 2015, 2017, 2018 and 2021.

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