Gender and Generational Family Change: A Factorial Survey Experiment

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Abstract

This study investigates the evolving dynamics of family ideals in the face of low fertility, changing partnership structures, and the rise in women's education across eight industrialized countries. Drawing on key theoretical concepts such as the second demographic transition and the gender revolution, we incorporate insights from social psychology theory to investigate the transformation of family preferences through an intergenerational identity perspective. To elucidate the multifaceted nature of family choices, we employ an innovative factorial survey experiment. Our findings highlight an identity motivated shift in family ideals, particularly among highly educated women, who actively distinguish their family preferences from the parental generation. They increasingly prioritize family communication, financial stability, and gender equity over traditional markers like marriage and child-rearing. Crucially, we do not find the same transformation among men. This study underscores the interplay between socio-economic development and changing family values, pointing to a distinct intergenerational identity difference, especially among women, a feature likely to have profound implications for future demographic trends.

1 Introduction

Low fertility, shifting partnership dynamics, and the rise in women's education have become noteworthy. Starting from the theoretical concepts of the second demographic transition, the gender revolution, and the literature on work-family conflict, this study reassesses the premise of stable family preference by incorporating an intergenerational identity approach to the gender perspective. We borrow insights from social psychology theory and research to examine the motivation behind the changes in family patterns. We harness a new survey featuring a factorial survey experiment (FSE) that presents families with randomized characteristics that vary on eight distinct dimensions. Moreover, the survey captures a comprehensive set of demographic details. Our sample encompasses

respondents from eight industrialized nations: Italy, Spain, Norway, Japan, Korea, urban China, Singapore, and the USA. These countries differ in their family norms, labor market structures, developmental paths, and to some extent, fertility rates—though all fall below the replacement level. Through the family vignettes presented in the factorial survey experiment, we elucidate the multifaceted nature of family ideals thereby establishing how individuals, across gender and education lines, navigate the trade-offs involved when expressing their family preferences.

2 Theoretical Background

2.1 Demographic Trends and Theoretical Paradigms

The declining fertility trend in many advanced countries raises the pressing question of its possible reversal. Classical theories, such as Becker's New Home Economics (Becker 1974) and the Second Demographic Transition, suggest a bleak future. They propose that as societies evolve and women become more educated, the life-course priorities shift, leading to smaller families and lower fertility rates. As societies progress and fundamental needs are met, and as women gain more education and marketable skills, individuals—especially women—alter the way they structure their life trajectories. Priorities and timing regarding work, partnership, parenthood, and family life undergo transformation. More and more women pursue higher education and consider lifelong employment an integral part of their lives (Goldscheider and Kaufman, 2006). Society as a whole shifts towards later and smaller families. A clear consequence of these changes is low fertility, even reaching the lowest-low fertility levels, with total fertility rates falling below 1.3 (Kohler et al., 2002; Billari and Kohler, 2004).

Since women's changing role in the society has been a major force behind the many changes in family patterns, gender focused theories have proposed that as society and family arrangement become more gender equal, fertility rate will eventually bounce back to the replacement level (Mcdonald, 2000; Anderson and Kohler 2015; Esping-Andersen and Billari, 2015). However, a crucial aspect of this presumed revival of fertility depends upon the assumption that family preferences concerning partnership, parenthood, and family size remain stable (Esping-Andersen and Billari, 2015).

While scholars argue that the preferences for stable partnerships, and a two-child family ideal persist (Anderson, 2016; Karney and Bradbury, 2020; Sobotka and Beaujouan, 2014; Thornton and Young-DeMarco, 2001), marriage is undergoing a process of deinstitutionalization, gradually replaced by cohabitation (Cherlin, 2004; Robbins, Dechter, and Kornrich, 2022). Additionally, the reliability of fertility desires as a predictor of actual fertility behavior has been questioned (Toulemon, 1996; Toulemon and Testa, 2005; Morgan and Bachrach, 2011; Bachrach and Morgan, 2013). Recent studies indicate that fertility desires are highly contextual and fluid (Trinitapoli and Yeatsman, 2018; Yeatsman, Trinitapoli and Garver, 2020). Qualitative research reveals that having two children is often taken for granted, seen as a choice among various other options and constraints (Brinton et al., 2018; Lebano and Jamieson, 2020). Thus, family preferences are evolving, especially concerning the importance attached to marriage and childbearing.

2.2 Intergenerational Identity and Changing Family Norms

Over the past decades, women have made significant advances in higher education. Notably, there are now more women than men with tertiary education across Europe, East Asia, and Anglo-Saxon countries (DiPrete and Buchman, 2013; De Hauw et al., 2017; Van Bavel, 2012; Esteve et al., 2012, 2016). Yet, despite their increased earning potential and growing contributions to households, women continue to encounter inequalities both in the job market and within the households. This inequality intensifies once women become mothers. While the gender gap in employment and earnings between men and childless women has diminished, a persistent gap remains between women with children and those without across most Western countries (Budig and England, 2001; England, 2005; Budig et al., 2012, 2016). Within households, women still shoulder a disproportionate share of household chores, even when they are employed or contribute equally to household income (Greenstein 2000; Hook 2010; Sayer 2010, 2016; Schneider 2011; Campaña et al. 2023). Once they become mothers, the time spent on household and childcare tasks widens further, primarily due to the larger increase in the time women devote to childcare tasks (Craig and Mulan, 2010; Pailhe, Solaz and Stanfors, 2021).

The potential conflict between work and child-rearing has been found to dampen and delay fertility (Shreffler Perretti and Drago, 2010; Brinton et al., 2018), and extensive research has explored the bargaining angle or "doing gender" perspective within household to address this conflict (Becker, 1969; West and Zimmerman 1987). The focus of this conflict has predominantly been between men (husband) and women (wife) (Mcdonald, 2000; Anderson and Kohler 2015). But the family process is not only between two partners; it is also inter-generational. Family spans and connects generations. The norms and values surrounding family life are passed down from previous generations. With regard to the conflict between work and child-rearing, as couples form families and confront unfair arrangements both inside and outside of the family realm, is gender-related tension the only factor at play here?

This study contributes to the ongoing debate of changing family by integrating insights drawn from social psychology. Social psychology research shows that people identify more strongly with groups associated with higher social status (Becker et al., 2014). Easterbrook, Kuppens and Manstead (2019) find that respondents from higher social classes consider identities that are indicative of their social class, such as education, occupation, and income, as more integral to their sense of self than identities based on basic demographics like gender or religion. Consequently, for both highly educated male and female, their level of educational attainment plays a crucial role in shaping their identity, potentially even more so than their gender. Although both female and male college graduates have benefited from meritocracy throughout their educational journeys, their experiences after graduating diverge significantly. Men could continue to harvest the benefit of meritocracy and higher education attainment in their career advancement and family forming. The status-quo norm, the legacy from the last generation benefits instead of burdening them. In contrast, women are confronted with trade-offs between career and family that their parents may not have encountered, and are often unrelated to their merit or qualifications. It is not surprising if they see themselves as a new generation distinct from the parental generation given the unique challenges they encounter in balancing career and family responsibilities.

Social identity theories (Tajfel and Turner, 1979; Turner et al., 1987) also suggest that people's self-concept is heavily influenced by the social groups they associate with.

When a particular group membership becomes salient, individuals are motivated to see their own group (ingroup) more favorably than the other group (outgroup), and often behave in the prototypical way of the ingroup. The prototypical behavior of the highly educated revolves around leveraging their skills to advance their careers and realize their full potential. In contrast, the prototypical behavior of the parental generation is for women to prioritize family, especially in roles as wives and mothers, over other pursuits. As women grapple with the choice between work and family, the difference between them and the previous generation becomes more pronounced and salient. Consequently, this heightened awareness of intergenerational identity difference motivates the new generation of women to adopt behaviors that set them apart from the previous generation. This inter-generational identity difference potentially reinforces and amplifies the low fertility preference of the new generation of women.

Building on the premise of highly contextual family preference and the intergenerational identity difference, we use a novel experimental method to study the ideal family within a controlled context. Our aim is to explore the relative importance individuals place on various aspects of family life, including fertility and marriage. We go beyond solely assessing respondents' own views on the ideal family, and delve into how they contrast and compare these views with those of the parental generation. We sample a diverse set of eight countries: Italy, Spain, Norway, Japan, Korea, urban China, Singapore, and the USA that vary in family norms, developmental trajectories, and slightly in fertility rates that are all below replacement level. In alignment with the social identity perspective, our research finds that women, especially those highly educated, actively differentiate their family preferences from the parental generation. This difference is particularly evident in their recalibration of the relative importance of fertility, income, and communication. They prioritize good family communication, adequate income, and gender equity over parenthood, while recognizing that their parental generation held a contrasting preference. Although men also acknowledge some degree of intergenerational difference in family preferences, it does not lead to a significant shift in priorities. This social identity approach reveals the intergenerational tension in family dynamics for women. To be who they are, the new generation of highly educated women are motivated to renovate family life away from the previous generation. What used to be the core tenants of family must change.

3 Method

3.1 Survey design

The survey was administered online through Qualtrics in December 2021. It comprised the factorial survey experiment (FSE) and closed-ended questions regarding participants' demographic and socioeconomic backgrounds. Participants began with the demographic and socioeconomic questions before progressing to the vignettes.

3.2 Vignette and experiment design

The study utilized eight vignette factors, including union status, fertility, income level, community respect, family communication style, external family contact frequency, gender role, and work-life balance. Each factor ranged from 2 to 4 levels, summarized in

Table 1. The order of factors was randomized for participants but remained consistent for each individual. An illustrative vignette is as follows:

"In the following you will find a description of Lisa and Robert's family. Lisa and Robert are both around 45 years old. Lisa and Robert are cohabiting. Lisa and Robert have three children. Lisa and Robert's combined income is lower than the country average. The family is not well respected in their community. Each parent and the children discuss their daily life infrequently, and they do not feel comfortable expressing their feelings and raising disagreements with each other. Lisa and Robert talk with their respective parents frequently and their children talk with all grandparents frequently as well. While Robert focuses on his career, Lisa focuses on taking care of the family and household responsibilities. Lisa does not feel conflicted between her family responsibilities and a potential career, while Robert feels conflicted between his career and the possibility to help out with family responsibilities."

Given the vast number of potential vignette profiles (2304 in total), we employed the %mktex and %mktblock macros in SAS (Kuhfeld, 2002) to select a d-efficient subsample. Following the general recommendation of presenting each participant with 5-10 vignettes, we subdivided a subsample of 576 vignettes into 96 blocks of 6 vignettes each. With a D-efficiency is 99.88, which surpasses the commonly accepted value of 90 (Auspurg and Hinz 2015), we ensured adequate statistical power to achieve unbiased estimates for the experiment. Participants were randomly assigned a block of vignettes. After each vignette, they responded to statements on a slider ranging from 0 (Strongly Disagree) to 10 (Strongly Agree), gauging their agreement with statements such as "This describes a successful family" and "This describes a family that people in my parents' generation would consider successful." Participants were required to spend a minimum of 15 seconds on each vignette page before progressing, and the time they spent on each vignette was recorded.

3.3 Sample

We recruited participants from Kantar, our panel participant provider, using quota sampling based on age and gender for each country. The distribution was: 25% 25-39 years female, 25% 25-39 years male, 25% 40-50 years female, and 25% 40-50 years male. We recruited varying number of participants from each country (1226, 1060, 1045, 1085, 314, 1508, 1107, 1585 for urban China, Italy, Japan, Korea, Norway, Singapore, Spain and the US respectively). The average educational level is a short-cycle tertiary education (5.09 on the ISCED 1-8 scale). Specifically, the shares with an educational level of bachelors degree or higher constituted 51.84% of the Japanese participants, 52.82% of the Singaporean participants, 66.72% of the Korean participants, 67.85% of the Chinese participants, 32.89% of the Norwegian participants, 43.36% of the Italian participants 54.54% of the Spanish participants, and 32.99% of the American participants. Monthly household income was adjusted to represent a three-person household in euro value, ranging from 2356 euros for Italy to 6761 euros for Singapore.

3.4 Analytical Strategy

We use the pooled sample of eight countries to estimate a three-level random intercept model, with vignette responses nested in individual participant in country:

$$Rating_{ijc} = \alpha_{jc} + \sum_{i=1}^{\infty} +\beta_i VignetteFactor_{ijc} + e_c + u_{jc} + v_{ijc}$$
 (1)

 $Rating_{ijc}$ is the dependent variable measuring the extent to which a respondent rates the specific family profile presented as "successful". $Vignette_Factor_{ijc}$ are experimental variables representing different family dimensions of the vignette i for respondent j in country c. In addition, α_{jc} is the random intercept; e_c is the country-level error term; u_{jk} is the respondent-level error term; and v_{ijc} is the vignette-level error term.

4 Result

4.1 Comparing Family Ideals of Men and Women and Perceived Intergenerational Differences

Graph 1 displays the experimental estimates for women and men. Women consider marriage, parenthood (1-child relative to no children $\beta = 0.29$), and an egalitarian gender role (relative to commonplace gender role $\beta = 0.33$) as the least crucial aspects of the ideal family. In contrast, good communication ($\beta = 1.04$), an income higher than the average, community respect, work-family balance for both spouses, and frequent contact with (grand)parents are deemed more important. Men generally share these values, except they place slightly less emphasis on communication than women. Women give good communication more weight than men do ($\beta = 1.04$ vs. $\beta = 0.66$).

When assessing generational differences in family ideals, both men and women perceive shifts in the importance of having children, good communication, and gender roles. Especially for women, the trade-offs between these aspects are more pronounced when comparing their preferences to those of the previous generation. For instance, while women prioritize communication and income over parenthood, they believe their parents' generation held the opposite view. That is, anchoring their response between family ideal and family ideal for their parent's generation, women see themselves as more distinct in terms of family values compared to their parent's generation. Specifically, the importance of marriage and parenthood is being traded off for good communication and egalitarian gender role.

More importantly, the relative importance of having children compared to other dimensions of family life is perceived to be different between the two generations. For women considering their parents' generation, having two or three children ($\beta=0.91$ compared to having no children) is seen as the most crucial aspect of family life. This is followed by a higher-than-average income ($\beta=0.84$ compared to lower than average), community respect ($\beta=0.72$), and good communication ($\beta=0.64$). In contrast, for female participants themselves, having one child ($\beta=0.29$) or two children ($\beta=0.38$) is less important than any other appreciated aspects of family life, and the most valued aspects are good communication ($\beta=1.04$) and higher than average income ($\beta=0.74$). In other words, women not only regard what used to be the "core" of family – marriage and children – peripheral, but also see such difference in family values as what sets apart them from the parental generation. As for men, they also see decreased importance

of parenthood and increased importance of communication and egalitarian gender role between generations, albeit to a lesser extent.

While there are notable similarities between males and females regarding their ideal family, differences arise in how they prioritize fertility in comparison to income and gender roles. Women consider parenthood ($\beta=0.29$, one child relative to no children) to be less important than average income ($\beta=0.55$, relative to lower than average income) and egalitarian gender role ($\beta=0.33$, relative to commonplace gender role). Conversely, men assign similar importance to both average and parenthood ($\beta=0.36$ and $\beta=0.48$), both of which are more valuable than egalitarian gender role ($\beta=0.14$). These gender differences extend to the perceived intergenerational variations in the ideal family. Women believe that their parents' generation places a higher value on parenthood compared to income and gender roles. In contrast, men perceive their parents' generation as making a similar ranking, with parenthood placed slightly higher than income. That to be said, for women, having either an average income or adopting egalitarian gender role at home is seen as a prerequisite to parenthood, a perspective that differs from both their parents' generation and that of men.

In short, family is a renovated concept for women for which they set themselves apart from the previous generation. This transformation is characterized by a reduced emphasis on marriage and children and an increased focus on process-oriented aspects, such as effective communication, and gender equity, including work-life balance and egalitarian gender roles. Fertility decline is likely to be slow to rebound, not only because of the peripheral role of parenthood to family ideal but also because it serves as a marker of distinct identity between two generations for women. While navigating family life, women seek to do things differently than the previous generations did. Men also perceive this intergenerational difference, albeit to a lesser extent.

Furthermore, women and men diverge in their prioritization of money, children, and gender role. Women require a stable financial position or fairness in gender roles to become parents. Should either of these conditions changes after having the first child, women are more inclined to stop at having only one child. In contrast, men are less motivated to challenge the established family dynamics shaped by the previous generation.

4.2 The Role of Education in Shaping Gendered Generational Differences

Graph 2 presents results by the level of educational attainment of men and women, with higher education defined as completing ISCED-2011 level 5. Women with higher education don't have significantly different family ideals than those without, except in their views on gender roles. Well-educated women see traditional gender roles (i.e., home-make wife breadwinner husband) as less ideal than those less-educated ones. Further they see commonplace gender role (where women work both at home and outside the home, and men only in the labor market) as less ideal than egalitarian gender role. For highly educated women, financial independence and contribution to the family are more important than fairness since the commonplace gender roles entails double burden for women. Such differences are absent among men.

With regard to perceived intergenerational differences, highly educated women perceive a much larger distance between themselves and parent's generation on marriage (difference in $\beta=0.32$ vs. 0.20), fertility (difference in $\beta=0.71$ vs. 0.37), and communication (difference in $\beta=0.45$ vs. 0.37) than women without higher education. Again,

this educational gradient of the perceived intergenerational difference is absent for men. Highly educated men do now see themselves more different from their parent's generation than their lower educated counterparts.

Among highly educated women, there's a direct trade-off between parenthood and income, as well as between parenthood and communication. Such trade-offs are not as evident among women with lower level of education and among men, regardless of their education level. More specifically, highly educated women value parenthood less than they value average household income (compared to less than average) and less than good communication, and they think the opposite was true for their parent's generation.

Highly educated women are the forerunners in female revolution, but not in the strict gender equality sense. Interestingly, women taking double burden of working and taking care of the family is considered as the least problematic aspect of family life, comparable with being childlessness. Instead, they see a sharp divide in the roles of parenthood, income and communication between themselves and the parental generation. They actively aspire for a family that is not defined by specific outcomes (i.e., fertility) but rather by process (i.e., communication), not defined by status (i.e., marriage or gender role) rather by experience (i.e., work-life balance for both sexes), and not by quantity but by quality (income trumps fertility).

5 Conclusions

Modern family dynamics, especially among highly educated women, are marked by a conscious departure from traditional norms. The emphasis has shifted from predefined outcomes, like fertility, to processes and experiences, such as communication and gender equity. This transformation, however, also uncovers deeper intergenerational tensions, revealing the evolving nature of what constitutes a "family" in today's world.

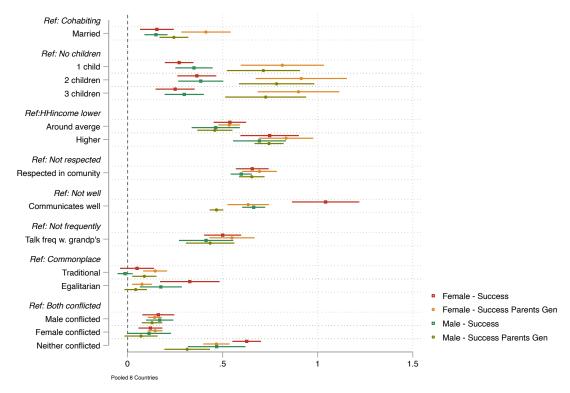
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In conclusion, reversing the decline in fertility rates observed in the countries studied here will likely be challenging, not only because parenthood has become less central to family ideals but also because it serves as a marker of identity for women, distinguishing them from the older generation. As they navigate family life, women seek to do things differently from the prior generation. Men, while perceiving some generational differences, are less inclined to change the status quo.

Table 1: Vignette factors and levels.

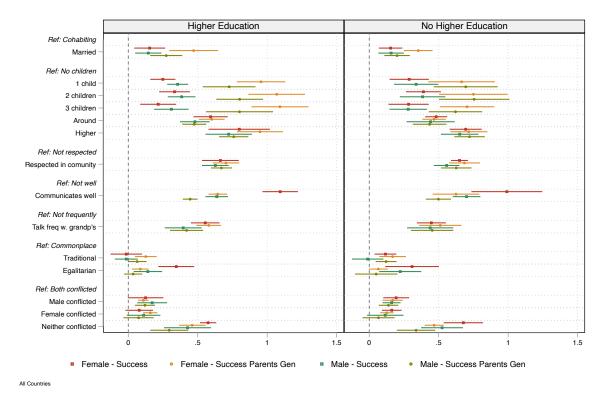
| Factors | # | Content |
|----------------------------|---|---|
| Union status | 2 | Cohabiting Married |
| Fertility | 4 | No children 1 child 2 childden 3 children |
| Household income | 3 | Below average Around average Above average |
| Community respect | 2 | Well-respected Not well-respected |
| Family communication | 2 | Comfortable expressing feelings $\&$ raising disagreements Not Comfortable |
| Contact with extended fam. | 2 | Frequently Not frequently |
| Gender roles | 3 | Traditional Commonplace Egalitarian |
| Work-family balance | 4 | Fem. not conflicted & male conflicted Fem. conflicted & male not conflicted Neither fem. nor male conflicted Both fem. & male conflicted |

Figure 1: Family ideals for respondent and parental generation by gender (Pooled sample of 8 countries).



Note: Estimates from random intercept multilevel linear regression models with weighted observations. Respondents aged 25 to 50. Sample includes respondents form Italy, Spain, Norway, Japan, Korea, urban China, Singapore, and the USA.

Figure 2: Family ideals for respondent and parental generation by higher education attainment by gender (Pooled sample of 8 countries).



Note: Estimates from random intercept multilevel linear regression models with weighted observations. Respondents aged 25 to 50. Higher education is defined as having a tertiary education degree. Sample includes respondents form Italy, Spain, Norway, Japan, Korea, urban China, Singapore, and the USA.