Gendered Family Preferences: Higher Education and Inter-generational Divergence in Eight Low Fertility Countries

Arnstein Aassve[1], Alícia Adsera[2], Letizia Mencarini[1], and Chen Peng[1,*]

[1]DONDENA Center for Research on Social Dynamics and Public Policy, Bocconi University, Milan (IT)

[2]Princeton University, Princeton (USA)

[*]Corresponding author; chen.peng@unibocconi.it

1 Introduction

In the past, the family was constructed upon institutionalized partnerships, kinship, and ancestral lineage, where the emphasis on survival, security, and collective goals took precedence over individual needs (Seltzer, 2019). In stark contrast, the 21st century saw low fertility, shifting partnership dynamics, and the rise in women's education as defining elements. Inspired by Maslow's Needs Theory, who argued that the need for belonging and love is foundational to any higher-order needs, Van de Kaa and Lesthaeghe (1986) extended Inglehart's thesis of individualization, arguing that the conventional expectations and structures of the family, including marriage and parenthood, are in conflict with the higher-order needs of autonomy, self-expression, and self-actualization (Maslow, 1954). Indeed, Cherlin (2004, 2020) argued that the meaning of marriage has evolved over time, transitioning from an institutionalized arrangement dictated by societal norms to a companionate model with well-defined roles, and currently, to an

individualized form that underscores personal choice and self-development. This shift in the meaning of marriage may have elevated its symbolic importance, with marriage now often seen as an expression of love and commitment rather than a necessary prerequisite for starting a family (Noack, Bernhardt and Wiik 2013; Lappegård and Noack, 2015; Perelli-Harris, 2018).

This shift away from traditional benchmarks of family, such as marriage and children, towards an emphasis on qualitative and process-oriented dimensions, is evident in the conscious identity difference between younger and older generations, particularly among women. As socio-economic development progressed, educational expansion empowered a new generation of women with higher education and renewed occupational status (Van Bavel, Schwartz, and Esteve, 2018). But alongside these changes in education and work, persistency in social norms and cultural values introduced a new double burden; women are now expected to balance being dedicated workers and devoted mothers (Epstein et al. 1999; Williams 2001; Hays 1996; Blair-Loy 2003). Essentially, women are now expected to fulfill roles similar to both their mothers and fathers, while inequality persists both at home and in the labor market. Faced with the dilemma of balancing career and family responsibilities, a challenge their parents did not have to the same extent, women — especially those highly educated — see themselves as part of a distinct new generation. Motivated to redefine the meaning of family, they are inclined to lead family lives differently from the previous parental generation.

It is not clear however, how today's generation view family life and how they compare themselves to the parental generation. Moreover, if there are differences, we do not know for which dimensions of family life they would view themselves differently. This study sets out to establish identity formation taking place among women with a view to how they perceive their parental generation. The idea is simple, but powerful: as women catch up with men in terms of education and career aspirations, they may distance themselves from the previous generation more strongly and differently compared to men in terms of what they consider to be an ideal family. The empirical analysis is based on a factorial survey experiment (FSE) that presents family descriptions with randomized

characteristics that vary on eight distinct dimensions. These characteristics (or family dimensions) are marriage, children, household income, cummunication and support, gender roles, work-family conflict, contact with grandparents and community respect. Moreover, the survey captures a comprehensive set of demographic details. Our sample encompasses respondents from eight industrialized societies: 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 according to given characteristics. We first ask them about their own family ideal, for then to ask what would be the family ideal of their parental generation.

In alignment with the social identity perspective, our analysis 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 and marriage, but the characteristic that stands out is the emphasis on communication: they prioritize good family communication over parenthood while recognizing that their parental generation held a contrasting preference. Although men also acknowledge some degree of inter-generational differences in family preferences, it does not lead to a significant shift in priorities. This social identity approach reveals an inter-generational tension in family dynamics for women. To be who they are, the new generation of highly educated women is motivated to renovate family life away from the previous generation.

2 Method

In order to explore these aspects, we design a vignette study where respondents are confronted with family descriptions. They are first asked to rate those descriptions in terms of how successful they are. Next, the same respondents are asked to rate how successful those descriptions are - but in terms of their parental generation. In other

words, respondents give evaluations as for how successful those descriptions are for their parents. We can then compare and contrast how respondents differ with their perception of their parental generation.

2.1 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.

2.2 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.

To test the orthogonality between factors, we first conducted balance check and find that the correlation coefficients between different experimental variables are very close to zero (see Table 1 Appendix). To test the randomization of our experimental design, we find that there are no correlations between experimental variables and respondents' demographic characteristics, indicating that respondents were randomly assigned to rather than self-selected into different vignettes (see Table 2 Appendix). The successful randomization of vignette factors ensures high internal validity of the results and allows us to establish causal relations.

After each vignette, participants responded on a slider ranging from 0 (Strongly Disagree) to 10 (Strongly Agree), to statements such as "This describes a successful family" and "This describes a family that people in my parent's 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.

2.3 Sample

We recruited participants from Kantar, our panel participant provider, using quota sampling based on age and gender for each country. Two age groups - 25-39 years olds and 40-50 years olds - divided by females and males each make up one fourth of the sample. We recruited varying number of participants from each country (1226, 1060, 927, 1085, 314, 1508, 1107, and 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-2011 scale). Specifically, the shares with an educational

level of bachelor's degree or higher constituted 54% of the Japanese participants, 52% of the Singaporean participants, 69% of the Korean participants, 70% of the urban Chinese participants, 42% of the Norwegian participants, 42% of the Italian participants 56% of the Spanish participants, and 44% of the American participants. Monthly household income was adjusted to represent a three-person household in euro value, ranging from 2361 euros for Italy to 6923 euros for Singapore. Cohabitation is common in Europe, ranging from 16% to 27%, less common 6% in the US, and rare in Asia, from 0 to 3%. About 72% of the sample have at least one child, varying from 77% of the participants in China and 71% in the US to 35% in Japan. For those that have at least one child, they have on average 1.69 children, ranging from 1.22 in China to 2.21 in the US. Table 3 in Appendix shows the detailed descriptive statistics for the sample in each country.

2.4 Analytical Strategy

First, we investigate the relative importance individuals place on various aspects of family life, including fertility and marriage. We go beyond solely assessing respondents' views on the ideal family and delve into how they contrast and compare these views with those of the parental generation. Second, we explore the heterogeneous effect of gender and education at both the micro-level and the aggregate level. On the vignette response level, we investigate if there is sub-group heterogeneity in family ideal and perceived intergenerational differences in family ideal. On the aggregate level, we investigate if intergenerational education gains are related to the perceived decreased value of parenthood between generations.

3 Result

3.1 Family Ideals and Perceived Intergenerational Differences of Men and Women

Pooled-country result Figure 1 displays the experimental estimates for women and men separately (also see Table 4 in Appendix). Women consider marriage, parenthood (1 child relative to no children β =0.29), and an egalitarian gender role (relative to commonplace gender role β =0.33) as the least crucial aspects of the ideal family. In contrast, good communication (β =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 – as less central, but also see such differences 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 roles 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 in 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 roles. Women require a stable financial position or fairness in gender roles to become parents. Should either of these conditions change 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.

3.2 The Role of Education on Gendered Perceived Intergenerational Differences

Figure 2 and Table 13 in Appendix present the results of men and women separately, each with or without higher education attainment. Higher education attainment is defined as completing ISCED-2011 level 6.

Women with higher education do not significantly differ in their family ideals compared to those without it, except in their views on gender roles. Highly educated women see egalitarian gender roles more ideal than both traditional and commonplace gender roles, while less-educated women see both traditional and egalitarian gender roles as more ideal than commonplace gender roles.

Comparing the view on traditional vs. commonplace gender roles between higher educated women and those without, highly educated women seem to particularly value financial independence and contribution to the family. While egalitarian gender role is optimal, giving up their job is as bad as taking double burdens as suggested in the commonplace gender role. Interestingly, highly educated women perceive their parent's generation holding traditional gender roles more ideal than commonplace gender roles, similar to the views of women without higher education.

About perceived intergenerational differences, highly educated women perceive a much larger distance between themselves and their 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 edu-

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

Among highly educated women, they see their parent's generation and themselves make the opposite trade-offs between parenthood and income, as well as between parenthood and other qualitative aspects of family. That is, highly educated women see having two or three children trump all other aspects of family life, while the opposite is true for them (except for gender role). Such contrasting trade-offs made by two generations are not as evident among women with lower levels of education, and not among men, regardless of their education level.

3.3 Intergenerational Education Mobility and Perceived Intergenerational Difference on the Aggregate Level

Table 3 shows the mean coefficients of generational change in education attainment and perceived intergenerational difference in parenthood for each country. Women in China, Spain, and Korea have gained the most years (four to five years) of education compared to their parent's generation, followed by Women in Italy and Singapore who have gained more than three years. Women in Japan, Norway, and the USA have gained 1.3-1.6 years. Women in China and Spain also reported the highest level of perceived intergenerational difference in parenthood. Having one child is seen 0.99 and 0.79 less relevant to family ideal compared to the parent's generation for Chinese and Spanish women respectively. Women in Japan, Italy, and Korea reported a medium level of decrease (around 0.5) while women in Norway, Singapore, and the US reported a low level of decrease (around 0.3).

Figure 3 and 4 plot the estimates of linear regressions between the perceived intergenerational difference of parenthood and the two-child ideal for family ideal and change in educational attainment between generations. Figure 3 shows that women in cohorts with larger educational gain also show higher levels of perceived intergenerational difference in the importance of parenthood for family ideal. One additional year of education is associated with a 0.12 decrease in the value of parenthood from the parental generation

to the current generation.

Figure 4 shows that women in cohorts with larger educational gain also show higher levels of perceived generational differences in the two-child fertility ideal. One additional year of education is associated with a 0.16 decrease in the value of having two children from the parental generation to the current generation.

This relationship between intergenerational education mobility and perceived generational decrease in the value of parenthood and the two-child ideal is only significant for women.

Moving from post-secondary education to tertiary education, 4 years of education gain translates to a 0.48 perceived decrease in the value of parenthood, and a 0.64 decrease in the value of parenthood.

3.3.1 Sensitivity Analysis

The relationship between intergenerational education mobility and perceived generational decrease in the value of parenthood and the two-child ideal remains robust to the configuration of subgroups and the units of education mobility. Table 14 and Figure A1 in the appendix shows the linear regression estimates between intergenerational education mobility in years and perceived generational difference when the sample is only divided into 32 subgroups (two age groups * gender * countries). Table 15 and Figure A2 in the appendix shows the linear regression estimates between intergenerational education mobility in ISCED-2011 levels and perceived generational differences.

4 Discussion

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.

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 differences in family preferences, it does not lead to a significant shift in priorities.

On the aggregate level, cohorts that benefited most from educational expansion have experienced the greatest educational gain compared to their parental generation. At the same time, women in these cohorts also perceived the largest generational decrease in parenthood and the two-child ideal. As society develops, rapidly in aspects like education, social norms and cultural values often lag, placing women in the challenging position of fulfilling doubled expectations and making grim trade-offs between work and family. The social identity approach reveals such intergenerational tension in family dynamics for women, in particular for highly educated women. Relying on education as an earned higher social class identity, the cohorts of women with the most educational gains are motivated to renovate family life away from the previous generation. If marriage and fertility are no longer paramount for family, they could be liberated to pursue other goals in life.

Despite parenthood still being considered important for family, the number of children is rather irrelevant in all countries ranging from the front-runner in development and gender equality such as Norway to later comers such as China. If this preference is driven by generation-based identity, to revise fertility, a new generation of women needs to actively differentiate themselves in terms of the value of fertility in family from their parental generation to reverse fertility. But this time, the change must move from low fertility preference to high fertility preference.

The gender revolution theory suggests the reversal of fertility hinges on gender equity, particularly gender equity at home. This study paints a rather pessimistic picture of this

argument. On the one hand, individuals including women, consider egalitarian gender roles marginal to family ideal, often more marginal than parenthood. On the other hand, Norway as one of the most developed, gender-equal, higher fertility (among low fertility) countries is seeing an opposite gendered generational change. Norwegian men have gained the least education (0.7 years), and yet they have perceived a relatively large decrease in the value of parenthood (0.48). In fact, only Norwegian men consider parenthood and the two-child ideal irrelevant to the family ideal, ranking them slightly lower in importance than Norwegian women.

Similar to Norwegian men, Japanese women also consider parenthood and the two-child ideal unimportant to family success. Japanese women and Norwegian men being the two groups that gained the least education from their parental generation, seem to represent two sides of a coin. Despite Japan's early development, women's roles in society and at home have hardly changed during the past 60 years. Japan remains one of the least gender-equal developed countries, and it is difficult for Japanese women to change their lives through education. In response to this situation, Japan has revised the value of children. Norway, on the other end of the spectrum, has advanced far in gender equality, making Norwegian men shoulder more family responsibilities than men of other countries. However, since Norway developed early, Norwegian men neither experienced upward education mobility nor improvement in their labor market position compared to their parental generation. In this case, it seems that fairness to women only translates into an additional burden for men, dissuading Norwegian men from having children.

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. In societies where structural change in gender relations is more advanced, men, instead of women perceive a larger generational decrease in the value of children for a family.

Table 1: Vignette factors and levels.

Factors	#	Content
Union status	2	*Cohabiting Married
Fertility	4	*No children 1 child 2 children 3 children
Household income	3	*Below average Around average Above average
Community respect	2	*Not well-respected Well-respected
Family communication	2	*Not Comfortable Comfortable expressing feelings & raising disagreements
Contact with extended fam.	2	*Not frequently Frequently
Gender roles	3	*Commonplace (Both work, female does most of the household and family tasks) Traditional (Female homemaker, male breadwinner) Egalitarian (Both work, equally divided of household and family tasks)
Work-family balance	4	*Both fem. & male conflicted Fem. conflicted & male not conflicted Fem. not conflicted & male conflicted Neither fem. nor male conflicted

* Reference level.

Table 2: Intergenerational Change in Education Attainment and Perceived Intergenerational Difference (PID)

	Sex	China	Italy	Japan	Korea	Norway	Singapore	Spain	USA	Total
Edu Attainment Change	Female	5.26	3.84	1.31	4.15	1.32	3.23	4.34	1.61	3.28
(schooling years)		(1.61)	(2.81)	(1.98)	(1.78)	(2.74)	(3.49)	(2.64)	(2.33)	(2.85)
	Male	4.31	3.77	1.34	3.50	0.72	4.16	3.54	2.32	3.21
		(1.57)	(2.75)	(2.01)	(1.62)	(2.84)	(2.87)	(2.69)	(2.53)	(2.61)
Perceived Change	Female	-0.99	-0.53	-0.55	-0.49	-0.33	-0.24	-0.79	-0.33	-0.54
in Parenthood*		(0.24)	(0.37)	(0.15)	(0.27)	(0.24)	(0.13)	(0.23)	(0.17)	(0.34)
	Male	-0.51	-0.37	-0.24	-0.39	-0.48	-0.30	-0.49	-0.11	-0.34
		(0.18)	(0.20)	(0.16)	(0.14)	(0.28)	(0.12)	(0.12)	(0.26)	(0.23)

Mean coefficients; SD in parentheses.

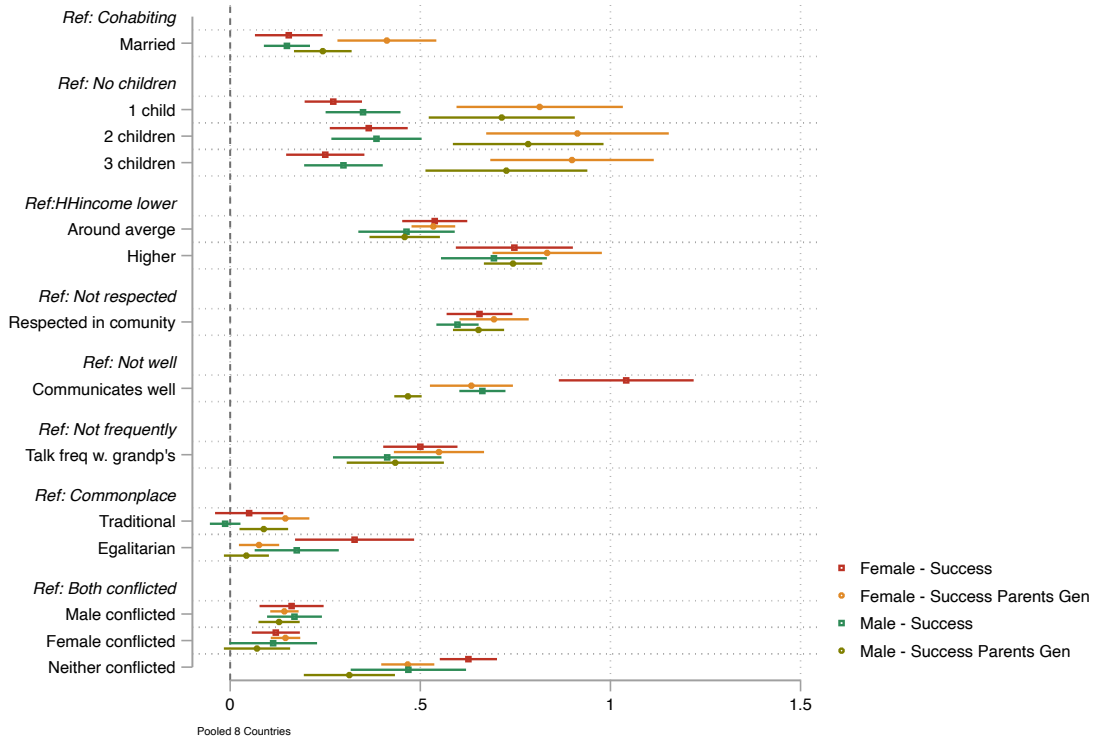
*Difference in having one child (compared to having no children) between successful family and successful family for parental generation.

Table 3: Intergenerational Education Mobility and Perceived Generational Difference

	Parenthood b/se	Two-child Ideal b/se
Female	0.07	0.24
	(0.12)	(0.12)
IntergenEduMobility (yrs)	-0.03	-0.02
	(0.03)	(0.03)
Female X IntergenEduMobility (yrs)	-0.12**	-0.16**
	(0.04)	(0.05)
Constant	-0.29**	-0.37**
	(0.09)	(0.09)
Observations	80	80

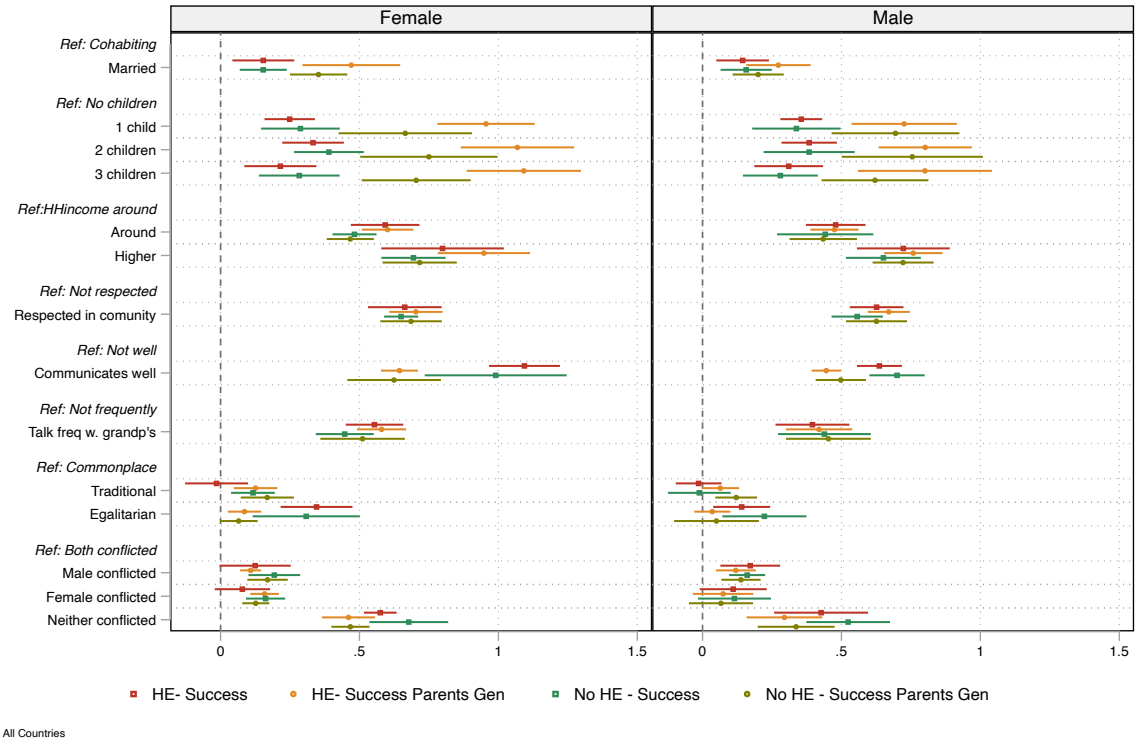
OLS; Robust SE. * p<0.05, ** p<0.01

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



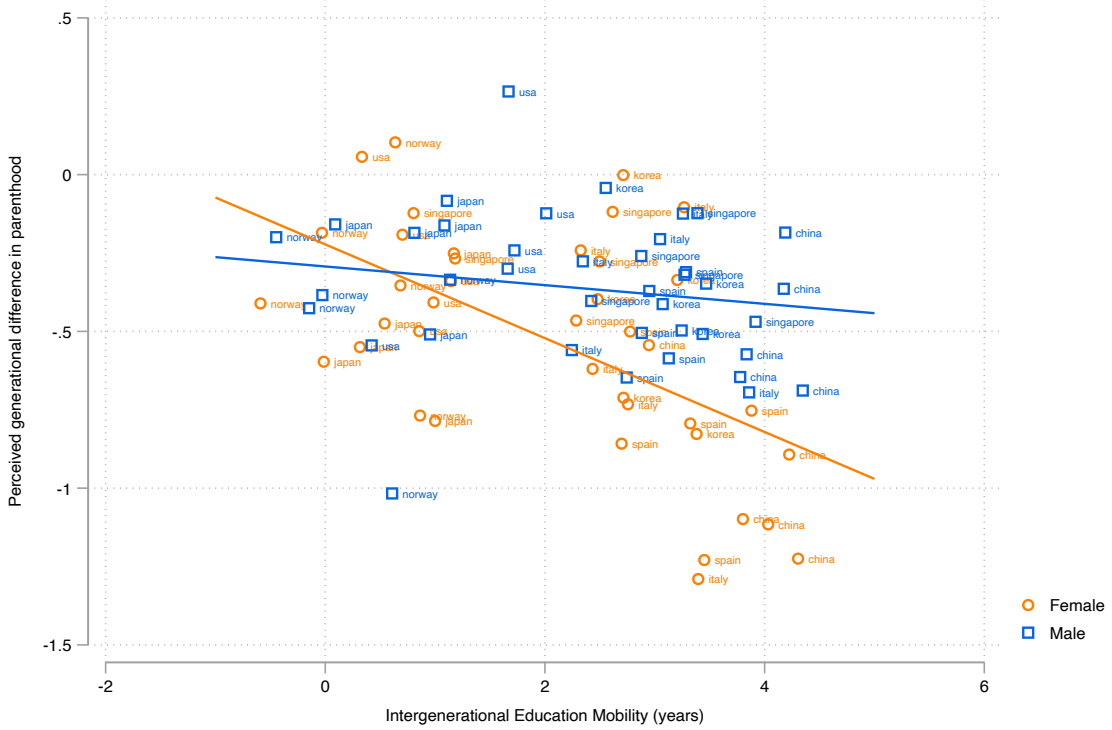
Note: Estimates from random intercept multilevel linear regression models with weighted observations. Respondents aged 25 to 50. Sample includes respondents form Italy, Spain, Norway, Japan, Korea, urban China, Singapore, and the USA.

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



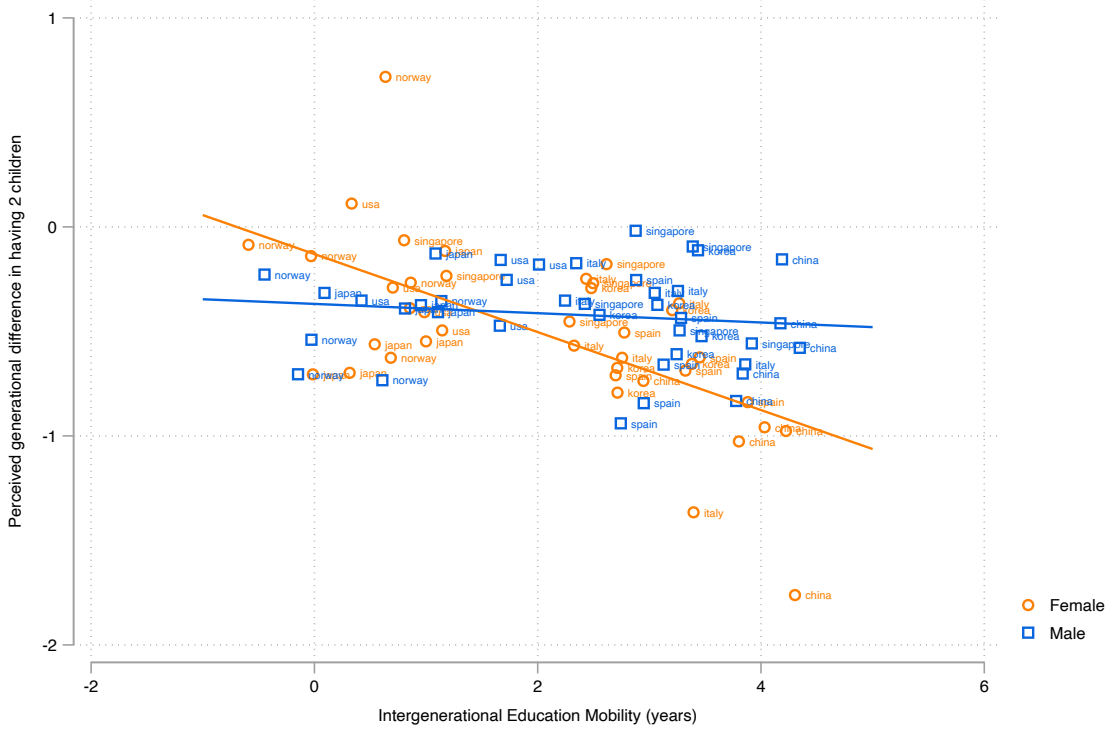
Note: Estimates from random intercept multilevel linear regression models. Respondents aged 25 to 50. Higher education is defined as having a long-cycle tertiary education degree (ISCED-6). Sample includes respondents form Italy, Spain, Norway, Japan, Korea, urban China, Singapore, and the USA.

Figure 3: Relationship between intergenerational education mobility and perceived intergenerational difference in parenthood



Note: Estimates from OLS linear models. Parenthood is measured as the effect of having one child compared to having no children. Perceived Intergenerational Difference In Parenthood is measured by the difference between the estimate of one's own family ideal and that of one's perceived family ideal of the parental generation.

Figure 4: Relationship between intergenerational education mobility and perceived intergenerational difference in the two-child fertility ideal



Note: Estimates from OLS linear models. Two-child fertility ideal is measured as the effect of having two children compared to having no children. Perceived Intergenerational Difference In Having 2 Children is measured by the difference between the estimate of one's own family ideal and that of one's perceived family ideal of the parental generation.