Knowledge about Fertility, Information Provision, and the Demand for Fertility Policy: Evidence from a Survey Experiment with young Italians

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1. Sponsors & Partners

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1) **PRIN 2022 –20229RB8HY - *Gender Stereotypes and Women's Achievements (GENS)* -** *CUP J53D23004290001*. Responsabile scientifico: Francesca Barigozzi. Missione 4 "Istruzione e Ricerca" - Componente C2. Investimento 1.1, "Fondo per il Programma Nazionale di Ricerca e Progetti di Rilevante Interesse Nazionale (PRIN)". Decreto Direttoriale. n. 104 del 2 febbraio 2022, Avviso pubblico per la presentazione di Progetti di ricerca di Rilevante Interesse Nazionale (PRIN) da finanziare nell'ambito del PNRR
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2. IRB

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3. Overview of Data Collection and Questionnaire Structure

Participants are invited to complete a survey administered using CAWI methodology through a web-app produced by Scenari S.R.L., designed specifically for this project by the team of the researchers. The web-app is accessible via computer, tablet, and smartphone and is available in Italian.
The questionnaire consists of multiple modules, including both standard survey sections and two embedded survey experiments. The structure is as follows:

1. **Prescreening Module -** Captures gender, age, region, urban area size, and educational attainment to ensure quota compliance.
2. **Demographics & Family Structure -** Includes birthplace, residence, household composition, number of children, current occupation status, and family configuration.
3. **Experimental Vignettes Module (Vignette 1–8)**
   Participants are randomly assigned to one of 8 experimental vignette scenarios varying the protagonist's: a) Gender (male/female); b) Parental status (has children/no children); c) Sector of employment (STEM/non-STEM). They report
      a. Second-order beliefs (SOB): what others like them would recommend
      b. First-order beliefs (FOB): what they would personally recommend.
   For both a) and b), responses are on a 0–100 scale. Some participants are incentivized based on accuracy.
4. **Fertility Intentions**
5. **Information Treatment** *(Random assignment 50% participants)* Half of respondents receive a frame linking low fertility to traditional family values ("neoconservative" frame); the other half receives a neutral, demographic-economic frame.
6. **Fertility and Social Norms.** Includes questions on: Life goals and fertility ideals/expectations, The importance of various factors (economic, relational, societal) for fertility decisions, Short-term fertility intentions, Perceptions of what matters for others in their demographic group.
7. **Knowledge about Fertility and fertility determinants** Includes fact-based questions on fertility rates and EU comparisons, with feedback on correct answers provided to a random 50% of the sample.
8. **Policy Preferences** Participants rate the perceived effectiveness of various pronatalist policies, including economic support, parental leave, childcare services, housing, and media campaigns.
9. **Political & Social Attitudes** A comprehensive battery of items measuring trust, political orientation, perceptions of institutions, gender roles, and family values.
10. **Employment and Education Sections** Tailored modules based on current status (student, employed, unemployed, inactive) including Job expectations/preferences, Labor market barriers, Preferences over contract types and wages.
11. **Couples and Parenting Modules** For partnered or parenting participants: questions on division of labor, childcare, partner's employment, and fertility decision-making.
12. **Final Modules** Includes: Personality traits (TIPI), Risk preferences, competitiveness, patience, Family background (e.g., parental education and employment), Religiosity, marriage attitudes, and primary news sources.
13. **Lottery and Donation Choice** Participants enter a lottery for a prize and are given the opportunity to donate part of their winnings to one of three pre-selected NGOs, with matching donations by the researchers.

4. Research team

The research team is composed by Francesca Barigozzi (University of Bologna), Luisa Carrer (ESCP Business School), Natalia Montinari (University of Bologna) and Giovanni Righetto (University of Bologna).

5. Experimental design

In this section we describe the structure of the survey and where the treatment variations occur. The assignment to different treatments should be as balanced as possible concerning the quota definition criteria (gender, age, metropolitan area).

Table 1. Survey Structure

Section	Description	Treatment Variation
1	Prescreening Module – Gender, age, education, region, urban area size	None
2	Demographics & Family Structure – Place of birth, residence, household	None
3	Vignette Module (8 conditions) – Protagonist receives a job promotion offer with trade-offs in prestige vs. time. Gender, parental status, and sector (STEM vs non-STEM) are varied across 8 scenarios. Participants report first-order and second-order beliefs.	Yes: Study 1 2×2×2 factorial design (gender × parental status × sector)
4	Fertility Intentions – Ideal and expected number of children, timing, priorities	Yes: Study 2 Frame treatment (neoconservative 50% vs neutral 50%)
5	Social Norms & Perceptions – Beliefs about others' priorities and social expectations by gender and age group	None
6	Factual Knowledge & Feedback – Respondents answer factual questions on EU fertility and receive randomized feedback	Yes: Study 3 Feedback randomly assigned to 50% of participants
7	Policy Preferences – Ranking of pronatalist policy effectiveness	None
8	Political & Social Attitudes – Trust, conservatism, gender roles	None
9	Employment and Education Status – Tailored modules for students, workers, unemployed, inactive individuals	None
10	Couples & Parenting – Partner's status, household division of labor, fertility planning	None
11	Personality & Background – TIPI traits, preferences, religiosity, parental background	None
12	Lottery & Donation Module – Endline incentive choice and donation opportunity	None

5.1 Treatment variations for Study 1, 2 & 3.

5.1.1 Study 1.
For the survey study 1 the following table describes the treatment variation.

Participants are randomly assigned to one of the following 8 scenarios, structured as a 2×2×2 factorial design based on gender, parental status, and sector of employment:

Table 1: Treatments for study 1 (N=2500)

		Variation in the field of work	
		STEM (50%)	**Non-STEM(50%)**
Variation in the presence of children and in the gender of the vignette's main character	Female – No Children	Scenario 1-F	Scenario 2-F
	Female – Has Children	Scenario 3-F	Scenario 4-F
	Male – No Children	Scenario 1-M	Scenario 2-M
	Male – Has Children	Scenario 3-M	Scenario 4-M

Distinction in Text Based on Educational Background
IMPORTANT: The text of the vignettes varies depending on the participant's educational background. Specifically, the distinction is based on two categories:
1. Participants with a university degree (or a diploma with the status of a university student).
2. Participants with a diploma (who are not university students).

This differentiation in the text is applied based on the participant's characteristics to adapt the vignettes to their educational background.

5.1.2 Study 2.
For study two we vary the presence of framing: a neoconservative frame emphasizing the protection of traditional family values and national identity (randomly presented to 50% of the respondents), or a neutral frame highlighting the economic consequences of declining birth rates (randomly presented to 50% of the respondents). After exposure to the frame, we collect detailed measures of fertility ideals, fertility intentions, and perceptions of the factors influencing fertility decisions for oneself, for individuals of the same gender, and for individuals of the opposite gender.

5.1.2 Study 3.
In Study 3, we examine how factual knowledge about fertility trends and gender equality influences policy preferences. All participants answer a series of incentivized factual questions concerning fertility rates in Italy and the EU, and the relationship between fertility and gender roles in the family and labor market. Subsequently, a random half of the respondents receive immediate corrective feedback on their answers, including the correct responses and brief explanations grounded in empirical evidence. After this manipulation, all participants are asked to rank the effectiveness of various pronatalist policy interventions.

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6. Sample

The study relies on a nationally representative sample of 2,500 individuals aged 19 to 39, selected to ensure balanced representation across key demographic dimensions. The sample is stratified based on gender (male, female), age group (19-24, 25-29, 30-24, 35-39), education level (high school diploma, university degree), region of residence, and urban size of the municipality (0-10,000 inhabitants, 10,000-50,000 inhabitants, over 50,000 inhabitants). Participation is voluntary, and Scenari SRL, the survey operator responsible for data collection and processing, ensures that informed consent is obtained from all participants regarding both participation in the study and the treatment of their personal data. Participants are recruited and monitored by the survey operator Scenari SRL, who ensures response rate tracking and replacement of non-respondents to maintain the target sample size.

7. Timing

Data collection began on April 28th 2025, and is being conducted by Scenari SRL. The delivery of the dataset is expected by June 30, 2025. As of the date of this document, the authors received 100 observations out of the planned 5,000, for quality checks. The questionnaire remained unchanged following this initial data review.