

From Profiles to Parenthood: Relationship Origins and Fertility Intentions in the Digital Age

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Abstract

The internet has revolutionised dating and union formation in the 21st century, with many couples now meeting online. Research shows that these relationships are often less satisfying, less stable, and marked by greater uncertainty, yet little is known about whether fertility intentions also differ between online and offline couples. This question is especially relevant in the context of declining fertility rates and the growing prominence of online dating as a couple-formation setting. Using data from the Generations and Gender Survey, round II (GGS-II), we examine differences in fertility intentions and relationship characteristics among childless couples who met online compared to those who met in offline settings. Preliminary results confirm that individuals in online-formed couples report lower relationship satisfaction and higher relationship uncertainty but nevertheless show higher short-term fertility intentions. However, we find no relationship between online couple formation and long-term fertility intentions of personal ideal number of children. The positive association between online couple formation and three-year fertility intentions is most pronounced among older females and younger males.

Introduction and Background

The digital revolution of the 21st century has reshaped individuals' lives across professional, personal, and family domains. This transformation also extends to dating and romantic relationships with couples now frequently meeting online. A study from 2019 estimates that 39% percent of couples met online in the USA in 2017 (Rosenfeld et al., 2019). Additional evidence emerges showing that the mode of meeting is more than just a meeting modality; whether couples first meet online or offline seems to be associated to their relationship quality, satisfaction, and stability. Couples who met online appear to have less satisfying relationships, especially when married (Hu et al., 2024; Sharabi & Dorrance-Hall, 2024) and experience lower levels of reported love (Kowal et al., 2025), which studies suggest translates into less stable relationships (Sharabi & Dorrance-Hall, 2024). Thus, where partners meet can shape the dynamics of romantic relationships, potentially also including partners' fertility intentions.

Importantly, couples who meet online and offline also differ systematically in their characteristics (Potarca & Hook, 2023). In its early stages, online dating primarily attracted individuals who faced challenges finding a partner in their offline social environment (Cacioppo et al., 2013; Potarca, 2021). As the practice became more widespread, however, it has grown less selective and increasingly serves as a mainstream tool to broaden matching opportunities for a wide range of individuals.

Online dating introduces a broader pool of potential partners and may emphasize different dating objectives such as efficiency, self-presentation, or short-term compatibility markers. In contrast, offline relationships may emerge from shared social settings that foster deeper shared interests, values, and social embeddedness from the start. These differences can then influence relationship quality, commitment, communication, long-term orientation, and

social networks surrounding the couple, all of which may be important predictors of fertility intentions.

However, it remains unknown if, and if so how, online versus offline couples differ on their fertility intentions or motivations. On the one hand, couples meeting online – especially those formed earlier in the past, when the practice was rarer and more selective, and couples formed online closer to the end of the reproductive period – may display greater fertility desires if partners turned to online dating in search of a life-long partner whom they did not find offline. On the other hand, couples formed online – especially in the more recent years and among younger partners – may instead see online dating as implying lower commitment compared to offline dating and, therefore, being a selected group of individuals with lower childbearing desires.

This study aims to address this open question. We investigate whether short- and long-term fertility intentions vary between different-sex childless couples that formed online versus offline, and whether differences emerge by gender and age groups. We further examine whether these couples differ in terms of potential mediators of the relationship between couple formation mode and fertility intentions, namely relationship quality and risk of breakup.

Hypotheses

Offline-formed couples are often more deeply embedded in kinship and community networks, where norms and expectations around family formation may be stronger and where practical and emotional support for childbearing is more readily available. By contrast, couples who meet online may begin their relationships with weaker social embeddedness, which can translate into lower external encouragement or pressure to have children. This relative detachment from kin and community ties may therefore contribute to reduced fertility intentions among online-formed couples.

At the same time, online dating provides individuals with access to a broader pool of potential partners and matching opportunities. In theory, this could lead to better alignment in long-term preferences, values, and life goals, which might foster greater relational compatibility. Such compatibility could, in turn, support fertility intentions. However, existing studies suggest that despite these potential advantages, couples who met online often report lower levels of relationship satisfaction and stability.

Finally, online and offline couples may differ systematically in who they are. Individuals turning to online dating may hold distinct values, life orientations, or personal goals that correlate with lower or delayed fertility desires. For instance, those prioritizing career ambitions, autonomy, or nontraditional lifestyles might be more likely to use online platforms and simultaneously less likely to pursue parenthood. Similarly, single individuals with strong fertility intentions and goals may turn to online dating as a means to accelerate partnership formation for that end.

The motives for and individual selection into couple formation through online dating may also differ across sociodemographic groups. Most relevant to examine are the differences by age and gender. Age represents a person's life stage, which is linked to variation in family formation aims and pressures. For instance, older individuals who are single but wish to have children may be more inclined to use online dating platforms, as they face a shorter time frame for becoming parents and may therefore seek to accelerate the process of finding a

suitable partner. This dynamic may further vary by gender, with women feeling greater pressure than men. Building on these perspectives, we advance four key hypotheses.

H1: Respondents in couples who met online differ in their intentions of becoming parents from those who met offline.

H2: Relationship satisfaction is lower among respondents in couples who met online.

H3: Differences in fertility intentions between online- and offline-formed couples are partly explained by their lower relationship satisfaction.

H4: Differences in fertility intentions between online- and offline-formed couples vary by age and are most pronounced at higher ages, and for women.

Data and Method

We use data from the first wave of the Generations and Gender Survey, round II (GGS-II), a cross-national, longitudinal survey coordinated by the Generations and Gender Programme (GGP). It surveys nationally representative samples of individuals aged 18–79 in multiple countries, covering a wide range of topics including partnership and fertility histories, fertility intentions, relationship quality, intergenerational ties, work, health, and attitudes toward gender roles.

GGS-II data were collected between 2020 and 2024. We focus on ten Western European countries: Germany, France, the Netherlands, Norway, Austria, Croatia, Denmark, Finland, and the United Kingdom. The starting sample consists of 85,071 individuals. We restrict the analysis to respondents aged 18 to 45 who are in a relationship with a partner of the opposite sex, in which the female partner is aged 18 to 45, and where neither partner has children from the current nor from previous relationships. After applying these restrictions, the analytical sample includes 15,880 respondents.

Measures

The key independent variable is the mode of meeting the current partner, based on the GGS-II question “How did you and your partner meet?” Respondents could choose from a wide range of categories, including: online dating, other online settings, through work, in education, at church or an equivalent setting, on vacation or a business trip, at a bar or nightclub, through a social organization, health club, gym, or volunteer group, at a private party or social event, through friends, through family, or other contexts. For the purposes of analysis, we group these responses into two categories: couples who met online (online dating platforms or other online settings) and couples who met offline (all other contexts, such as friends, work, school, family, or social events).

In the current version of our study, the first dependent variable captures short-term fertility intentions, based on the question: “Do you intend to have a/another child during the next three years? Please take into account only biological children?” Respondents could choose from five options: Definitely not, Probably not, Unsure, Probably yes, and Definitely yes. In the main analysis, we recode the responses in three possible outcomes: “Yes”,

“Unsure”, “No”, but the main conclusions are robust also with the more detailed category response.

We further explore long-term fertility intentions collected through the question: “Supposing you do not have a child during the next three years, do you intend to have any children at all?” Again, respondents could choose from five options: Definitely not, Probably not, Unsure, Probably yes, and Definitely yes. In the main analysis, we recode the responses in three possible outcomes: “Yes”, “Unsure”, “No”, but the main conclusions are robust also with the more detailed category response.

Finally, we look at the personal ideal number of children collected in the survey through the question: “For you personally, what would be the ideal number of children you would like to have or would have liked to have had?” Respondents could answer any number; we dichotomized the variables, which now takes the value of 1 if the response is zero children and 0 otherwise.

To explore potential mechanisms linking meeting venue and fertility preferences, we draw on GGS-II’s rich information on relationship dynamics. One measure is relationship satisfaction, based on the survey item: “How satisfied are you with your relationship with your partner?” Respondents answer on a scale from 0 to 10, where 0 means not at all satisfied, 10 means completely satisfied, and 5 indicates about average. A second measure captures relationship stability, using the question: “Over the past 12 months, have you thought about breaking up your relationship?” with response options Yes or No. Together, these indicators reflect both the quality and stability of current partnerships, and they serve as potential mediating factors in the link between online meetings and fertility intentions.

Methods

At the current stage, we first explore the association between the mode of couple formation and fertility intentions of the responding partner through multinomial logistic regression. We estimate regressions separately by the sex of the respondent (male or female). All models control for the respondent’s age, country, and the year the relationship began.

Second, we examine whether the relationship varies by age by including an interaction term between the indicator for online couple formation and age grouped into five-year bands.

Finally, we explore the relationship between having met online and the indicator of relationship satisfaction, as well as having considered a breakup in the last year as a proxy of relationship uncertainty. All results are estimated using sampling weights and apply robust standard errors.

Preliminary Findings

The regression analyses reveal important differences between couples who met online and those who met offline, particularly among men.

Figure 1 shows the average marginal effects of online dating on short-term fertility intentions, controlling for age in five-year bands, relationship duration, and country of residence. Results show that for both genders, couples who met online more often intend to have children in the next three years. This finding offers support for our first hypothesis, H1.

Figure 2 shows the same results for fertility intentions beyond three years and shows no substantive and statistically significant difference between the two groups. This is also

confirmed by looking at the likelihood of reporting no children as an ideal number (not shown). Conjunctly, these results suggest that the relationship between online couple formation and fertility intentions is connected to fertility timing, signalling a higher short-term desire to become a parent among individuals in couples that started online.

These aggregate differences are also evident when disaggregating by age as reported in Figure 3 for females and Figure 4 for males. In the case of females, we observe that the association is present and stronger in higher age ranges, closer to the end of the reproductive window. In support of our H4, childless women in older ages that found a partner online are the most likely to show positive short term fertility intentions. Conversely, against our hypothesis, men show a positive association between online couple formation and fertility intention at younger ages (Figure 4). While it remains unclear what underlies this finding, younger men that use online dating as a means to seek a committed partnership (that results in coresiding and is hence captured in our data) may be selected based on their stronger family formation ideals and preferences, leading to higher short term fertility desires among young men in couples who formed online versus offline.

Finally, in terms of relationship quality (results not shown), we find that men in online formed couples, on average, report lower satisfaction with their relationship compared to men who met their partners offline, even after controlling for age, country, and year the relationship started. A similar pattern emerges when considering relationship stability. Men in online couples are more likely to have thought about breaking up in the past year (although confidence intervals are very large). This suggests that online-formed relationships may carry greater uncertainty or fragility, at least from the male perspective. This finding is in line with that of prior studies (Kowal et al., 2025; Sharabi & Dorrance-Hall, 2024) and offers support for our H3.

Discussion, Conclusions and Outlook

The analyses reveal notable differences between couples who met online and those who met offline, particularly among women. Overall, online-formed couples are more likely to express short-term fertility intentions—wanting to have children within the next three years—while no significant differences emerge for longer-term intentions. These patterns suggest that online couple formation is associated with a desire to accelerate family formation rather than alter overall fertility goals. Age-specific analyses further show that this association is strongest among older childless women and younger men, indicating distinct gendered dynamics in how online dating relates to fertility timing desires. However, despite these similarities in fertility aspirations, men in online-formed relationships report lower relationship satisfaction and greater perceived relationship instability compared to those in offline relationships, pointing to potential greater fragility in online-initiated unions.

Building on these findings, the next step will be to refine the analysis by accounting for additional socioeconomic confounders and couple characteristics. In particular, we will explore heterogeneities by couple duration, and other socio-demographic factors to assess whether the effects of meeting venue vary across different groups. Further, we will investigate additional outcomes, namely couples' alignment on fertility intentions.

A second research avenue opened by these preliminary findings is to broaden the investigation of relationship dynamics, i.e. mechanisms that may underlie the differences in fertility intentions between online and offline couples. Beyond overall satisfaction and

breakup considerations, we will examine how specific dimensions—such as motives of disagreement (e.g., over money, household chores, or leisure time) and communication styles within couples—mediate the association between meeting venue, relationship quality, and fertility intentions.

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Fig 1: AME of having met online on three years fertility intentions. Multinomial logistic controlling by age, country, relationship duration

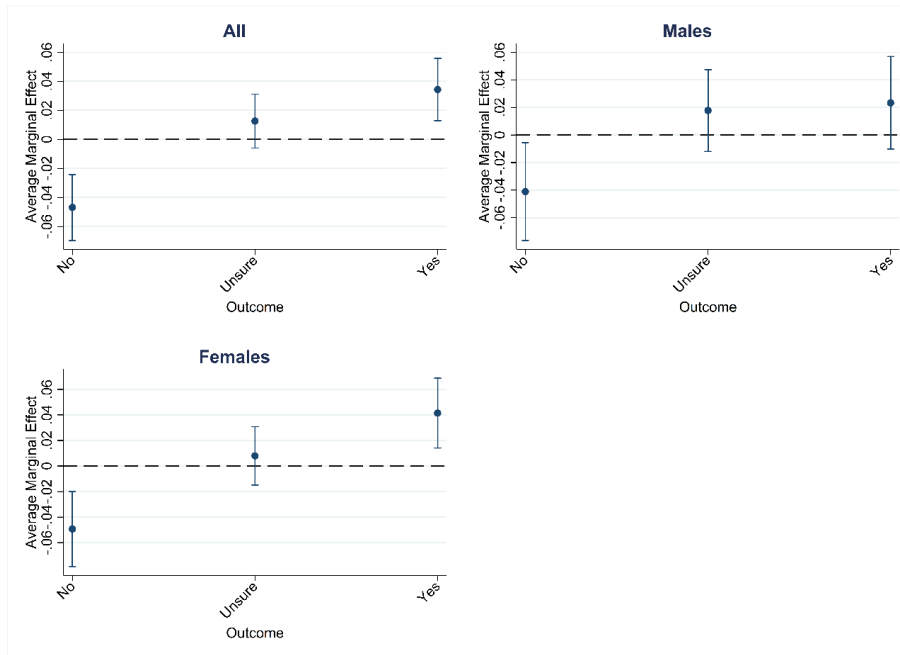


Fig 2: AME of having met online on long term fertility intentions. Multinomial logistic controlling by age, country, relationship duration

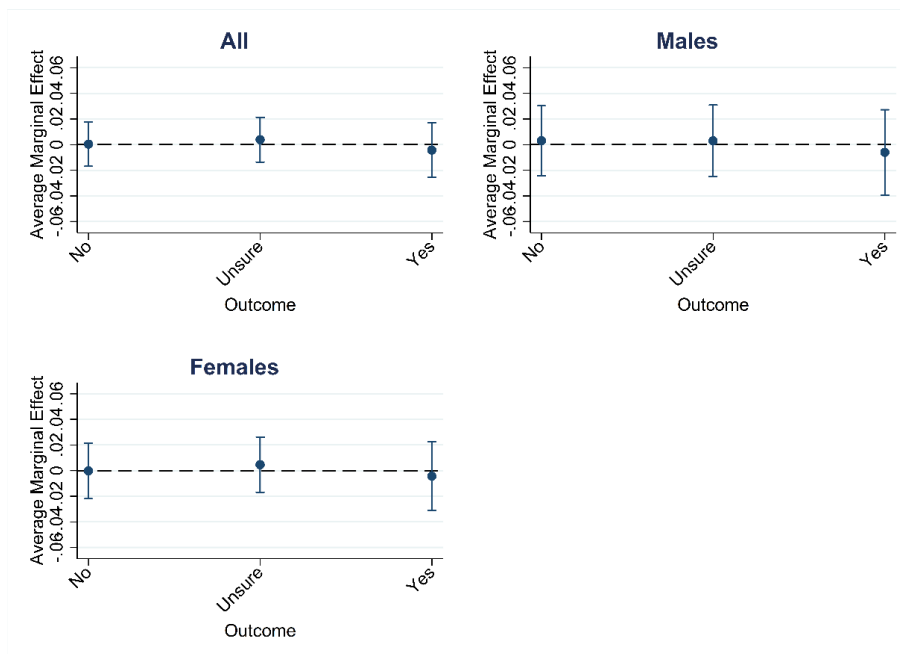


Fig 3: AME of having met online on three years fertility intentions by age for females. Multinomial logistic controlling by age, country, relationship duration

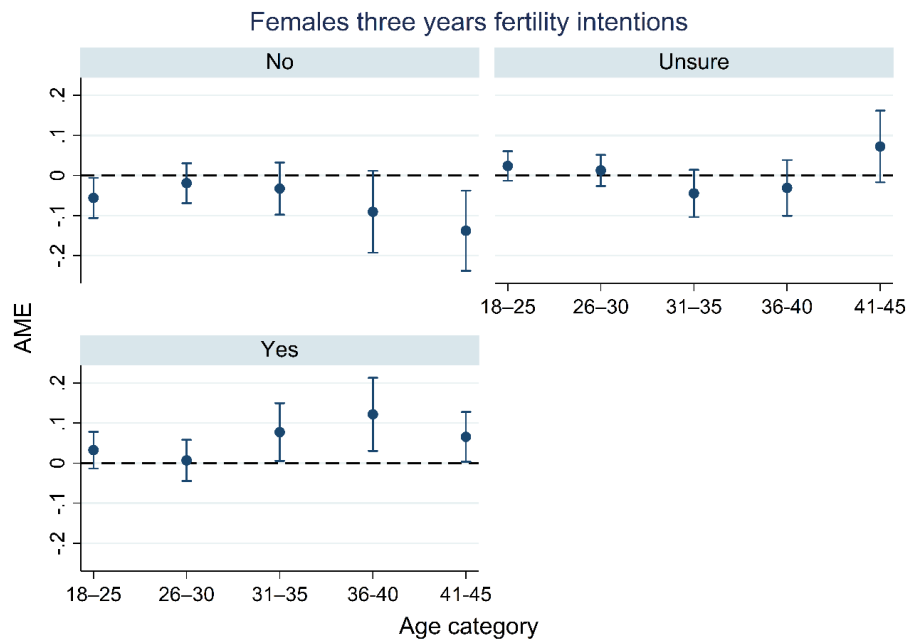


Fig 4: AME of having met online on three years fertility intentions by age for males. Multinomial logistic controlling by age, country, relationship duration

