

No experience of union formation as a proximate determinant of remaining childless

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One of the societal challenges in high-income countries (HICs) is fertility declining below the replacement level, driven by increasing childlessness (Zeman et al. 2018). For example, in Southern Europe and East Asia, over 20% of women in recent generations remained childless (Sobotka 2017). There is less research on low- and middle-income countries (LMICs), primarily because of the common assumption that childlessness is not common in regions with higher fertility rates. However, childlessness has increased in some Sub-Saharan Africa and Latin American countries (Rosero-Bixby et al. 2009; Verkroost and Monden 2022). In both LMICs and HICs, male childlessness has received less attention, and consequently less attention has been paid to gender differences.

Understanding the determinants of childlessness is crucial. There is evidence that most individuals remain childless unintentionally (Kreyenfeld and Konietzka 2017). In HICs, health issues and economic constraints are often named as key reasons for remaining childless unintentionally. However, when surveys explicitly ask why people remained childless (e.g., in Japan, Spain and the UK) the primary reason seems to be the lack of a (right) partner. In LMICs, the focus has also been on health reasons and economic determinants. Partnership status has received less attention, even though it has been speculated that factors behind childlessness in HICs may also operate in LMICs, albeit to a lesser extent (see Verkroost and Monden (2022) on Sub-Saharan Africa). Overall, there are various factors influencing fertility outcomes, and they can be classified into indirect ones (e.g., economic or environmental factors) and direct, i.e., proximate, ones (e.g., union formation or contraceptive use) (Bongaarts 2015). This study focuses on the association between one of the most important proximate determinants of fertility, namely union formation. Specifically, we examine how the proportion of individuals who have never formed a union is linked with the proportion of childlessness at country level.

We used wave 1 of Generations and Gender Survey and the latest available round of Demographic and Health Surveys for each country that includes both women's and men's questionnaires. Among all available 80 countries, we selected 64 countries that had at least 10 cases of childless population for each gender. The total number of cases, number of childless population aged 35+, and number of individuals who have never been in union by age 35 were corrected by survey weights. Figure 1 displays the proportion of childless people in the 1960s birth cohorts, by sex. Countries with higher level of development tend to have higher levels of childlessness for both women and men. Sweden, with the highest human development index, has 32.8% among males and 27.3% among females; Chad, with the lowest human development index, has 1.7% and 0.8% for males and females, respectively. Nonetheless, some countries with lower level of development have proportions as high as the most developed countries among men (e.g., Peru, Brazil, and Mauritania) and women (Georgia and Myanmar). There is a striking gender gap in childlessness that varies across development levels. In Europe, post-Soviet countries, and Latin America, men are more likely to remain childless than women.

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West and Southeast Asia show a mixed pattern. In Africa, the gender gap is the smallest in absolute terms.

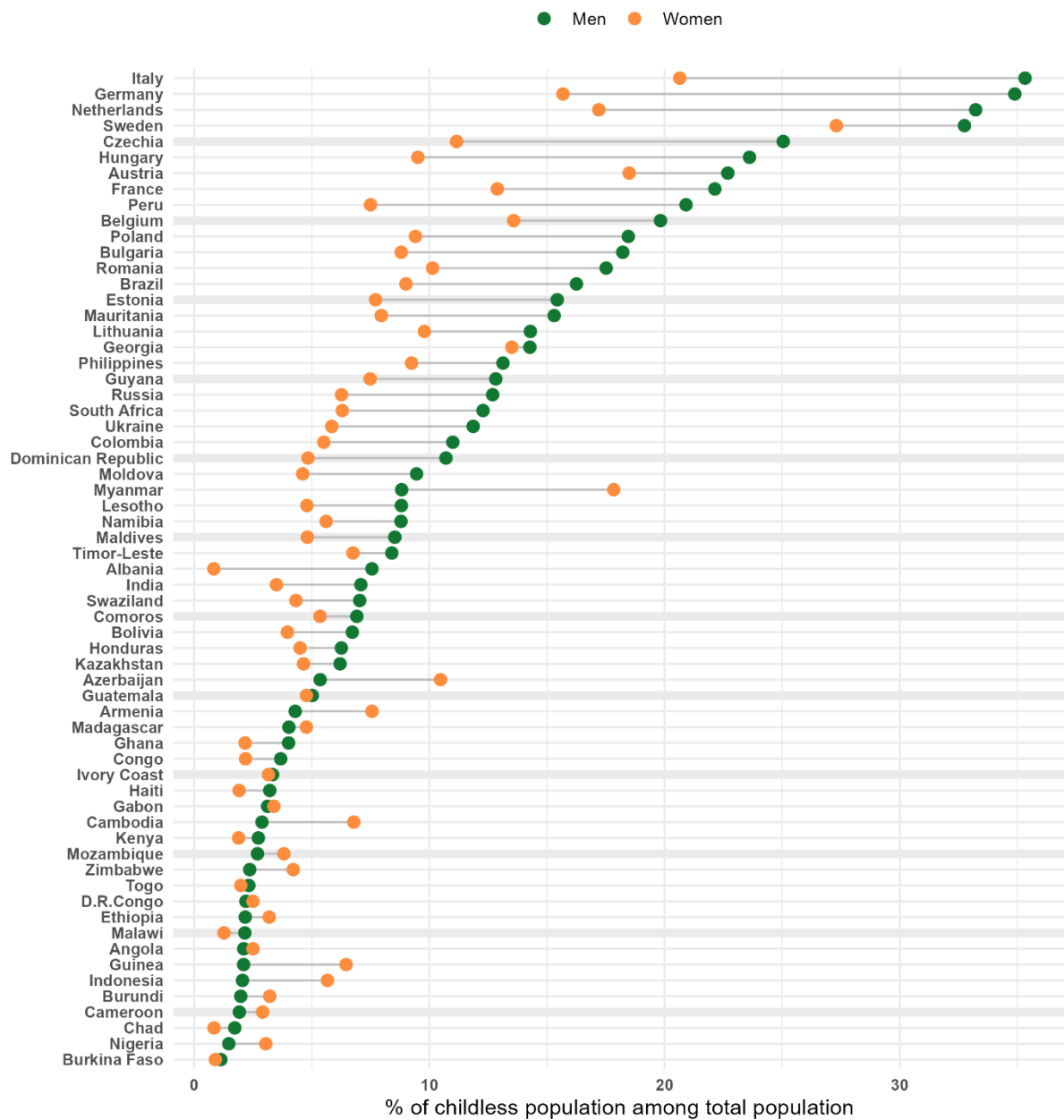


Figure 1: Proportion of childless population among total population born in 1960s by sex

Figure 2 illustrates the association between the proportion of childless population aged 35+ and the proportion of individuals who have never formed a union among the childless population by age 35. Both proportions are calculated for those born in the 1960s. The dots indicate the combination of each proportion by country, with fitted lines by continent. It shows that, among men, Africa and South-West Asia exhibit high and positive correlations between these two proportions, while the association in Latin America and Europe is positive but weak. Countries of the former Soviet Union display a negative correlation. In contrast, among women, all continents except Europe have positive correlations. These trends among women

may indicate that union formation plays a major role in the likelihood of remaining childless when the prevalence of childlessness is still low. However, as the proportion of childless population rises, other factors, such as economic uncertainty and self-realisation, might become more prominent.

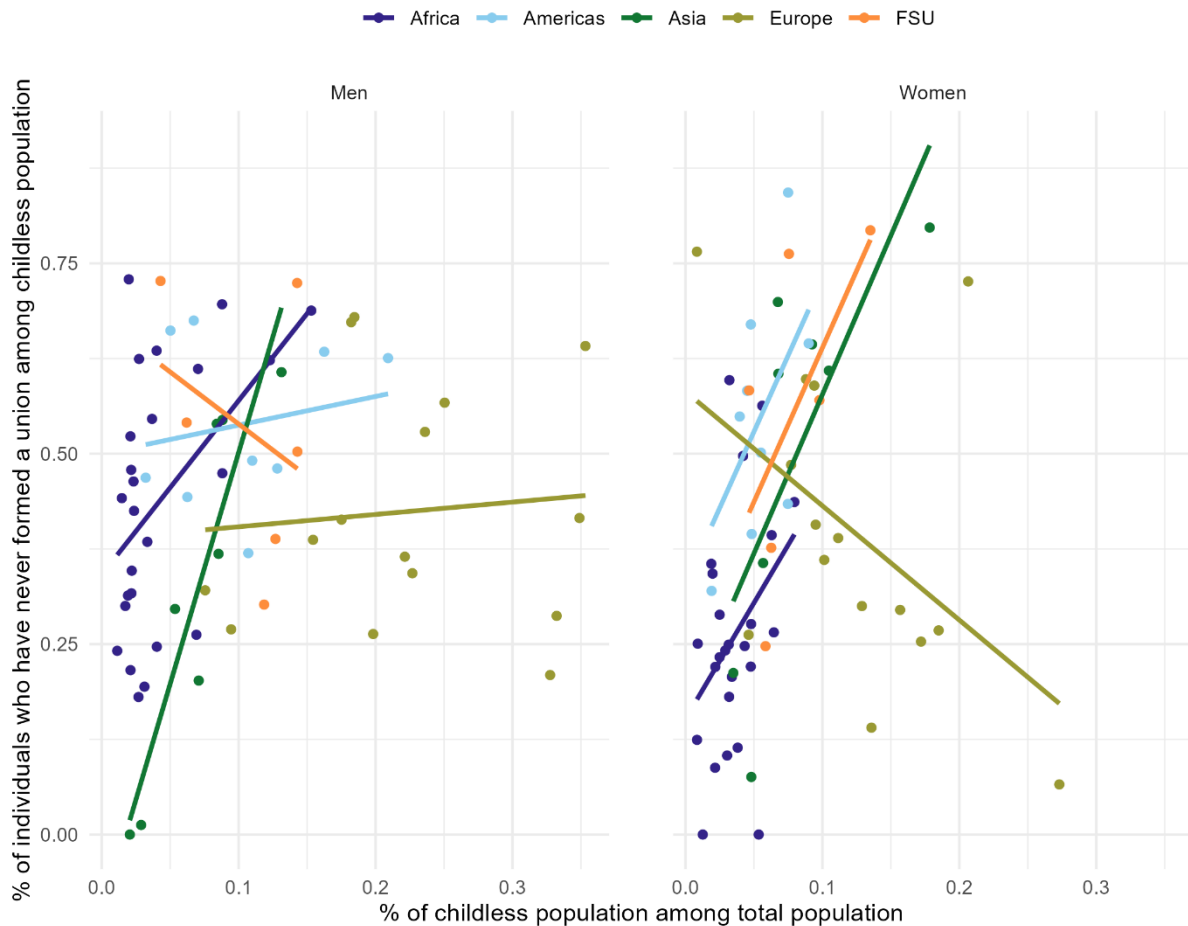


Figure 2: The association between the proportion of childless population among total population aged 35 + and the proportion of individuals who have never formed a union by age 35, among 1960s birth cohort

Future addition by presentation at EPC

As a next step, we will include additional countries to strengthen our conclusions. Also, we plan to conduct corresponding analysis by educational level to study interactions between the indirect and proximate determinants of childlessness. Previous research on the determinants of remaining childless focused on socioeconomic characteristics, particularly educational attainment. In most high-income countries, including Western and Southern Europe, the US and Japan, the relationship between educational attainment and remaining childless differs by gender. Highly educated women are more likely to remain childless, whereas less-educated men more often stay childless (Hara 2008; Reher and Requena 2019; Rybińska 2020). However, in Nordic countries, education is positively associated with childbearing patterns: less-educated men and women are more likely to remain childless (Jalovaara et al. 2019). However, recent studies identified a converging trend of educational differences in childlessness for women in Spain, West Germany and the US (Kreyenfeld and Konietzka 2017;

Reher and Requena 2019; Rybińska 2020). These findings suggest that the current low-educated population may be increasingly affected by socioeconomic disadvantages that affect having a child. This can also be interpreted in a different way—the highly educated are more likely to take advantage of societal and/or private care resources and have more support from their partner for childbearing and childrearing compared to their less-educated counterparts (Jalovaara et al. 2019). Thus, those remaining childless are more likely to be impacted by their socioeconomic disadvantages. Education levels also are associated with union formation (Trimarchi and van Bavel 2017). Our preliminary results show that, in general, less-educated males comprise a higher proportion of the childless individuals who have never been in union compared to more-educated counterparts, whilst for females, the relationship is opposite.

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