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Value Change and the New Wave of Fertility Postponement in Western Europe

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Abstract

Since 2010, Western Europe has experienced a renewed wave of fertility postponement, contributing to declining fertility rates and rising childlessness. Although multiple explanations have been proposed, the role of ideational factors remains underexplored. This study examines whether value change helps explain contemporary fertility postponement, drawing on the framework of the Second Demographic Transition. We apply Schwartz's Theory of Basic Human Values to investigate trends in Openness-to-Change and Conservation among women of childbearing age, assessing both aggregate changes over time and individual-level associations with having entered parenthood. Results show that these values are strongly associated with individual propensities to enter parenthood; however, their stability over time suggests they do not underlie the recent fertility postponement trend. Moreover, the selective role of values for entry into parenthood appears unchanged. Some regional heterogeneity emerges, with Southern Europe showing value shifts that may contribute to fertility postponement, though their overall influence appears limited. We conclude that contemporary fertility decline is unlikely to be driven by broad shifts in SDT-related values.

Keywords: fertility decline, fertility postponement, value shift, second demographic transition, theory of basic human values, fertility delay

1. Introduction

Persistent fertility declines across Western Europe continue to puzzle demographers. Despite occurring in economically, culturally, and institutionally heterogeneous countries, the declines display a striking degree of uniformity in both timing and trajectory. Though the onset of the declines coincides with the Great Recession, their persistence past periods of economic recovery suggests a more fundamental change in individuals' relationship to childbearing. A possible explanation for these cross-national trends is a shift in values, facilitating the diffusion of alternative family forms as part of a continuing *Second Demographic Transition*.

Suggestive evidence points in this direction. Acceptance of childfree lifestyles has increased across Western Europe, and the proportion of individuals intending never to have children appears to have grown during the years of fertility decline (Neyer, Lai, and Andersson 2024). Even the long-stable ideal number of children has come under challenge, with more individuals reporting a preference for no children (Golovina et al. 2024; Hartnett and Gemmill 2020). Beyond explicit intentions, younger cohorts may also be extending the interim period between meeting material prerequisites and entering parenthood, reflecting desires for autonomy, mobility, and consumption, and a wish to keep futures open.

In line with the *Second Demographic Transition*, such shifts may reflect broader self-actualization goals and a declining inclination to follow traditional life-courses or enter into long-term commitments, potentially explaining the cross-national similarity and partial economic decoupling of these trends.

Yet, empirical evidence directly linking value change to the current fertility decline remains scarce, in part due to challenges in linking the proposed ideational shifts to values at the micro level. This study addresses that gap by integrating Schwartz's (1994, 2012) *Theory of Basic Human Values* into the *Second Demographic Transition* framework. Specifically, it transposes the Materialism/Postmaterialism dimension into the higher-order values of Openness-to-Change and Conservation, using ESS data (2002–2022) to examine their association with not having had a child among women of childbearing age and how these values have evolved over time. The aim is not to establish individual-level causal mechanisms, but to assess whether fertility-relevant values are linked to fertility outcomes and whether these values have shifted in a way consistent with contemporary increases in the prevalence of women not yet having entered motherhood at childbearing ages. Beyond this, the study also explores changes over time in the selective role of values for entering motherhood, as well as heterogeneity across European areas and educational groups.

In what follows, we first describe changes in childbearing patterns and behavior in 21st-century Western Europe, to then link these to the ideational shifts of the *Second Demographic Transition* at the macro level. We then turn to the *Theory of Basic Human Values*, which we argue offers a promising framework for understanding the relationship between values and fertility behavior at the micro level, and connect this framework to the ideational components of the *Second Demographic Transition*. Finally, we outline the study's aims and hypotheses, contending that while micro-level associations and population-level coincidences between values and delayed

entries into parenthood are not sufficient on their own to explain contemporary fertility declines, they are a necessary condition for any plausible explanation based on value shifts.

2. Literature review and theoretical framework

2.1 Fertility postponement in the 21st century

In the early 21st century, Western countries experienced an unprecedented convergence of fertility trends, with uniform increases in fertility rates that seemed to signal the end of “lowest-low” fertility (Bongaarts and Sobotka 2012; Goldstein, Sobotka, and Jasilioniene 2009). Following the Great Recession, however, fertility rates again declined sharply and, contrary to expectations, have remained persistently low, showing only a weak connection to objective economic indicators (Comolli et al. 2021; Vignoli et al. 2020).

Western Europe has been particularly affected by these declines. The sharpest reductions have occurred in the Nordic countries – long regarded as fertility-friendly contexts – with Sweden, Finland and Norway reaching lowest-recorded fertility rates in 2023/2024 (1.43, 1.25, and 1.40 children per woman respectively). However, similarly consistent declines are evident across the other Northwestern European countries, and despite already low fertility rates in Southern Europe, the region has seen a continuing decline: leading to a convergence in fertility rates across Western Europe. Indeed, by 2023, total fertility rates in Western Europe had converged to a narrow band, ranging from 1.66 in France to 1.12 in Spain.

Evidence from the Nordic countries and the United States points to declining first birth rates as a primary driver (Hellstrand, Nisén, and Myrskylä 2020; Kearney, Levine, and Pardue 2022; Ohlsson-Wijk and Andersson 2022), largely reflecting delays in childbearing during early adulthood (Lesthaeghe and Zeman 2024). Consequently, the age-conditional prevalence of childlessness has increased (Beaujouan and Neels 2025), a development often interpreted as a prolonged period of postponement.

The remarkable uniformity of the fertility decline across diverse contexts – and, in particular, its impact not only on countries with traditionally low fertility but also on those long regarded as relatively immune to such declines – has given rise to extensive debate. A central theme in this debate has been the apparent decoupling of fertility trends from objective economic conditions, which has shifted scholarly attention toward subjective determinants. Explanations have variously emphasized uncertainty linked to globalization, rising direct and indirect costs of childbearing, and changing cultural norms around parenting (Comolli 2023; Matysiak and Vignoli, 2024; Ruckdeschel 2024; Van Wijk and Billari 2024; Vignoli et al. 2020). Yet, no consensus has emerged on the dominant causes.

2.2 The Second Demographic Transition revisited

By contrast, the role of ideational factors has received less systematic attention. The *Second Demographic Transition* (SDT) offers the most prominent framework for linking values to fertility change, describing a fundamental reorientation of family dynamics across the developed world driven by shifting attitudes and value priorities (Lesthaeghe, 2014; van de Kaa, 2001; Sobotka, 2008). Drawing on Maslow (1943) and Inglehart (1971), SDT scholars view these shifts as a cohort phenomenon, rooted in the higher material security experienced

during early life in post-WW2 Western societies. Economic development and educational expansion are argued to have reduced the salience of basic survival and material needs for younger cohorts, fostering postmaterialist values centered on self-expression (van de Kaa 2001; Zaidi and Morgan 2017). In this account, rising secularism, progressive politics, egalitarianism, tolerance for nontraditional ethics, individualism, and the prioritization of relationship quality over traditional marital norms emerged as defining orientations (Surkyn and Lesthaeghe 2004: 51–52). These ideational shifts facilitated non-conventional family formation and new fertility behaviors – such as increased contraceptive use, postponement of first births, and extramarital childbearing – that gradually gained widespread acceptance (Lesthaeghe 2010). Diffusion was typically argued to occur through a top-down process, primarily via education: the higher-educated first adopted the new values and behaviors, which subsequently spread to the broader population.

While the ideational framework of the Second Demographic Transition has generally been more successful in explaining changes in union formation and dissolution than changes in fertility (Lesthaeghe and López-Gay 2013), there are indications to suggest that contemporary fertility declines may reflect an ideational shift. In contemporary fertility regimes characterized by widespread control and planning, childbearing is generally voluntary, and having children is thus preconditioned on a desire for children. Though such desires may be unrealized due to structural constraints, declining fertility rates may also be explained by a change in these desires themselves. Indeed, across the Western world, an increasing proportion of young people seem to report desires and intentions to remain childless (Golovina et al. 2024; Hartnett and Gemmill 2020; Neyer et al. 2024), possibly indicating that the new fertility trends are driven by conscious and voluntary decisions to (temporarily) forego parenthood. Thus, many individuals in younger cohorts may simply desire a life without children; a life without the obligations and responsibilities that childbearing involves.

At the same time, fertility desires are not formed in isolation but are shaped by present circumstances and future expectations and thus remain closely tied to individuals' structural conditions and opportunities (Vignoli et al. 2020). Further, delays in childbearing often seem to reflect ambivalences regarding the future, rather than long-term plan-making (Beaujouan and Neels 2025). Shifts in fertility desires may therefore reflect economic considerations as much as changes in underlying motivations or aspirations. For that reason, the influence of ideational factors cannot be reduced to stated fertility desires but should be understood in relation to the broader system of life goals and priorities – i.e., values – that underlie decisions about childbearing.

From the perspective of values, recent changes in childbearing behavior may be tied to wider cultural dynamics in contemporary society. It is telling that the sharpest declines have occurred in Western Europe – a region long characterized by strong self-expression values and democratic institutions that reinforce individual choice, in contrast to the more materialist outlooks of Eastern Europe (Inglehart and Welzel 2001; Lesthaeghe and Zeman 2024). Furthermore, the rise of social media has created new pathways for the diffusion of values and collective narratives, particularly among youth (Boyd 2014). The emerging social media cultures and platforms have further emphasized ideals of authentic self-expression and

conspicuous consumption, potentially fostering hedonistic and individualist orientations (Baym and Boyd 2012; Taylor 2022). On the other hand, other developments may complicate the view of a linear development toward postmaterialist orientations, especially following the Great Recession. The rise of globalization, protracted labor market deregulation, and economic uncertainty may reinforce materialist values, leading individuals to desire security and stability during periods of hardship (Guetto, Luijkx, and Scherer 2015; Mills and Blossfeld 2003).

2.3 Reconsidering values in the SDT

While the SDT offers a compelling framework for understanding contemporary fertility postponement, recent trends may therefore raise questions about whether its underlying value shifts have continued. The ideational components of the SDT have also been difficult to establish at the micro level. Although some studies have found positive associations between postmaterialist values and family formation (Moors 2008; Surkyn and Lesthaeghe 2004), the evidence remains limited (see Zaidi and Morgan 2017). Many studies focus on single cultural indicators, such as religiosity, reflecting only a limited subset of the relevant value dimensions, or use postmaterialist indices that have been criticized for failing to distinguish between fundamentally different value positions and that have generally proven difficult to validate (Brooks and Manza 1994; Davis and Davenport 1999; Smallenbroek 2023; Zaidi and Morgan 2017).

Further, analyses of the SDT tend to conflate attitudes – which are more volatile and context-specific evaluations of objects as good or bad – with values, which are relatively stable, abstract motivational goals (Schwartz 2012; Smallenbroek 2023). This conflation risks endogeneity, as family-related attitudes are likely shaped by individuals' perceived possibilities for childbearing and the structural constraints influencing those possibilities. By focusing on broad, abstract values, we may more efficiently disentangle ideational components from structural components of contemporary fertility trends. In this respect, the *Theory of Basic Human Values* (TBHV; Schwartz 1992) provides a strong framework, while also offering a way to operationalize the value shifts central to the SDT at the individual level (Smallenbroek 2023).

Unlike postmaterialist indices, the TBHV has been extensively validated cross-nationally (Schwartz and Bardi 2001; Schwartz and Boehnke 2004; Schwartz and Sagie 2000), and its dimensions consistently predict a wide range of behaviors, from political preferences to health practices (Nazirova and Borbala 2024). Crucially, TBHV values are grounded in basic human needs – individual biological needs, the need to coordinate actions with others, and the collective need for group survival and welfare – that are conceptually exogenous to fertility behavior.

In the TBHV, values are defined as emotional beliefs that guide behavior, reflecting what individuals find important, motivating actions, and helping them to evaluate situations (Schwartz 2012). A basic value is postulated to be universally recognized and meaningfully distinguished. In its most common configuration, 10 such values are identified and organized into four higher-order categories – *Openness-to-Change*, *Conservation*, *Self-Enhancement*, and *Self-Transcendence* – arranged in a circumplex according to the conflict or compatibility of their motivational goals (see Figure 1). Through this, micro-level value orientations can be

directly connected to the macro-level framework of the SDT: *Openness-to-Change* corresponds to postmaterialist orientations emphasizing autonomy, independence, pleasure, and novelty, while *Conservation* aligns with materialist orientations emphasizing security, stability, and adherence to traditional life courses.¹ Empirical research supports the behavioral relevance of these dimensions: Openness-to-Change is associated with a higher risk of cohabitation, while Conservation is associated with a lower risk (Smallenbroek 2023). With regard to fertility, mothers tend to place more importance on Conservation values than non-mothers, although this difference may partly reflect value shifts following childbearing (Lönnqvist, Leikas, and Verkasalo 2018).

However, individual-level associations are insufficient to demonstrate macro-level causation, and evidence of population-level value change remains mixed. Using longitudinal data for the Netherlands, Leijen et al. (2022) found an increasing importance of hedonism and stimulation across generations, though differences between *Millennials* (1980–1992) and *Generation X* (1965–1979) were modest. Cross-sectional studies suggest a broader shift from Conservation to Openness-to-Change values (Mentus 2024), but this pattern may not hold among younger cohorts affected by the Great Recession (Sortheix et al. 2019).

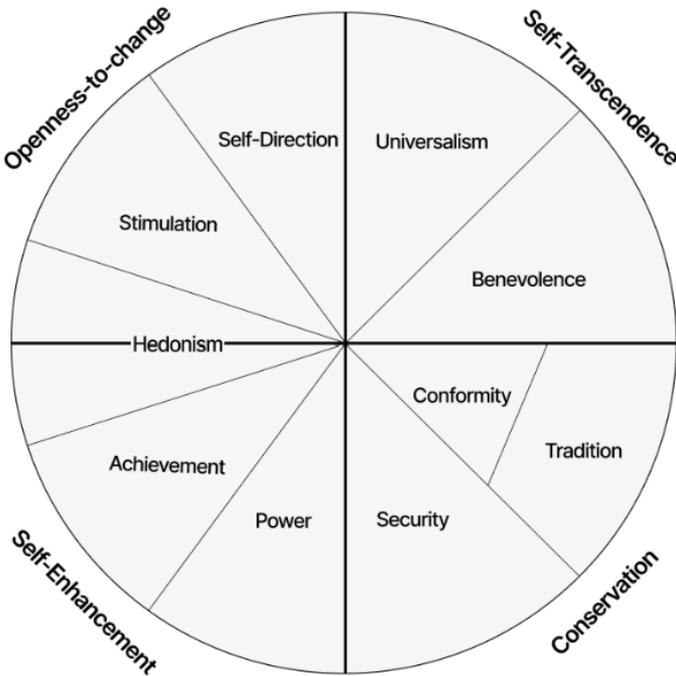


Figure 1. Model of Basic Human Values. By authors; adapted from Schwartz (1992).

¹ Beyond their conceptual overlap, Conservation and Openness-to-Change have been shown to correlate with materialist and postmaterialist orientations (Dobewall and Strack 2014).

2.4 Analytical framework and hypotheses

Building on this framework, this study examines whether changing value orientations may contribute to recent fertility decline at the population level. It tests a set of necessary – but not sufficient – conditions for values to be a root cause of the decline. Rather than estimating causal effects, our aim is to evaluate whether the observed associations are consistent with value change as a plausible explanation for contemporary fertility decline. That is, that values have changed in such a way as to facilitate a fertility decline. In addition, the study examines a related but distinct mechanism: whether the behavioral salience of values has changed over time, such that value orientations have become more consequential for entry into motherhood.

Given the evidence that recent declines are driven primarily by delayed or foregone entry into parenthood, the analysis focuses on the relationship between entering motherhood and the higher-order values of Openness-to-Change and Conservation. If value change is driving the delay in entries into motherhood, increases in the proportion of women who have not yet had a child should coincide with population-level shifts in values. This leads to the *value shift hypothesis*:

H1: *Openness-to-Change values have increased in relative importance compared to Conservation values as more women have not yet had a child.*

Further, the relevance of values for fertility behavior may have increased even if values have remained stable at the population level. In this sense, values may have a selective role in contemporary fertility declines by moderating the effects of other structural or cultural changes. For example, the possible emergence of intensive parenting norms and increasing perceived costs of childrearing may deter those who prioritize open futures more than those who prefer traditional life-courses (Gauthier, Smeeding, and Furstenberg 2004; Kornrich and Furstenberg 2013; Sayer, Bianchi, and Robinson 2004). Similarly, a weakening of pro-fertility norms and growing acceptance of childfree lifestyles may have enabled those who prefer not to have children to realize those preferences more readily – thus increasing the selective effect of values on childbearing. This leads to the *value salience hypothesis*:

H2: *Over time, the associations between the higher-order values and not having had a child have become stronger.*

Complementing the value shift hypothesis, the value salience hypothesis examines an alternative mechanism through which values may shape patterns of fertility postponement. Rather than examining whether value shifts themselves underlie delayed childbearing, it considers that value orientations may gain or lose behavioral importance depending on broader contextual developments. In this sense, evidence in support of the hypothesis would not imply that values are the root cause of fertility postponement, but that they matter contextually through their interaction with other social or structural changes.

Changes in the behavioral relevance of values may also provide insight into the macro-level consequences of value shifts. Most importantly, the demographic effects of an observed value shift will depend on whether values remain behaviorally relevant for entering motherhood and whether this association is stable or increasing over time. If the relative importance of openness-

to-change values has risen but the associations with having children have weakened toward zero, the potential effects of a value shift are counteracted by decreased selectivity of values, making the aggregate effects of the value shift small and a value-based explanation unlikely. In this sense, the motivation for the value salience hypothesis is twofold: first, to test whether value-based selectivity contributes to fertility postponement, and second, to provide additional empirical insight into the macro-level consequences of shifting values.

3. Data & methods

3.1 Data

The study uses data from the repeated cross-sectional *European Social Survey* (ESS). Since its inception, the ESS has included a consistent, comprehensive set of items measuring Schwartz’s basic human values, making it ideal for examining values over time. Data from rounds 1–10 (2002–2022) were used.

The analytic sample consists of non-migrant women aged 20–39 residing in Western European countries.² Foreign-born individuals were excluded to reduce the risk of confounding, as migrant households in the EU are more likely to include children (European Commission 2024) and foreign-born populations may differ from native-born populations in their value orientations. Moreover, the proportion and composition of migrants changed over the study period. Respondents missing data on children in the household or any value indicators were also excluded from the analysis.

In Table 1, the criteria for sample selection and corresponding omissions are shown.

Sample selection

Sample criteria	Dropped observations	Remaining observations
Total sample		490,555
Resident in Western Europe	195,685	294,870
Woman	140,371	154,499
Native-born	16,176	138,323
Age: No missing data	855	137,468
Aged 20-39	85,900	37,581
Children: No missing data	39	37,542
Values: No missing data	3,900	33,642
Analytic sample		33,642

Table 1. Description of the sample selection.

3.2 Dependent variables

The main dependent variable is a binary indicator of *not yet having had a child*. Since the ESS does not consistently include data on births, this is proxied using information on the presence (and former presence) of children in the household (see Brini 2020). In waves where data on births are available, this proxy aligns closely with that information: 99.4% of respondents who had ever given birth were classified as having had a child, and 96.7% of those who had not given birth were classified as not yet having had a child. Across the sample, 49% had not had children: 75.8% among women aged 20–29 and 27.9% among women aged 30–39.

² Included countries are Austria, Belgium, Switzerland, Germany, Denmark, Spain, Finland, France, Great Britain, Greece, Ireland, Iceland, Italy, the Netherlands, Norway, Portugal, and Sweden.

3.3 Independent variables

The main independent variables are the higher-order value scores for Openness-to-Change and Conservation. In the ESS, basic human values are measured through 21 items, each asking respondents how similar they are to a described person with specific motivational goals on a scale from 1 (low similarity) to 6 (high similarity).³ Of these, 12 items are linked to the values analyzed in this study (see Table 2). To adjust for individual response styles – since some respondents tend to agree or disagree with all items – we followed the standard procedure of centering each item on the respondent’s mean rating across all 21 items (the “common factor”). This procedure yields a relative ranking of values, emphasizing the priority given to one value compared to others (Rudnev 2021; Schwartz 2012). Thus, this study focuses on *value priorities* – the individual-level preference given to one value in relation to all other – in line with the TBHV’s focus on the structure of individuals’ values. Note that conclusions were substantively unchanged when raw (non-centered) scores were used.

Composition of higher-order values from basic values and corresponding value items

Higher-order value	Basic value	Value item
Openness-to-Change	Hedonism	Having a good time is important to her. She likes to “spoil” herself. She seeks every chance she can to have fun. It is important to her to do things that give her pleasure.
	Stimulation	She likes surprises and is always looking for new things to do. She thinks it is important to do lots of different things in life. She looks for adventures and likes to take risks. She wants to have an exciting life.
	Self-direction	Thinking up new ideas and being creative is important to her. She likes to do things in her own original way. It is important to her to make her own decisions about what she does. She likes to be free and not depend on others.
Conservation	Security	It is important to her to live in secure surroundings. She avoids anything that might endanger her safety. It is important to her that the government ensures her safety against all threats. She wants the state to be strong so it can defend its citizens.
	Tradition	It is important to her to be humble and modest. She tries not to draw attention to herself. Tradition is important to her. She tries to follow the customs handed down by her religion or her family.
	Conformity	She believes that people should do what they’re told. She thinks people should follow rules at all times, even when no-one is watching. It is important to her always to behave properly. She wants to avoid doing anything people would say is wrong.

Table 2. The questions (for a female respondent) from which the basic and higher-order values under study are constructed.

Basic values were then calculated as the mean of the centered items belonging to each value, and higher-order values as the mean of their constituent basic values. For example, if a

³ In the original ESS data the scale is coded in the opposite direction. The items were reversed so that higher scores indicate greater similarity.

respondent's overall mean across all 21 items was 2, but her mean rating on Tradition items was 3, her Tradition score would be 1. If she additionally had Conformity = 2 and Security = 3, her Conservation score would be 2. Equivalently, a Conservation score of 2 implies that, on average, a respondent rated the items related to Conservation two points higher than their average rating across all 21 items. The theoretical range of these higher-order value scores is approximately -3.6 to 3.6 . In practice, the measures are roughly normally distributed, with means of 0.02 ($SD = 0.56$) for Openness-to-Change and -0.15 ($SD = 0.59$) for Conservation. The observed ranges for both higher-order value scores are about -2.9 to 2.4 . For the basic value scores, the theoretical range is approximately -4.5 to 4.5 , with observed SDs between 0.73 and 0.94 .

To account for period effects and assess whether the influence of values changes over time, a categorical variable indicates the interview period, with each period covering two rounds of the ESS (three to four years).

Since values are often shaped by socioeconomic status, the analysis includes a variable for the highest level of completed education, categorized as up to lower secondary, upper secondary, tertiary education, and missing information. An interaction term between education and age is added to account for differences in the timing of motherhood across educational groups. A control for country of residence is also included, as national contexts likely influence both value priorities and the timing and prevalence of motherhood. In analyses of heterogeneity macro-regions were considered as well: the Nordic countries (Sweden, Denmark, Norway, Finland and Iceland), German-speaking countries (Germany, Switzerland, and Austria), Southern European countries (Italy, Spain, Portugal, and Greece), and Western Atlantic European countries (France, Belgium, the Netherlands, the UK, and Ireland).

Full summary statistics can be found in Table A1 in the Appendix.

3.4 Analytic strategy

The analysis examines three aspects of the relationship between values and fertility: population-change over time, individual-level associations, and changes in the associations over time. Since values and fertility dynamics tend to change across stages of the life-course, the analysis examines women at traditional postponement ages (20–29) separately from women at ages of recuperation (30–39).

To examine population-level change over time, regression models are fitted to estimate differences in the prevalence of women who have not yet had a child and average higher-order values across periods. To ensure that observed changes are not an artifact of differences in country compositions across survey rounds, average within-country changes are estimated by including country fixed effects. Trends for the constituent basic values are also estimated to facilitate a more fine-grained analysis of value change. Furthermore, the examination is complemented by analyses of geographic and educational heterogeneity.

To examine the association between value priorities and motherhood at the individual level logistic models are employed, estimating the associations between the higher-order values (as well as the constituent basic values) and not having had a child. Models are estimated for the

full sample and separated by region. As the within-individual centering of the value scores introduces autocorrelation, separate models are fitted for each value. Results are displayed in tables of average marginal effects.

To estimate whether the salience of values has increased over time, we use logistic models interacting higher-order values with periods. These are also estimated for the full sample and separately across regions.

As both the presence of children in the household and values are measured at the time of interview, the analyses rest on the assumption that value priorities remain relatively stable across the adult life course – and that values do not change substantively in response to motherhood. To test the robustness of the results to these assumptions, additional models with alternative fertility outcomes are presented in section 4.4. Further, the analysis is replicated with a measure of religiosity replacing value scores, to examine whether the results are corroborated when examining another key cultural dimension of the SDT.

Given the nested structure of the data, with individuals clustered within countries, standard errors are clustered at the country level to account for potential intra-country correlation when estimating individual-level associations. All analyses are weighted to account for unequal inclusion probabilities and non-response.

4. Results

4.1 Time trends in values and the prevalence of women without children

We first test the value shift hypothesis by examining changes in value orientations over the study period. Results are displayed in Figure 2.

Among women aged 20–29, the proportion of women who have not yet entered motherhood has increased steadily over time. Between 2002–2005, approximately 74% were estimated to be without children, compared to 83% in the period 2018–2022. Contrary to the value shift hypothesis, there was, however, no clear shift toward Openness-to-Change, with average value scores remaining largely stable over the period. For women aged 20–29, the increasing levels of women not yet having had a child do not therefore coincide with any clear value shift across Western European countries.

Among women aged 30–39, the proportion of women who had not entered motherhood similarly rose from about 24% to 34% over the study period, while both higher-order value scores stayed relatively stable. Though there was some decline in the average Conservation score, this change was very marginal, with a total decrease in average Conservation scores of less than 0.1. Thus, the evidence indicates that the value shift hypothesis does not hold among women aged 30–39 either, and that the increasing prevalence of women without children does not coincide with a broad value shift.⁴

⁴ Examining trends in the constituent basic values suggest that the small increase in Conservation was driven by a decline in Conformity, and that there was a slight increase in Hedonism scores as well (consistent with Leijen et al. 2022). These changes were however only marginal as well, with the Conformity score being only 0.17 points lower in 2018–2022 compared to 2002–2005 (see Figure B1 in the Appendix).

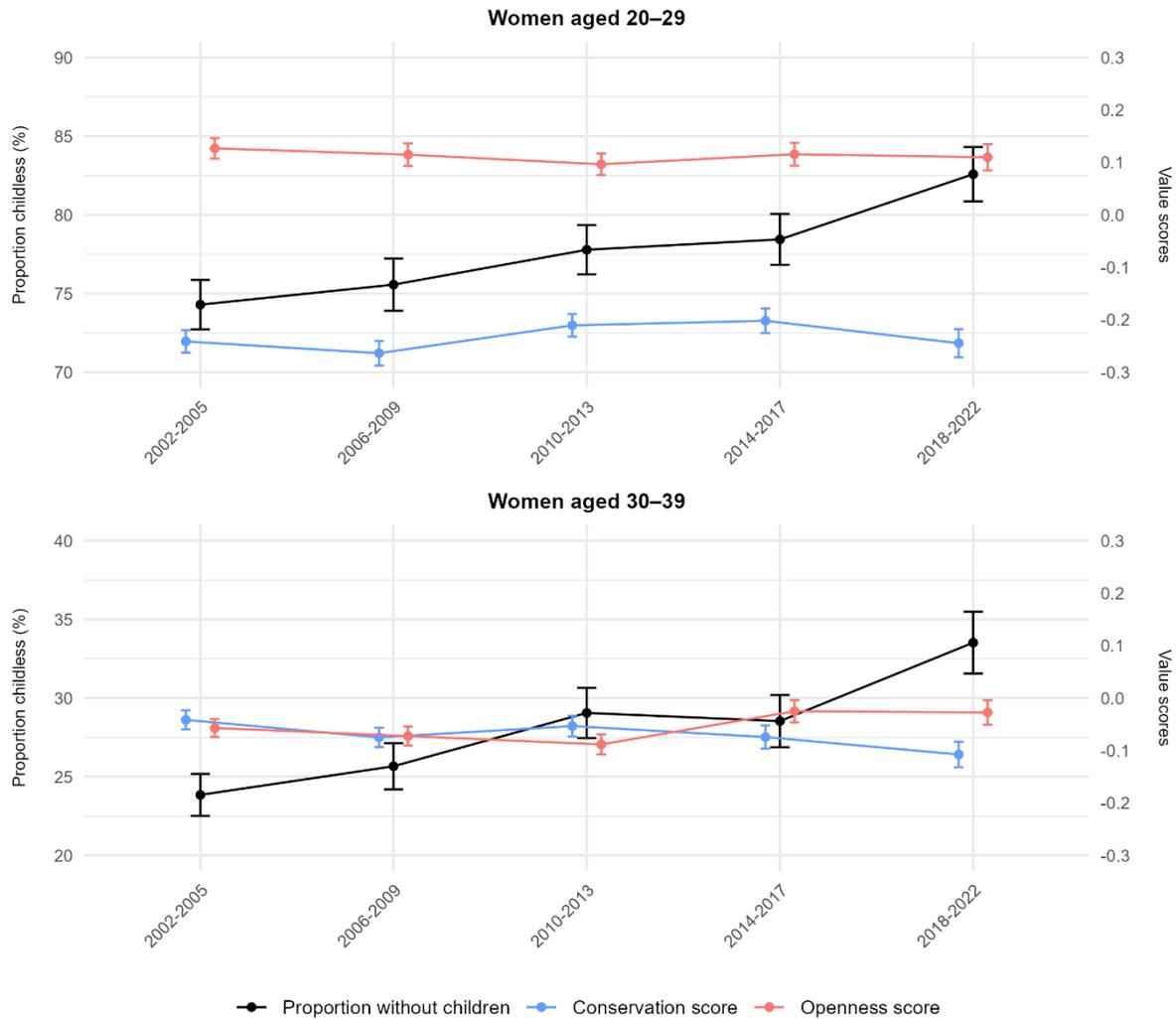


Figure 2. Prevalence of women who have not yet had a child and population-average value scores. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

Overall, these findings therefore indicate that recent fertility delays have not been accompanied by broad shifts in value orientations among women of childbearing age across Western European countries. Turning to regional heterogeneity, we further find no evidence in support of the value shift hypothesis for the Nordic, Western Atlantic, or German-speaking countries (where we rather observe a small tendency toward stronger Conservation values among women aged 20–29), despite an increasing prevalence of women without children in all regions (see Figure 3). However, the exception is Southern Europe, which does display a clear shift toward Openness-to-Change across age groups – with an overall increase in Openness-to-Change of 0.18 and 0.22 and a decrease in Conservation of 0.16 and 0.21 for women aged 20–29 and 30–39, respectively. In this case, the value shift hypothesis seems to hold, and the increasing prevalence of women having not had a child is consistent with a continued diffusion of SDT-related values.

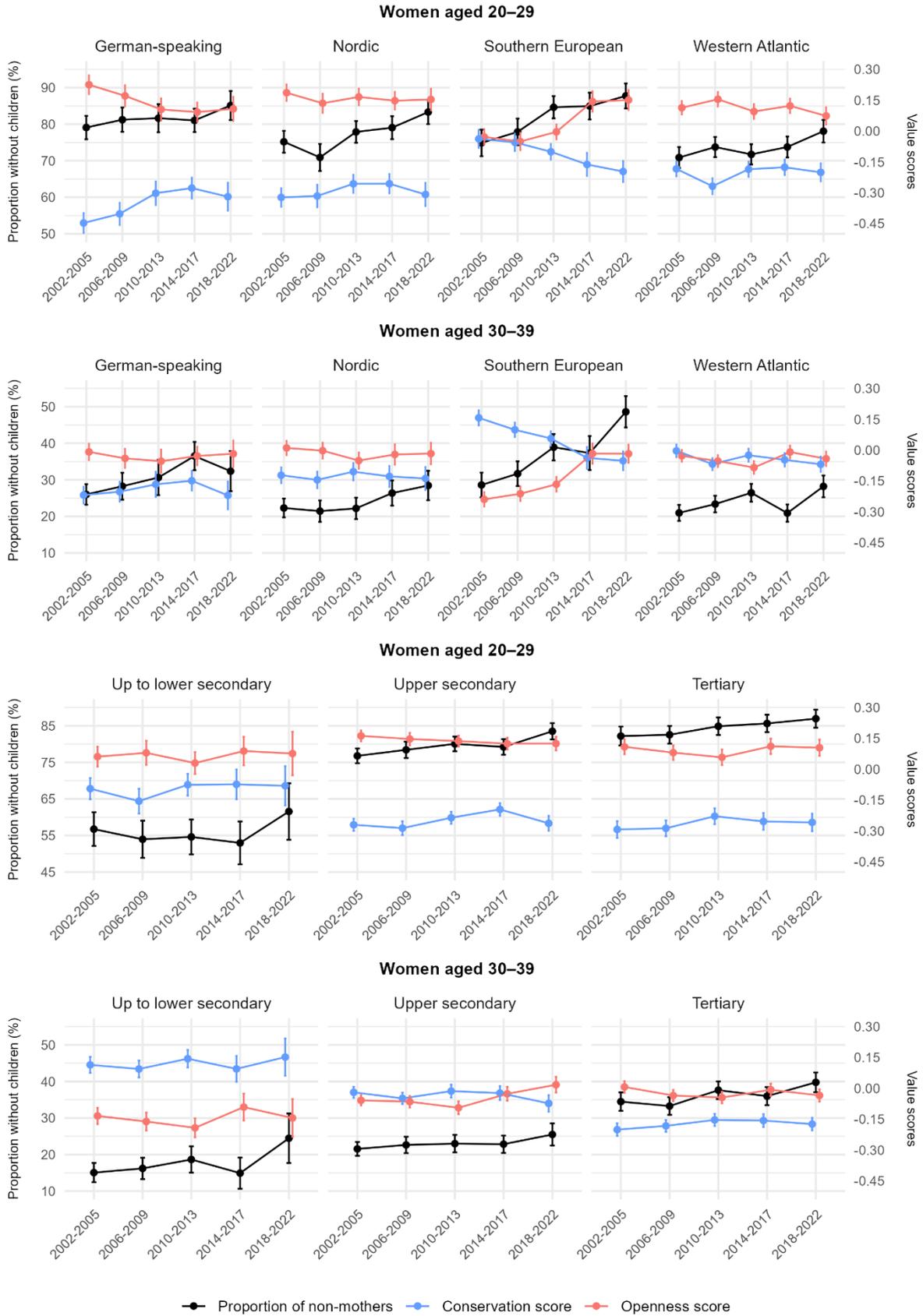


Figure 3. Prevalence of women who have not yet had a child and population-average value scores, by region and educational category. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

In conclusion, the value shift hypothesis is therefore not corroborated, and no evidence is found in support of a value shift coinciding with the increasing prevalence of women without children, except in the case of Southern Europe. The analysis of heterogeneity across levels of education provides further contextual support: although value orientations differ systematically by education – higher education being associated with greater Openness-to-Change and lower Conservation in line with SDT expectations – these values remain stable over time for all educational groups. Meanwhile, trends in the prevalence of women without children are relatively muted within educational groups compared to the overall rise, suggesting that educational expansion itself may be an important component of the increases in Western Europe. Crucially, however, this expansion does not appear to be linked to any processes of value change. Moreover, the only clear increase in the prevalence of non-mothers is observed among women aged 30–39 with low education, the group most strongly emphasizing Conservation values. Such a pattern is difficult to reconcile with a value-change explanation, since fertility appears to be delaying the most where values have remained most traditional.

4.2 Association between not yet having children and values

Having established that aggregate value orientations have remained largely stable over time, we next examine their relevance for individual fertility behavior by testing whether they are associated with not having entered motherhood. The results are clear: mothers tend to place more importance on Conservation values than non-mothers, while non-mothers place more importance on Openness-to-Change (see Table 3).

Women aged 20–29: Average marginal effects of value scores on the probability of not having a child					
	Total	Nordic	German-speaking	Atlantic	Southern
Openness	.083 (.007)	.103 (.017)	.055 (.006)	.082 (.011)	.089 (.014)
Hedonism	.046 (.004)	.032 (.008)	.030 (.004)	.057 (.001)	.059 (.005)
Self-direction	.027 (.006)	.052 (.013)	.016 (.005)	.021 (.010)	.007 (.005)
Stimulation	.034 (.005)	.049 (.006)	.029 (.008)	.025 (.009)	.034 (.012)
Conservation	-.089 (.008)	-.104 (.016)	-.077 (.014)	-.093 (.013)	-.067 (.026)
Tradition	-.036 (.006)	-.049 (.007)	-.043 (.008)	-.027 (.012)	-.028 (.016)
Conformity	-.020 (.004)	-.025 (.012)	-.012 (.002)	-.025 (.006)	-.007 (.008)
Security	-.066 (.006)	-.081 (.009)	-.054 (.012)	-.072 (.013)	-.051 (.007)

Women aged 30–39: Average marginal effects of value scores on the probability of not having a child					
	Total	Nordic	German-speaking	Atlantic	Southern
Openness	.114 (.009)	.141 (.007)	.107 (.005)	.097 (.016)	.107 (.017)
Hedonism	.051 (.005)	.064 (.005)	.038 (.017)	.054 (.007)	.044 (.003)
Self-direction	.046 (.007)	.074 (.009)	.043 (.002)	.022 (.009)	.043 (.010)
Stimulation	.051 (.004)	.054 (.004)	.063 (.007)	.042 (.006)	.045 (.016)
Conservation	-.104 (.009)	-.116 (.012)	-.113 (.002)	-.091 (.023)	-.094 (.009)
Tradition	-.057 (.006)	-.075 (.008)	-.072 (.007)	-.037 (.012)	-.053 (.008)
Conformity	-.025 (.005)	-.030 (.012)	-.022 (.003)	-.026 (.010)	-.012 (.010)
Security	-.060 (.005)	-.061 (.004)	-.069 (.007)	-.056 (.010)	-.056 (.012)

Table 3. Average marginal effects of value scores on the probability of not yet having had a child. Models control for age, country, period, education, and the product-term age*education. Standard errors in parentheses. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

Among women aged 20–29, a one-point increase in the Conservation score is associated with a 9-percentage-point lower probability of not having had a child. Comparing women at the 5th and 95th percentiles of the Conservation score, the probability gap is 17 percentage points (85% vs. 68%) – indicating a strong relationship between Conservation values and the propensity of not having children. The model using the Openness-to-Change score shows an inverse relationship, and all constituent basic values are associated with not having had a child in the expected directions – that is, consistent with the higher-order values that they constitute.

The results for women aged 30–39 show even more pronounced associations, with an average marginal effect of 0.11 for Openness-to-Change, and a corresponding probability gap of 21 percentage points (18% vs. 39%) between the 5th and 95th percentiles.

These associations are consistent across regions (though particularly pronounced in the Nordic countries) with higher-order values strongly linked to not having had a child and associations with basic values aligning in the expected directions. This cross-regional consistency suggests that the studied value dimensions are relevant across institutional and cultural contexts, supporting their importance for selection into parenthood. However, because these values have not changed over time, they cannot account for the rising prevalence of women who have not yet had children and declining fertility. The exception is Southern Europe, where the associations are both strong and consistent – suggesting that values may indeed play an important role in the increasing postponement of childbearing in this region.

4.3 Value-based selection into motherhood over time

Finally, we now turn to the value salience hypothesis, which proposes that the relationship between value orientations and not yet having had a child has grown stronger over time. This would be reflected in a stronger positive association between not having had a child and Openness-to-Change, and a stronger negative association between not having had a child and Conservation and indicate an increasing value-based selection into motherhood. The results shown in Figure 4 provide little evidence for such a shift. On the contrary, the associations have remained stable over time across both age groups, suggesting that the relevance of the higher-order values for not having had a child has not in general increased across Western European countries over time.

When examining regional heterogeneity, the association remains stable for the Nordic countries, German-speaking countries, and Western Atlantic countries (see Figure 5). Across these regions, the combined findings do therefore not suggest either a change in values or in the relevance of values for selection into motherhood over time, despite strong individual-level associations and an increasing prevalence of women without children.

Southern Europe presents a more complex case. Here, the association with Openness-to-Change weakens over time among women aged 20–29, while the association with Conservation weakens among women aged 30–39. These results not only contradict the value salience hypothesis but also cast doubt on whether the observed value shifts in Southern Europe are even relevant for fertility postponement, as their potential effects may be nullified by the diminished salience of values.

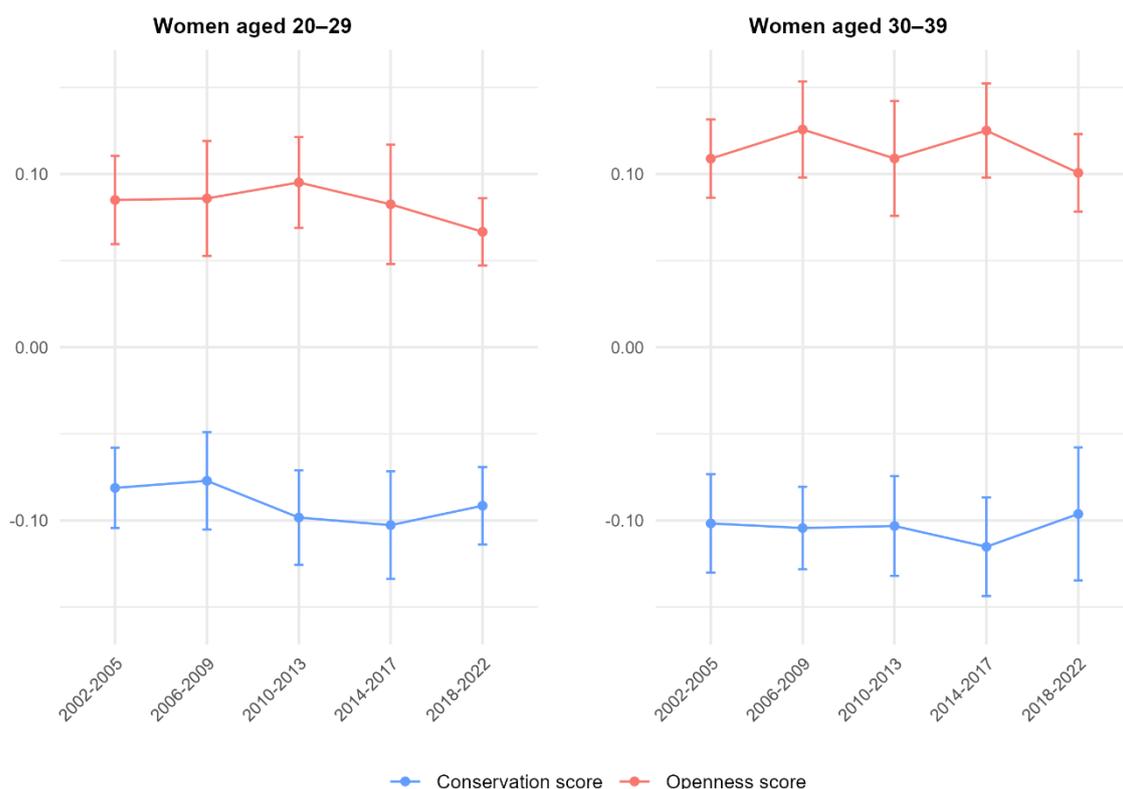


Figure 4. Average marginal effects of value scores on the probability of not yet having had a child over time. Models control for age, country, period, education, and the product-term age*education. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

4.4 Alternative fertility and value measures

Because both the absence of children and values are measured at the time of interview, the analysis assumes that values remain stable over the life course. The assumption is more credible for recent mothers than for those who had their first child decades earlier, among whom substantial value shifts may have occurred. Such shifts could bias the associations upward, since Conservation values generally increase with age (Smallenbroek et al. 2023). Similarly, because the outcome may reflect decisions made before the period where it is measured, changes in the salience of values may be harder to detect than with outcomes more closely tied to current behavior. For example, if the salience of values shifted suddenly after 2010, many mothers in the sample would still have entered parenthood before 2010 – even in the later periods – and would therefore reflect an earlier context of selection. To test whether this affects the results, we estimated additional models using recent birth (defined as having a child under four years old living in the household) as the outcome variable, pooling all age groups and adding an additional control for parity four years prior to the interview. The results show that also recent births are strongly associated with the higher-order values, but that these associations have not changed over time, supporting the study’s main findings (see Figure C1 in the Appendix).

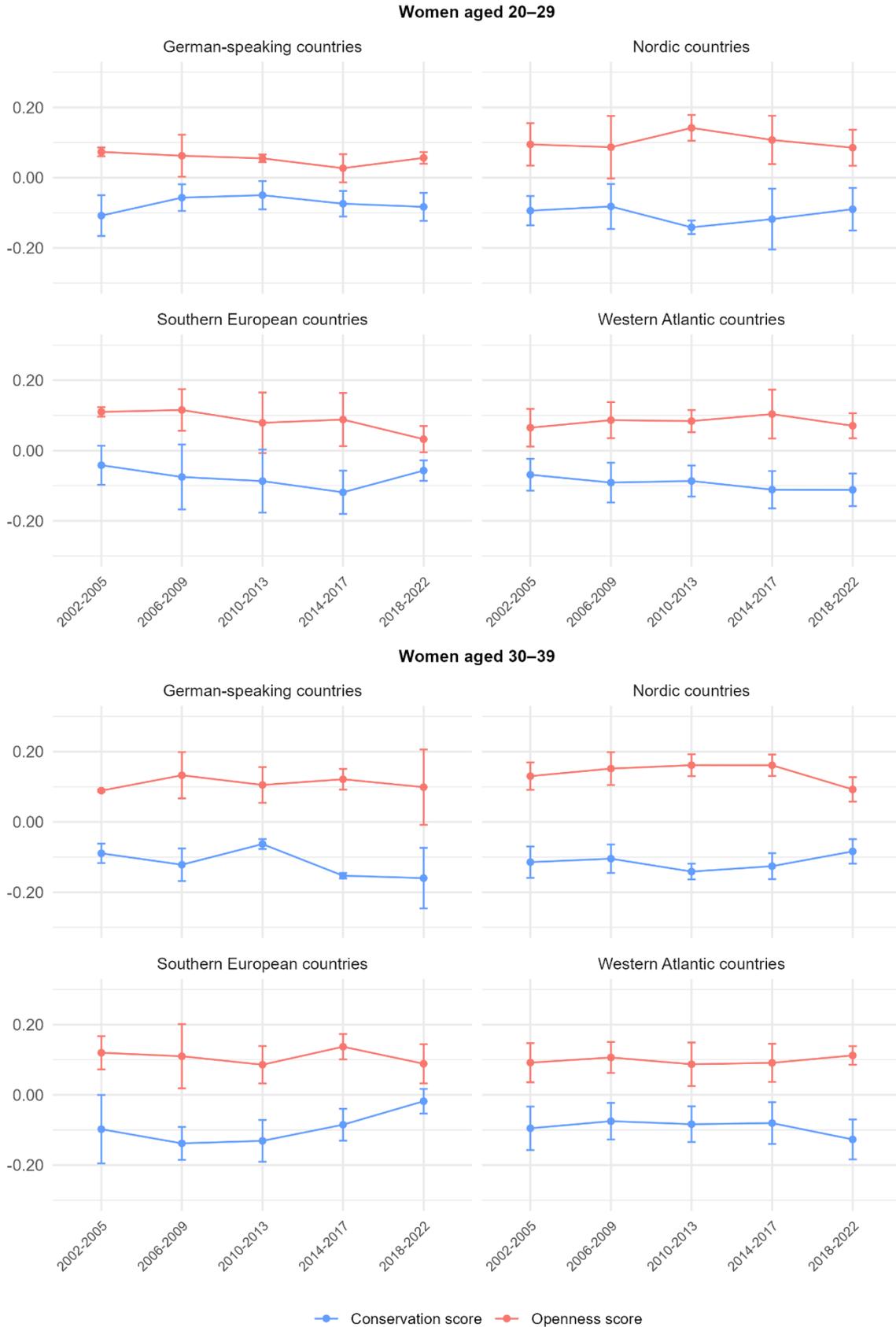


Figure 5. Average marginal effects of value scores on the probability of not yet having had a child over time, by region. Models control for age, country, period, education, and the product-term age*education. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

A further concern is reverse causality, since prior research suggests that the entry into motherhood may increase the emphasis on Conservation values (Lönnqvist et al. 2018). While ESS data do not allow us to link values to subsequent fertility behavior directly, rounds 2 and 5 include questions on fertility intentions. We re-estimated the models using a binary measure of fertility intentions as the outcome, pooling all age groups and controlling for parity at the time of the interview. The results show strong associations between fertility intentions and the higher-order values, in the expected directions (see Table C1 in the Appendix). This supports the idea that values influence fertility behavior already at the stage of intentions, before actual outcomes are observed.

Given the relevance of religiosity in prior research on SDT-related fertility declines, and its conceptual overlap with the studied value dimensions, we further examined whether changes in religiosity provided a better explanation than the value dimensions analyzed above. Religiosity was measured on a 0–10 scale, based on a direct self-assessment of how religious respondents are. ESS data indicate that religiosity among women of childbearing age has declined over the study period (see Figure D1 in the Appendix). However, among women aged 20–29 the association with fertility outcomes is weak – and disappears once Conservation scores are controlled for – while among women aged 30–39 the association diminishes over time, suggesting a reduced relevance of religiosity for selection into parenthood (see Figure D2 in the Appendix).⁵

Although it has not always been clear whether religiosity influences childbearing independently of value orientations, these findings suggest that its effect is at best weak beyond its overlap with higher-order values. Increased secularization, therefore, is unlikely to affect fertility postponement in the absence of broader shifts in values.

5. Discussion

Though shifting values have been suggested to explain the new wave of fertility postponement, few studies have so far subjected the explanation to rigorous empirical testing. This study addressed that gap by integrating Schwartz’s *Theory of Basic Human Values* with the *Second Demographic Transition* framework. Our analysis found consistent and strong associations between the higher-order values of Openness-to-Change/Conservation and the likelihood of not having had a child, demonstrating the usefulness of the TBHV in fertility research. There is little doubt that this dimension matters for fertility behavior given its consistency across alternative fertility measures. However, higher-order values remained stable over the study period, while the prevalence of women who had not had a child increased substantially, providing little support for the value shift hypothesis. Likewise, the value salience hypothesis was not supported. If other cultural or structural factors were affecting individuals differently according to their values, we would expect changing associations between values and fertility over time, yet these remained largely stable. Together, these results suggest that although values are relevant for individual fertility behavior, they are unlikely to be the primary driver of recent fertility postponement in Western Europe. At the least, they do not offer a compelling

⁵ And this is further emphasized when controlling for Conservation scores

explanation of the uniformity of declines or their decoupling from economic conditions. Instead, other mechanisms may be more relevant to explain recent delays in the transition into parenthood.

While the stability of values over time therefore suggests a limited explanatory potential for processes of value shifts, it remains possible that other value dimensions beyond the studied higher-order values are of relevance for postponement. One point of consideration is the consistent decline in Conformity over the study period. Such a decline is generally clear across research on value change, but the relevance for fertility trends appears to be low as the associations between Conformity and not having had a child are weak.

Another ideational process often linked to postponement is secularization. With respect to secularization, the evidence here corroborates findings of declining religiosity across Western European countries. Yet the association between religiosity and not having had a child also weakened, suggesting secularization at best offers a partial explanation of contemporary postponement. Further, religiosity does not appear to offer much explanatory insight beyond the higher-order values studied, as its influence on fertility is largely attributable to its overlap with higher-order values. Overall, fertility-related selection processes appear to be more strongly grounded in values than in religiosity.

Beyond explanations based on value shifts, the value salience hypothesis sought to determine whether changes in value-based selection could be linked to delayed entry into motherhood, and whether values moderate the factors causing fertility postponement. Changes in pro-fertility norms, attitudes toward childlessness, and intensive parenting norms – potentially arising from long-term value shifts and the diffusion of new family behaviors – would arguably be expected to affect individuals favoring open lifestyles more than those favoring traditional life courses, thereby increasing the salience of values associated with having children. However, we did not observe an increasing salience of values over time, suggesting that the causes of postponement are not strongly moderated by higher-order values. In this regard, the findings extend beyond value-based explanations, indicating that delayed childbearing represents a generalized phenomenon across value orientations rather than one confined to those prioritizing open futures.

The generalized pattern of postponement is further reflected in the finding that the proportion of women who had not yet had a child increased most among those with lower levels of education – who, on average, hold more conservative values – a trend that cannot be attributed to a diffusion of Openness-to-Change values within this group. In this case, the reduced propensity to enter motherhood may be more closely linked to structural factors such as labor-market uncertainty or rising income prerequisites for childrearing. Moreover, the muted trends in entry into motherhood by level of education, together with the absence of value shifts both within educational groups and at the population level, do not support an SDT-type ideational mechanism; rather, they indicate that educational expansion has influenced fertility postponement through changes in life-course timing.

Beyond the general patterns observed for Western Europe as a whole, the results also reveal regional variation in how values and changes in the propensity to enter motherhood may be

connected. Most notably, Southern Europe showed a clear shift toward more openness-oriented values, potentially consistent with an SDT-like explanation of recent fertility declines. During the 21st century, these countries have also experienced a widespread diffusion of behaviors such as cohabitation and divorce, which are usually taken as evidence of SDT processes in the realm of partnership dynamics (e.g., Aassve et al. 2024). Nevertheless, the weakening associations between having entered motherhood and higher-order values indicate that, despite observable shifts in values, their role in fertility postponement in Southern Europe has become increasingly limited. Indeed, the rapid increase in women who have not yet had a child does not appear limited to individuals with specific value orientations but rather reflects a more generalized behavioral shift. Part of this may be linked to increases in education, in line with the analysis of educational heterogeneity and consistent with strong trends of educational expansion in Southern European countries in the 21st century (OECD 2022).

Contrary to Southern Europe, the initial forerunners of the SDT in the Nordic and Western Atlantic countries display no clear changes in values during the analyzed period. In these countries, the continuing relevance of SDT-like processes is, at least in the context of fertility, unclear. While values continue to predict having entered motherhood at the individual level, the recent increase in postponement does not appear explainable by shifts in values at the population level or by changes in how values influence behavior. The stability of value orientations is particularly noteworthy in the Nordic context, where fertility declined sharply after 2010 despite broadly favorable economic conditions and continued comprehensive family policies. Under conditions where structural explanations appear least convincing, one might expect ideational mechanisms to play a stronger role. Yet the absence of value change or increasing behavioral selectivity suggests that even in this context, recent postponement is unlikely to be ideationally driven.

In the German-speaking countries, we did observe clear increases in the prevalence of women who have not yet entered motherhood as well, despite less clear declines in fertility rates. Importantly, this rise does not coincide with a shift towards more open value orientations but rather with a tendency towards increasing emphasis on Conservation values. Nor is there evidence of change in the selective function of values for childbearing. Taken together, these findings suggest that value orientations are of limited relevance for understanding the contemporary fertility postponement in this region as well.

In conclusion, our findings challenge culture-centered explanations of Europe's new wave of fertility postponement. They also underscore the importance of examining individual-level mechanisms when assessing the influence of ideational factors on childbearing patterns. The TBHV offers a valuable, yet underutilized, framework for understanding how value orientations shape childbearing behavior. Future studies should aim to further develop the role of basic values for fertility behavior and for family life-course events prefiguring potential parenthood, such as partnership formation. Furthermore, the role of men's values and value discrepancies within couples merits further attention.

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Appendix A. Summary statistics.

Descriptive Statistics

Variable	N	Mean	SD	Min	Max
Age	33642	30.22	5.77	20	39
Openness-to-Change score	33642	.02	.56	-2.86	2.38
Conservation score	33642	-.15	.59	-2.88	2.38
Hedonism score	33642	.08	.84	-4.19	4.07
Stimulation score	33642	-.46	.94	-4.14	2.62
Self-direction score	33642	.44	.73	-3	3.24
Tradition score	33642	-.22	.88	-3.98	3
Conformity score	33642	-.46	.94	-4.14	2.9
Security score	33642	.24	.82	-3.38	3.19
Have not yet had a child					
No	17122	50.89			
Yes	16520	49.11			
Total	33642	100.00			
Recent birth					
No	25321	75.85			
Yes	8063	24.15			
Total	33642	100.00			
Country					
Austria	1792	5.33			
Belgium	2195	6.52			
Switzerland	1785	5.31			
Germany	2755	8.19			
Denmark	1429	4.25			
Spain	2304	6.85			
Finland	2205	6.55			
France	2476	7.36			
Great Britain	2661	7.91			
Greece	1810	5.38			
Ireland	2596	7.72			
Iceland	478	1.42			
Italy	910	2.70			
Netherlands	2389	7.10			
Norway	1885	5.60			
Portugal	2200	6.54			
Sweden	1772	5.27			
Total	33642	100.00			
Period					
2002-2005	8291	24.64			
2006-2009	7094	21.09			
2010-2013	6812	20.25			
2014-2017	6231	18.52			
2018-2022	5214	15.50			
Total	33642	100.00			
Age group					
20-29	14879	44.23			
30-39	18763	55.77			
Total	33642	100.00			
Education					
Up to lower-secondary	5047	15.00			
Upper-secondary	15208	45.21			
Tertiary	13296	39.52			
Missing	91	0.27			
Total	33642	100.00			

Table A1. Summary statistics of sample. Data from the European Social Survey; calculations by authors.

Appendix B. Supplementary results.

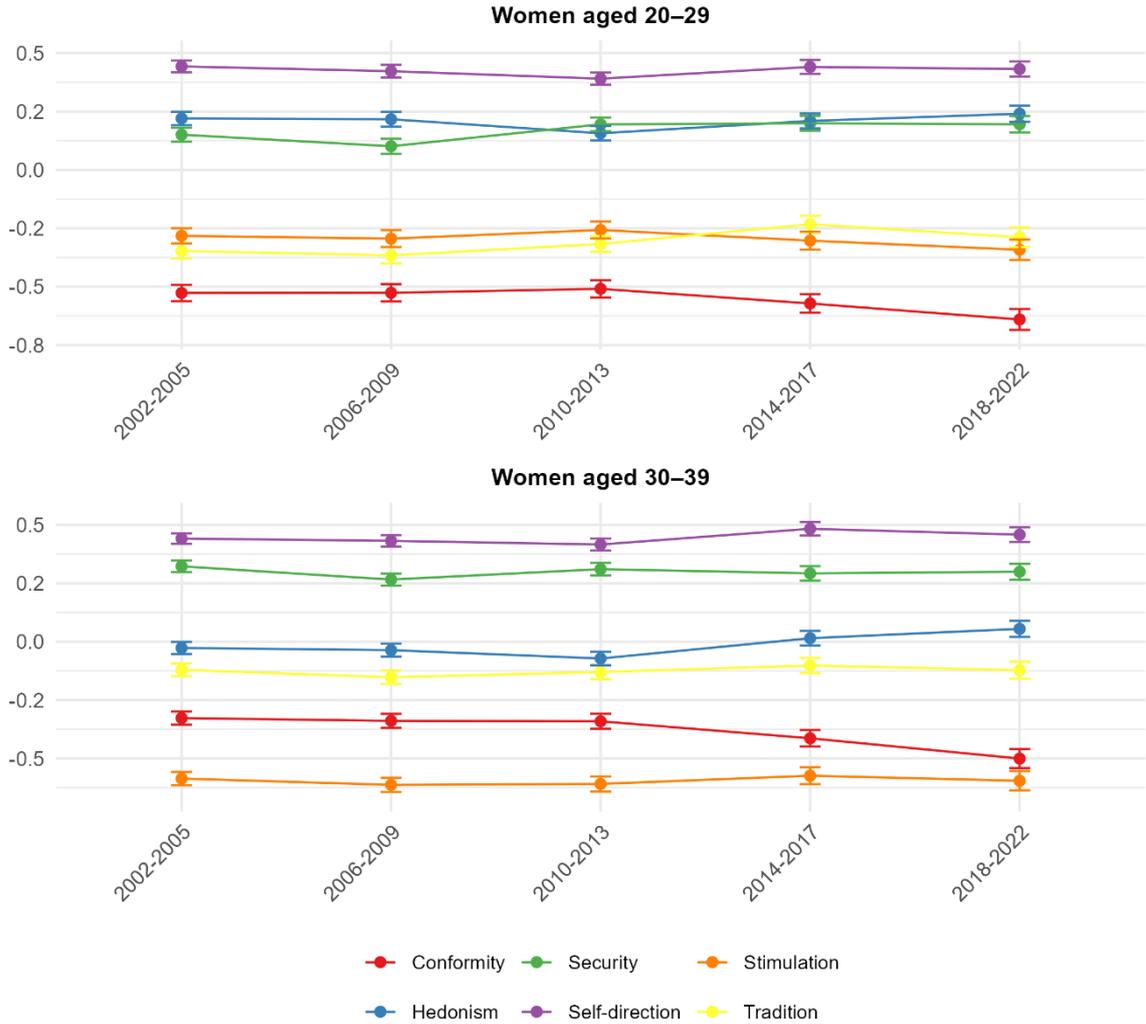


Figure B1. Population-average basic value scores. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

Appendix C. Results for alternative fertility measures.

Average marginal effects of value scores on fertility intentions

	Total sample
Openness	-.035 (.011)
Hedonism	-.003 (.006)
Self-direction	-.022 (.010)
Stimulation	-.019 (.008)
Conservation	.051 (.010)
Tradition	.040 (.007)
Conformity	.010 (.006)
Security	.014 (.008)

Table C1. Average marginal effects of value scores on the probability of having positive fertility intentions controlling for age, country, period, education, parity, and the product term age*education. Standard errors in parentheses. Weights adjust for sample inclusion probability and non-response. N=7,041. Data from the European Social Survey; calculations by authors.

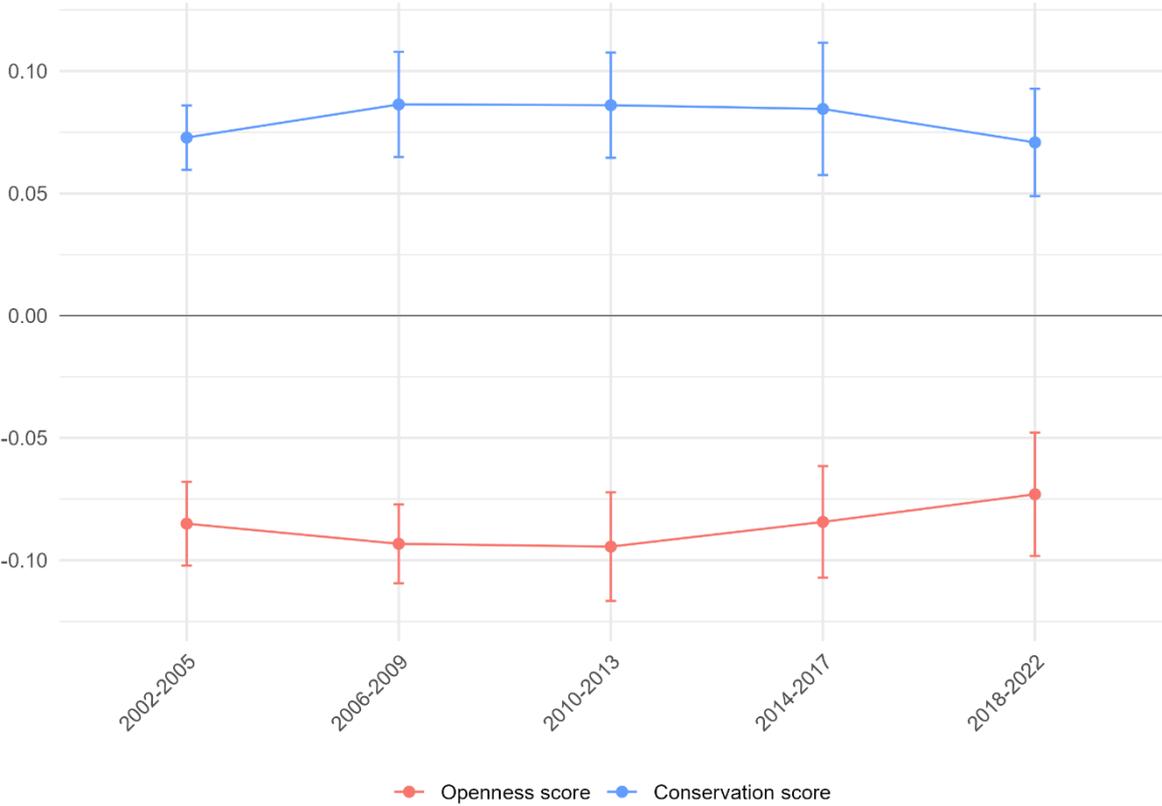


Figure C1. Average marginal effects of value scores on the probability of having had a recent birth over time. Models control for age, country, period, education, parity, and the product-term age*education. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

Appendix D. Results for religiosity.

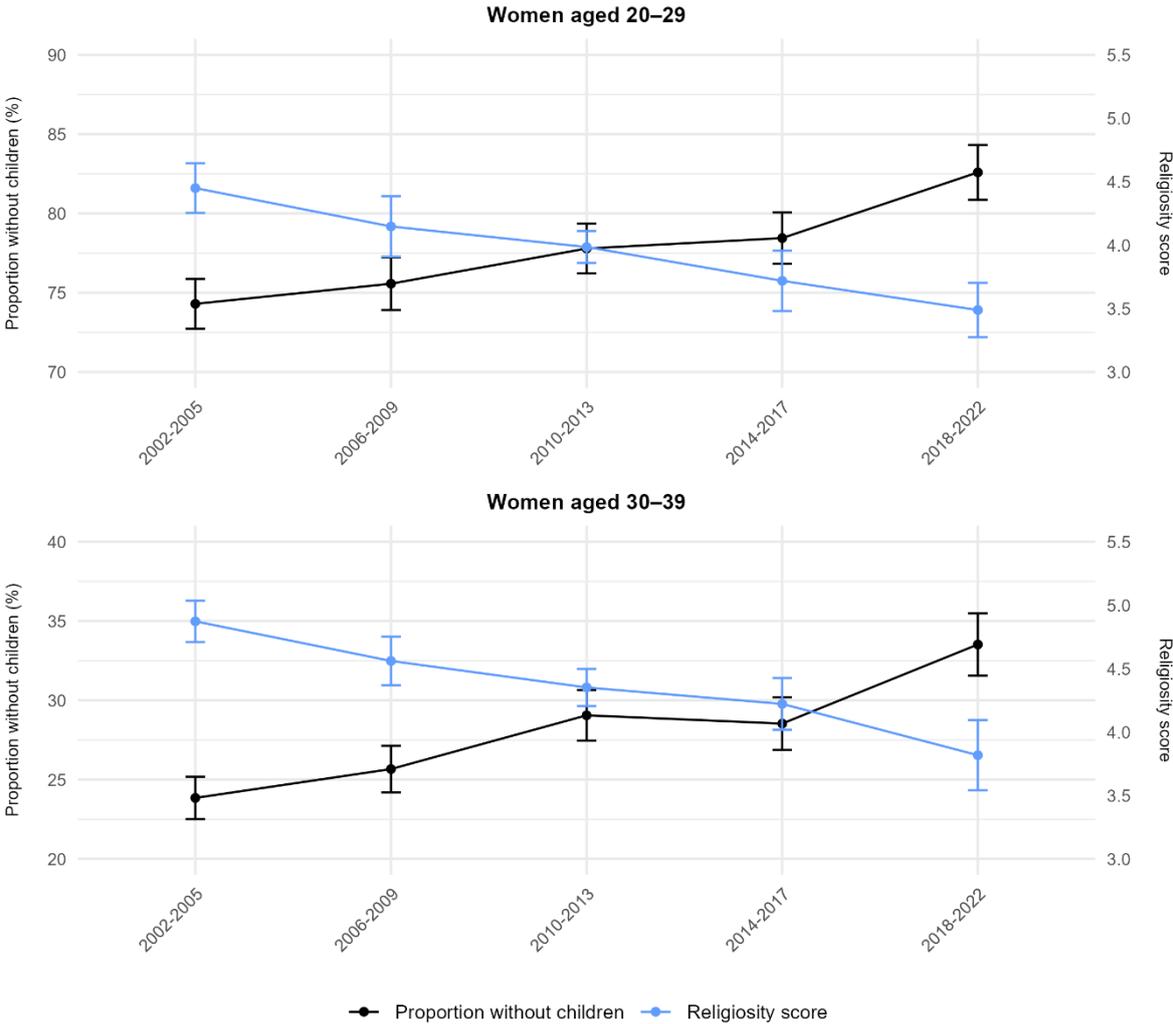


Figure D1. Prevalence of women who have not yet had a child and population-average religiosity scores. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

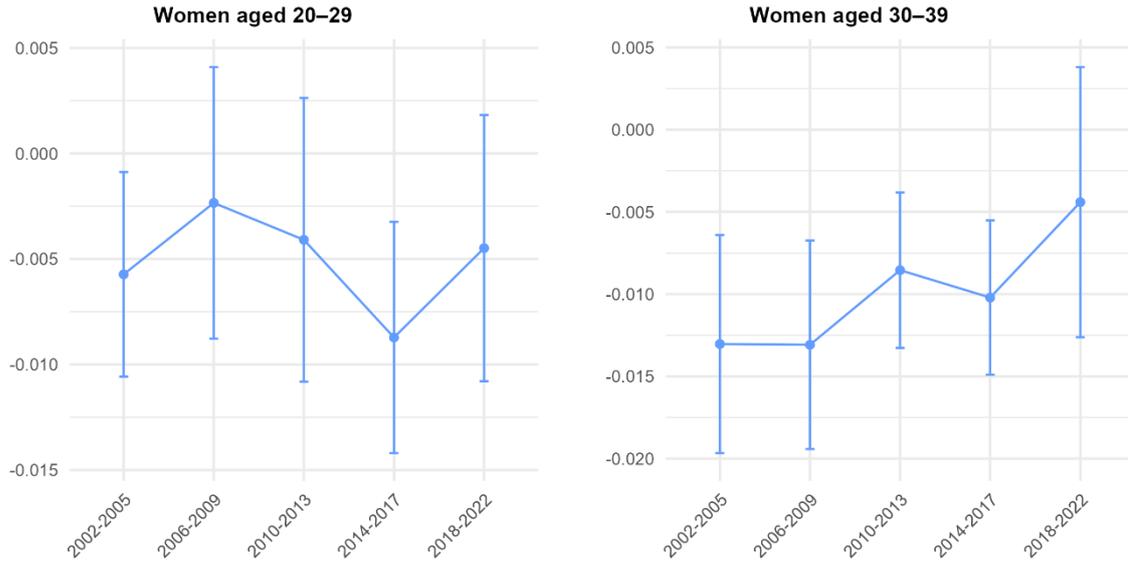


Figure D2. Average marginal effects of religiosity on the probability of not yet having had a child over time. Models control for age, country, period, education, and the product term age*education. Weights adjust for sample inclusion probability and non-response. Data from the European Social Survey; calculations by authors.

