Individual autonomy and ideal age for becoming a parent: A cross-European comparison

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Abstract

We investigate the association between individuals' value orientations toward autonomy and their ideal age to have a first child in a cross-national perspective, assuming that the association between people´s 'need for autonomy' and their ideal age for first birth depends on the welfare context. In countries where welfare reduces the negative consequences of childbearing through generous support for parents, we expect this association to be weaker or non-existent; in such a context having children should interfere less with pursuing goals such as hedonism and self-direction. We carry multilevel regressions using a sample of 8,180 individuals from 23 countries, stemming from Wave 3 of the European Social Survey (2006). We operationalize welfare by using social expenditures on families and children as percentage of GDP. Analyses confirm our hypothesis that the higher these expenditures, the weaker the association between people´s 'need for autonomy' and their ideal age for first birth.

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Introduction

In recent decades, the average age of becoming a parent has increased in almost all European countries, though in some countries more than in others (Billari & Liefbroer 2010; Beets 2011). The rise in age at first birth reflects a rise in ideal age for first birth (Pebley 1981) and preferences for later timing (Wilkie 1981). Surveys have indeed shown an increase in ideal ages for first birth (Van Nimwegen et al. 2002)[3]. In addition to the impact of the introduction of reliable contraceptives and of structural factors on postponement of parenthood, such as expansion of education – particularly women's education –, an important role is attributed ideational factors. In the Second Demographic Transition theory (Lestheaghe & Van de Kaa 1986; Van de Kaa 1987; Lesthaeghe 1995), the increased value that people attach to individual autonomy and self-fulfillment plays a key role in explaining postponement of parenthood and other changes in demographic behavior. In this paper, we examine the association between value orientations regarding individual autonomy and ideal ages for having a first child from a cross-European perspective. Moreover, we discuss the extent to which this association depends on the ability of the welfare state to moderate the negative consequences of having children on parents' freedom.

The association between values and ideal or actual timing of births has not often been empirically tested. More attention has been paid to the impact of domain specific attitudes on childbearing, for example gender role attitudes (Bernhardt & Goldscheider 2006); attitudes toward luxury spending (Barber 2001), career attitudes (Barber 2001; Barber, Axinn & Thornton 2002), than on the impact of basic values. Whereas attitudes refer to specific actions or situations, values refer to the abstract goals people strive to attain. They are deeply rooted motivations that guide justify or explain attitudes, norms, and actions (Rokeach 1973; Schwartz 1992, 2007; Halman & De Moor 1994). Although scarce, there is some evidence on the association between values and timing of childbearing, which will be discussed in the next section.

Besides documenting the association between values and ideal timing of childbearing, our key contribution to the literature is that we examine whether this association depends on the welfare context. We argue that the more parents' 'freedom' is reduced by having children,

[3] Yet, in most European countries, the average age of first birth for women (Vienna Institute of Demography 2008) is even 2 to 3 years higher than the average ideal age of transition to parenthood of women aged 25-29 years (Testa 2006).

the stronger the association between the importance people attach to individual autonomy and ideal age for first birth. In countries where the state reduces the negative consequences of having children through generous support for parents, the association is expected to be weaker or non-existent. This study therefore aims both to contribute to research on contemporary fertility and to increase our insight in how welfare policy shapes childbearing patterns. In fertility, the study of ideals contributes significantly to our knowledge of behavior and potential policy responses. For example, the gap between ideal number of children and actual number of children has been targeted as a key topic for family-related policy (see e.g., OECD 2011). Here we focus on the ideal age for first birth, given the crucial relevance of postponement in shaping fertility levels in advanced societies. A series of multilevel regressions are conducted using a sample of N = 8,180 individuals from 23 countries, stemming from the third wave (2006) of the European Social Survey (ESS).

Literature Review and Hypotheses

Values and Timing of Childbearing

As the literature on the ideal timing of first birth or preferences for timing of childbearing is limited, we mainly discuss studies on actual timing of first birth in this literature review. The actual timing of first birth reflects preferences and ideals, although actual behavior might not correspond directly to ideals, as behavior may be affected by constraining factors.

Ample evidence of the effect of *attitudes* on timing of childbearing exists, yet surprisingly only few studies investigated the association between *values* and timing of childbearing. Van de Kaa (2001) showed a positive macro-level association between post-modern and post-materialist values (see Inglehart 1977) and fertility at later ages, based on a sample including 25 European countries and Canada and the United States. However, these values measure what people find important for society (social values), not what they find important goals for their own lives (personal values). Using Dutch panel data, Jansen and Kalmijn (2002) found that post-materialist values lead to postponement of first birth, but only for women. We agree, however, with Liefbroer (2003) that personal values are more likely to influence behavior in the private domain (e.g., childbearing) than social values such as Inglehart's postmaterialism. Liefbroer (2003), also using Dutch panel data, showed that a hedonist value orientation leads to postponement of the first child. In a study on the effects of personality traits on timing of the first child, Tavares (2010) shows that British women with a

high score on "openness to experience" (which is also referred to as autonomy) are most likely to delay childbearing.

The effect of childbearing on attitudes has also been investigated. For example, a study using U.S. data indicated that having a teenage birth increased the importance that male and female adolescents attach to having children (Marchena & Waite 2002). Furthermore, several studies indicated that the transition to parenthood leads to an adjustment of gender role attitudes in a traditional direction (e.g., Liefbroer 2002). Less is known about the effect of childbearing on values. Although values are assumed to be more enduring than attitudes (Rokeach 1973), they might change to some extent over the life course. Schwartz (2007) states that as people age, they tend to attach more value to 'conservation values' (tradition, conformity, security) and less to 'change values' (self-direction, stimulation). Studies on value adaption after life course transitions are very scarce. Moors (2002) reports a decrease of importance placed on personal and economic autonomy among German women who entered a more traditional family situation than their previous living arrangement (through marriage or having a child).

We assume that values regarding individual autonomy and ideal age for first birth are associated. The main reason for this assumption is that childbearing and childrearing interfere with pursuing individual autonomy and people anticipate this. Liefbroer (2005) showed that the more Dutch young women think that having a child will reduce their personal freedom, the more they postpone the transition to parenthood.

Second, once a child is born, people might attach less value to personal autonomy. It is not likely, however, that the ideal age to become a parent has an effect on value orientation. Our first hypothesis is:

H1) The more importance people attach to individual autonomy, the higher their ideal age to become a parent.

However, we expect this association to vary between countries because the extent to which having children limits parents' freedom depends on the countries' welfare regime. The state can reduce the direct and indirect costs of having children, by providing benefits, parental leave and childcare (i.e. compensating for money and time). Large variation in the level of such benefits and facilities exists within Europe (Bradshaw & Finch 2002; OECD 2011). Aassve, Mazzuco and Mencarini (2005) showed that childbearing leads to the smallest reductions in monetary well-being and social deprivation for women in social democratic states and the largest in conservative and Mediterranean states. We expect that the positive association between the value placed on individual autonomy and ideal age for first birth is

especially strong in contexts where parents have to make the largest adjustments to their lifestyle when they have children. There are two reasons for this. On the one hand, personal values are less likely to impact on childbearing in a context where having children interfere less with pursuing goals such as autonomy and self-fulfillment. On the other hand, the need to adjust one's values and after childbearing is likely to be smaller in such contexts. Hence, our second and central hypothesis is:

H2) The higher the social expenditures on families and children, the weaker the positive association between the importance attached to individual autonomy and ideal age to become a parent.

Furthermore, we expect gender differences in the association between importance attached to individual autonomy and ideal age to become a parent as well as in the dependence of this association on social expenditures on families and children. Having a child impacts more on the life of women than of men. For example, women's employment opportunities are more restricted by parenthood than men's (Kalmijn & Saraceno 2008). There is also some evidence that parenthood increases daily strains more for women than for men (Ross & Van Willigen 1996; Nomaguchi & Milkie 2006). Therefore, women might be more restricted in fulfilling personal goals related to autonomy after childbearing, and possibly they anticipate on this. Liefbroer (2005) showed that young Dutch women without children expect more negative consequences of having a child for their individual autonomy than their male counterparts. Finally, as having children impacts most on women's lives, social expenditures that support parents might also impact on their lives more than on men's lives. Therefore we expect:

H3) The positive association between importance attached to individual autonomy and ideal age to become a parent is stronger for women than for men.

H4) The dependence of this association on the welfare context (social expenditures on families and children) is stronger for women than for men.

Other Correlates of Ideal and Actual Age at first birth

Older persons are expected to have lower ideal ages for becoming a parent than younger persons, due to a cohort effect (i.e. they have been socialized before the vast postponement of childbearing of the past decades). However, within younger cohorts, older people might have higher ideal ages for becoming a parent, as young people may adjust their preferences when growing older (De Valk and Liefbroer 2007).

Highly educated persons are expected to have higher ideal ages to become a parent, because long educational training and a strong career orientation –which is more likely among highly educated – may be conflicting with childbearing and childrearing. Sobotka (2010) indicated a large gap between the best age for a woman to become a mother reported by low educated and by tertiary educated Austrian women. The association between educational attainment and actual timing of first birth is well documented for women (e.g. Blossfeld 1995; Martin 2000, Mills et al. 2011), but men's higher education also results in postponed parenthood (Corijn, Liefbroer, and De Jong Gierveld 1996).

Female employment has been found to result in postponement of first birth (Blossfeld & Huinink 1991; Budig 2003), but among men unemployment may delay childbearing (Liefbroer & Corijn 1999). This does, however, not necessarily mean that unemployed men have higher ideal ages for becoming a father.

As most religions encourage childbearing (Pearce 2002), we expect highly religious persons to have lower ideal ages of than less religious persons. People living in urbanized areas are more likely to hold more modern attitudes than people from rural areas (Trent & South 1992), and are therefore expected to have higher ideal ages of parenthood than people living in rural areas.

Because married persons hold more traditional family attitudes than unmarried persons (Trent & South 1992) and because the decision to marry is highly endogenous to the decision to have children (Steele et al. 2005), we expect the married to have lower ideal ages for first birth than the unmarried. Finally, as an individual's actual age at first birth might affect his or her ideal age for first birth (Pebley 1981), we expect parents to have lower ideal ages for childbearing than persons without children.

Method

Data

In this study we used data from the third wave of the European Social Survey (ESS 2006), a repeated cross-sectional survey that was designed to measure social attitudes and values using face-to-face interviews. The ESS aimed to be representative of the residential populations aged 15 years and older, regardless of their nationality or citizenship. Strict guidelines were used to obtain a dataset of high methodological quality. We used the 2006 wave because it contains a module with questions on attitudes regarding family formation and other life course events. Data were collected in 25 countries. Sample sizes per country range from 995 to 2405.

A total of 47,009 respondents participated. Response rates per country vary between 46.0 percent and 73.2 percent. The (unweighted) average is 63.5 percent. Because our country-level variable (see below) is not available for two of the countries in the dataset (Russia and Ukraine), this study includes the remaining 23 countries: Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Latvia, the Netherlands, Norway, Poland, Romania, Sweden, Slovak Rebublic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom. In our sample we included respondents with and without children up to age 45 (4,305 women and 3,875 men).

Variables

Dependent variable. Our dependent variable is ideal age for becoming a parent. This is measured with the following item: 'In your opinion, what is the ideal age for a girl or woman (/boy or men) to become a mother?' The survey had a split ballot design; the female version of the questions was randomly assigned to half of the respondents and the male version was assigned to the other half. We only selected male respondents who reported the ideal age for becoming a father and female respondents who reported the ideal age for becoming a mother (thereby leaving out men who reported the ideal age for women to become a mother and women who reported the ideal age for men to become a father). We think that this way our dependent variable is a better indicator of individual timing preferences for first birth, which are probably stronger related to a person's individual need for autonomy than ideal age for first birth interpreted as an ideal for men or women in general. Only including respondents up to age 45 also makes our dependent variable a better indicator for individual timing preferences. Respondents were also allowed to answer that "there is no ideal age for a man/woman to have a first child". This response option was not presented to the respondents, but interviewers were instructed to accept this response if given spontaneously by the respondent. The percentage of respondents stating that there is no ideal age to become a parent was 11.40%, ranging from 0% in France to 30.55% in Austria. These respondents were not included in our analyses.[4] Apart from those stating that there is no ideal age to become a parent, the percentage of missings was 4.19%.

[4] We tested whether this selection resulted in a bias in our findings by including a variable indicating the predicted probability that respondent would respond that there is no ideal age to become a parent in our models. To predict this probability we conducted a multilevel logit analysis estimating the odds that a respondent would state "no ideal age" with an instrumental variable that is theoretically unrelated to the dependent variable in our main analyses (i.e. ideal age for becoming a parent). This instrumental variable indicated an interviewer

Independent variables at individual level. Our key independent variable, autonomy, expresses the importance that respondent attaches to personal autonomy and is based on three 'subvariables': self-direction, stimulation and hedonism. They were derived from the Schwartz scale of basic human values (Schwartz 1992; Davidov, Schmidt, & Schwartz 2008). To measure these values, the ESS included verbal portraits of persons, gender-matched with the respondents. Each portrait described a person's goals, aspirations or wishes. Regarding each portrait, respondents were asked: "How much like you is this person?" Responses were measured on a 6-point scale ranging from "Not like me at all" to "very much like me". The portraits were formulated as follows:

Self-direction:

- "It is important to him to make his own decisions about what he does. He likes to be free to plan and to choose his activities for himself."
- "Thinking up new ideas and being creative is important to him. He likes to do things in his own original way."

Stimulation:

- "He likes surprises and is always looking for new things to do. He thinks it is important to do lots of different things in life."
- "He looks for adventures and likes to take risks. He wants to have an exciting life."

Hedonism:

- "Having a good time is important to him. He likes to 'spoil' himself."
- "He seeks every chance he can to have fun. It is important to him to do things that give him pleasure."

If one of these six items was missing, it was replaced by the mean score of respondents with the same score on the item that correlates highest with the missing item.

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characteristic, namely the proportion of respondents responding that there is no ideal age for the transition to parenthood per interviewer. This proportion ranged from 0 to 1. (A proportion of 1 was scored mainly by interviewers who conducted only one or very few interviews) and was a good predictor of the probability of reporting "no ideal age". Including the predicted probability of providing no ideal age for respondents in our models of ideal age for first birth resulted in similar coefficients and standard errors of the other variables. Combining missings and the answer category "no ideal age" into one category and then following the same procedure did not result in different outcomes either. Therefore, we decided to present the models without correction for selection bias.

The theory of basic human values contains ten motivationally distinct, broad and basic values, including self-direction, stimulation and hedonism. The ten values are structured on two dimensions: the self-enhancements versus self-transcendence dimension and the openness- to-change versus conservation dimension. Self-direction, stimulation and hedonism are situated at the openness-to-change end of the latter dimension. Their "closeness to each other" implies that their underlying motivations are rather similar. A factor-analysis including all six items described above showed one clear factor. Cronbach's alpha is .77. Therefore we constructed one variable combining all three values (scale 1-6; a higher score corresponds to higher autonomy). This variable is labeled autonomy. Of our sample, 3.19% has a missing value on autonomy.

The ESS values scale demonstrated configural and metric invariance, allowing researcher to use it to study relationships among values, attitudes, behavior and socio-demographic characteristics across countries (Davidov et al. 2008).

Furthermore, we included a set of control variables at the individual level, which are expected to be associated with autonomy as well as with ideal age for becoming a parent as discussed earlier. Age was measured in years. Educational attainment ranged from primary education not completed (0) to second stage of tertiary education (6). Employment status distinguished between not employed (0) and employed (1). We accounted for religion by using the degree of religious involvement. Religious involvement was measured as a factor score on the basis of three items. First, self-evaluated level of religiosity, measured with the question: "Regardless of whether you belong to a particular religion, how religious would you say you are?". The response scale ranged from not at all religious (0) to very religious (10). Second, frequency of church attendance, measured with the question: "Apart from special occasions such as weddings and funerals, about how often do you attend religious services nowadays?". Response options ranged from every day (1) to never (7). Third, frequency of prayer, measured with the question: "Apart from when you are at religious services, how often, if at all, do you pray?" with response options also ranging from every day (1) to never (7). If one item was missing, it was substituted by the average value of respondents with the same score on one of the other two items. A factor analysis showed one clear factor underlying these items. The higher the factor score, the higher a person's religious involvement. Urbanization was measured on a scale ranging from farm or home in the countryside (1) to big city (5). Marital status indicates whether the respondent was married/widowed (1) or else (0). Parental status indicates whether the respondent ever had a child (0 = childless, 1 = ever had one or more children). Descriptives of these individual-level

variables are presented in Table 1. The mean country scores of ideal age for becoming a father/mother and of autonomy are presented in Table 2.

[Table 1 here]

Independent variable at country level. The degree to which the states supports parents was operationalized as social expenditures on families and children as % of GDP in 2006 (Eurostat 2009). This percentage ranges from 0.8% in Poland to 3.7% in Denmark (see Table 2). Scores were centered around the mean.[5] This variable is available for 23 of the 25 countries in the ESS dataset, information on Russia and Ukraine is missing. Therefore, these countries are excluded from the analyses.

Method of Analysis

Multilevel regression analyses were conducted including variables at the individual and the country level to predict ideal age for becoming a parent. Because we wanted to investigate whether the effect of autonomy on ideal age for becoming a parent varies across countries, we used random-slope models, allowing the effect of autonomy to vary across countries. The cross-level interaction effect between autonomy and expenditures on families and children was included to test whether the effect of autonomy on ideal age to become a parent depends on the welfare context. Analyses were conducted using a sample including men and women, but also separately for men and women. We only present tables with separate models in order to avoid presenting a model with the three-way interaction between gender, autonomy and expenditures on families and children, which would be difficult to interpret. We estimated our models using the "xtmixed" command in Stata using the maximum likelihood option.

[5] Because we included a cross-level interaction effect between this variable and autonomy, we centred the values around the mean (Snijders and Bosker 1999: 74). This facilitates the interpretation of the main effects coefficient of autonomy, which are to be interpreted as the effect for cases with a score 0 on expenditures on families and children. After centering, these cases are (fictional) persons living in a country with an average level of expenditures on families and children.

Findings

Descriptive Findings: Ideal Age for the becoming a parent

Table 2 presents the mean ideal age for first birth for men and for women in each country. The ideal age for first birth for men ranges from 24.4 in Latvia to 29.4 in Cyprus. The ideal ages for first birth for women is lower, as expected, and ranges from 23.9 in Latvia to 27.7 in Spain. The gap between men's and women's ideal age for first birth is highest is 1.4 years on average, but ranging from a low of .4 years in Ireland to a high of 2.7 years in Bulgaria.

[Table 2 here]

Findings of Multilevel Analyses

Table 3 presents the multilevel estimates of ideal age for becoming a father (only male respondents) and Table 4 those of ideal age for becoming a mother (only female respondents). Age has a very small positive effect in Model 2 of Table 3 and of Table 4, indicating that older men and women have higher ideal ages for first birth (note that we only included respondents up to age 45). Furthermore, ideal ages are higher among men and women who are highly educated, living in urban areas, and childless. Among women, being employed also has a positive effect on ideal age for first birth, but not among men. Among men, being married or widowed results in lower ideal ages for first birth, but not among women. Religious involvement does not affect ideal age for the becoming a parent for men nor for women. The effect of autonomy is positive in the model for men as well as the model for women, implying that the more importance men and women attach to individual autonomy, the higher their ideal age for becoming a parent. This supports Hypothesis 1. Expenditures on families and children do not affect ideal age for becoming a father nor a mother.

The random part of Model 2 in Table 3 and that of Model 2 in Table 4 shows that variance of autonomy is larger for men than for women, but significant in both models. This indicates that the effect of autonomy on ideal age for first birth varies across countries for men as well as for women. The size of this random slope variance can be interpreted by considering that the interval $\beta \pm 1.96 * \sqrt{\text{random slope variance}}$ contains 95% of the slopes. This means that the slope of autonomy (i.e. the size of the effect) varies between -.208 and .768 (i.e., $.280 \pm 1.96 * \sqrt{.062}$) across countries for men and between -.049 and .519 (i.e., $.235 \pm 1.96 * \sqrt{.021}$) across countries for women. Hence, in some countries the effect of

autonomy on ideal age for becoming a parent is positive, but in other countries there is no effect, or even a small negative effect.

In Model 3 of Table 3, respectively Table 4, we added the cross-level interaction effect of autonomy and expenditures on families and children. This interaction effect is negative in both models, indicating that the positive effect of autonomy on ideal age for becoming a father and for becoming a mother is weaker or non-existent where expenditures on families and children are higher. This is in line with Hypothesis 2. Including this cross-level interaction reduced the variance of autonomy with 27.4% for men. This means that 27.4% of the variation between countries in the effect of autonomy on ideal age for becoming a father is explained by differences in the level of expenditures on families and children. The fit of Model 3 in Table 3 is significantly better than the fit of Model 2 ($\Delta\chi^2 = 4.09$, $\Delta df = 1$, $p = .043$). For women, including the cross-level interaction effect reduced the variance of autonomy almost completely. The fit of Model 3 in Table 4 is significantly better than the fit of Model 2 ($\Delta\chi^2 = 9.36$ $\Delta df = 1$, $p = .002$).

[Tables 3 and 4 here]

To facilitate interpretation of these interaction effects, we plotted the predicted ideal ages for becoming a mother by autonomy for a 25-year-old unmarried woman, who has no children, is employed and has averages scores on educational attainment, religious involvement and urbanization, in two welfare regimes: a regime with the lowest level of expenditures on families and children we find in our sample (0.8 % of GDP) and a regime with the highest level of expenditures on families and children (3.7% of GDP) (see Figure 1). In a country with low family expenditures, women with the highest score on autonomy have a predicted ideal age for becoming a mother that is 2.7 years higher than that of women with the lowest score on autonomy. In a country with high family expenditures, women with the highest score on autonomy have a predicted ideal age for becoming a mother that is even 0.9 years lower than that of women with the lowest score on autonomy.

[Figure 1 here]

Comparing the coefficients of autonomy and of the interaction term of autonomy and family expenditures for men with those for women (Tables 3 and 4), suggest that, in contrast with our expectations, the effects of autonomy and the interaction effects are similar in size

for men and women. Formally, to test these gender differences, one needs to use a sample in which men and women are pooled. We also ran our models on such a pooled sample (models not presented). The model to test whether the effect of autonomy on ideal age for becoming a parent is different for men and women included gender and the interaction between gender and autonomy. Although the effect of autonomy is a bit smaller for women than for men, this difference is not significant. Hence, Hypothesis 3 is not confirmed. To test whether the effect of autonomy on ideal age for becoming a parent depends on expenditures on families and children, we ran a model with the three-way interaction effect of gender, autonomy, and expenditures on families and children, also including all possible two-way interactions between these 3 variables (gender * autonomy; gender * expenditures; autonomy * expenditures). The three-way interaction effect was not significant. Hypothesis 4 is thus not confirmed either.

Conclusion and Discussion

This paper aimed to gain insight in the association between the importance attached to autonomy and ideal age in a cross-national context. Our key innovation is that we investigated whether this association depends on the welfare context. In line with the Second Demographic Transition idea, and with some of the previous findings in the literature, we found a positive association between individuals' value orientations regarding autonomy and their ideal age for having a first child. However, supporting our key hypothesis, this association is weaker or non-existent in countries where social expenditures on families and children are higher. To the best of our knowledge, this is the first study to reveal that the association between autonomy and ideal timing of childbearing depends on the welfare context. Our findings suggest that generous welfare support for parents makes young people less "afraid" that having children will interfere with other personal life goals. In countries with low welfare support, people probably anticipate or have experienced more negative consequences of having children in terms of limitations to their freedom, leading people who attach much value to personal autonomy to think that it is better to have children at later ages than people who do not attach much value to personal autonomy. Generous welfare support for parents does, however, not result in lower ideal ages for becoming a parent. Hence, the effect of social expenditures on ideal age for having a first child is only moderating. Welfare support for parents could have a direct positive effect on quantum of fertility though.

We argued that having children usually has a stronger impact on women's lives than on men's and therefore we expected the association between individual autonomy and ideal age for first birth, as well as the dependence of this association on family expenditures, to be stronger for women than for men. However, we did not find differences in the effects between men and women. Although Liefbroer (2005) found that young childless Dutch women anticipate more negative consequences of having a child for their 'freedom to do as one pleases' than their male counterparts, perhaps in other European countries men and women equally anticipate that their lives will be restricted by having children. Or perhaps in some countries men are even more concerned about the negative consequences of having children than women. Bernhardt and Goldscheider (2006) found that in Sweden, young childless men expect more negative consequences of having children in terms of individual freedom, finances, and time for friends than their female counterparts. In contrast to this Swedish study, our study also included persons who have already become parents, and although fathers generally spend less time on child care than mothers, fathers and mothers may equally perceive that their lives are restricted by having children. A reason could be that men feel a greater pressure to be a good provider.

This study focused on ideal ages for first birth. We think that effects of values on actual timing of first birth operate trough ideal ages or timing preferences. However, it would be interesting to also investigate whether the association between autonomy and actual age at first birth depends on the welfare context. Unfortunately no cross-national panel data including enough countries to permit prospective multilevel event history analysis are available yet. However, if we would limit ourselves to the footprints of values and behavior, the ESS dataset could be used to investigate this issue. Footprints are the associations between values and behavior which result from the recursive mechanism of selection and adoption between values (or attitudes) and behavior (Lesthaeghe and Moors 2002). Such a study would require data on welfare spending going back to at least 1980 (in order to cover a large part of the childbearing period of sufficient respondents). Unfortunately this information is not at hand for most Eastern-European countries, leaving us with too few countries to conduct a multilevel analysis. A more modest but feasible research design would be to use a non-time varying categorical variable on welfare regime type. We intend to include such an analysis to a future version of this paper.

Another interesting lead for future research is to investigate whether the association between autonomy and (ideal) timing of having a first child depends on societal norms on good parenting. Do high demands on parents, for example expressed in norms against

outsourcing the care for one's children, result in a stronger association between autonomy and timing of first birth? In a similar vein, aggregate level time use data on time spent by parents on child care would provide an interesting country level indicator.

To conclude, we believe that the results of our study underline the value of using a cross-national perspective, taking into account family policy, when studying the associations between individuals' value orientations and ideal or actual demographic behaviors.

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Table 1 Overview of individual characteristics

	Men (N = 3,875)		**Women (N = 4,305)**	
Variable	***M* (%)**	***SD***	***M (%)***	***SD***
Independent variables				
Age[a]	31.03	9.00	31.77	8.83
Educational attainment[b]	3.16	1.26	3.25	1.31
Employment status (% employed)	74.92		65.32	
Religious involvement[c]	-.32	.93	-.00	.97
Marital status (% married or widowed)	37.88		45.62	
Parental status (% with children)	43.48		57.38	
Urbanization[d]	3.08	1.22	3.09	1.21
Autonomy[e]	4.45	.71	4.34	.78
Dependent variable				
Ideal age for becoming a parent[a]	27.07	3.61	25.75	3.31

Notes: Descriptive statistics refer to our sample, they are not weighted by a population size weight that would ensure that each country is represented in proportion to its population size.
[a] In years. [b] Scale: 0–6. [c] Factor scores. [d] Scale: 1–5. [e] Scale: 1–6.

Table 2 Overview of country characteristics: ideal age to become a father/mother and social expenditures on families and children

Country	**Mean ideal age for becoming a father**	**Mean ideal age for becoming a mother**	**Mean autonomy score men**	**Mean autonomy score women**	**Social expenditures on families and children (% of GDP)**	***N* (men)**	***N* (women)**
Austria	27.43	26.25	4.73	4.51	2.9	160	199
Belgium	27.21	26.34	4.57	4.49	2.0	218	227
Bulgaria	26.85	24.14	4.54	4.33	1.1	86	119
Cyprus	29.43	26.61	4.63	4.63	1.9	120	107
Denmark	27.11	26.07	4.43	4.32	3.7	163	128
Estonia	25.93	24.01	4.12	4.17	1.5	137	158
Finland	25.76	25.03	4.35	4.27	2.9	214	182
France	26.92	26.38	4.17	4.06	2.5	199	225
Germany	27.44	26.20	4.51	4.46	3.1	263	267
Hungary	27.91	25.60	4.71	4.66	2.8	107	131
Ireland	26.94	26.56	4.49	4.20	2.5	120	163
Latvia	24.39	23.90	4.57	4.62	1.1	163	193
Netherlands	27.96	27.31	4.56	4.42	1.6	202	208
Norway	26.71	25.94	4.19	4.15	2.7	187	187
Poland	25.99	24.78	4.37	4.09	0.8	194	193
Portugal	26.62	25.12	4.40	4.11	1.2	145	226
Romania	26.79	24.38	4.41	4.35	1.2	197	221
Slovak Republic	26.93	25.09	4.31	4.30	1.2	191	205
Slovenia	27.53	25.48	4.73	4.76	1.9	140	133
Spain	28.74	27.69	4.54	4.40	1.2	214	226
Sweden	27.37	26.09	4.27	4.19	2.9	163	174
Switzerland	28.90	27.35	4.62	4.42	1.3	143	179
United Kingdom	26.25	25.40	4.36	4.34	1.6	212	254

Note: Ideal age for becoming a father as reported by men and ideal age for becoming a women as reported by women.

Table 3 Multilevel estimates of ideal age for becoming a father (only male respondents, $N = 3{,}875$)

	Model 1		Model 2		Model 3	
Fixed part	***B***	***SE***	***B***	***SE***	***B***	***SE***
Constant	26.809***	.205	23.088***	.469	23.052***	.469
Individual level						
Age[a]			.041***	.009	.041***	.009
Educational attainment [b]			.406***	.048	.402***	.048
Employment status [c]			.157	.143	.163	.143
Religious involvement [d]			-.123	.065	-.120	.065
Urbanization[e]			.240***	.046	.240***	.046
Marital status[f]			-.455**	.154	-.457**	.154
Parental status[g]			-1.27***	.161	-1.27***	.161
Autonomy			.280**	.095	.296**	.092
Country level						
Expenditures on families and children[h]			.324	.230	1.043*	.430
Cross-level interaction						
Autonomy * expenditures on families and children					-.227*	.110
Random part						
Variance autonomy	.244***	.120	.062***	.053	.045***	.052
Variance constant (σ_μ^2)	3.518	2.224	.020	.665	.002	.039
Covariance autonomy, constant	-.818	.489	-.024	.167	-.009	.090
Variance residual (σ_ε^2)	11.886***	.272	11.085***	.253	11.077***	.252
Log likelihood	-10,335.173		-10,191.633		-10,189.586	

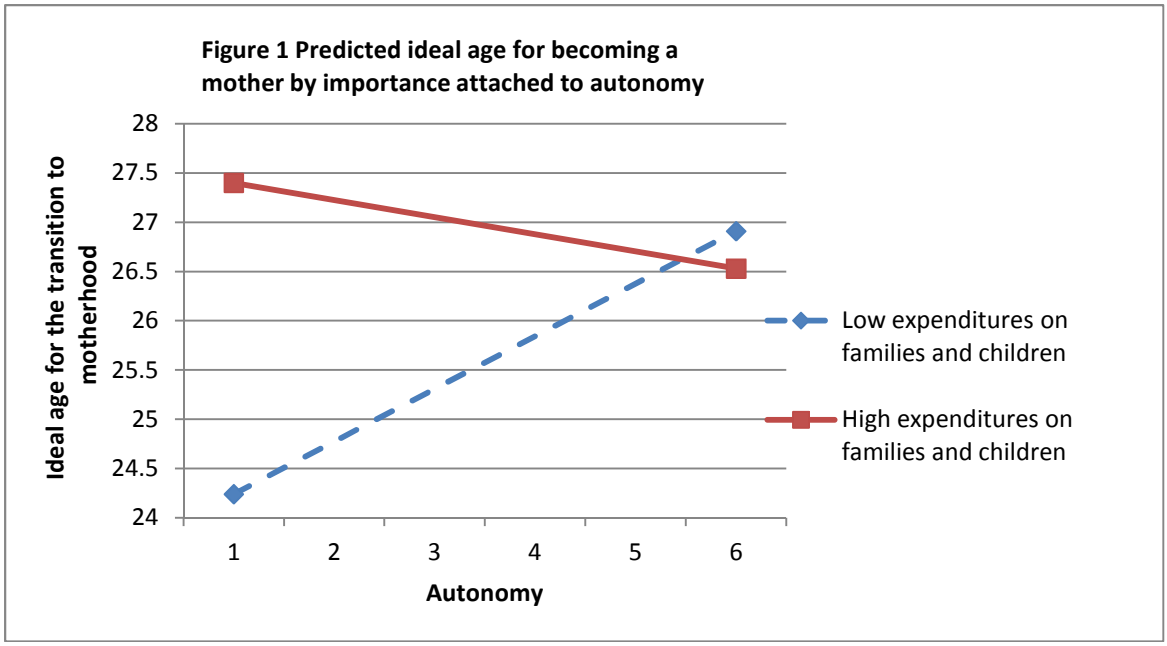
Notes: [a] In years. [b] Scale: 0–6. [c] 1 = employed, 0 = not employed. [d] Factor scores. [e] Scale:1 -5. [f] 1 = married or widowed, 0 = else [g] 1 = has child(ren), 0 = no children. [g] in % of GDP, centered around the mean.

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 4 Multilevel estimates of ideal age for becoming a mother (only female respondents, $N = 4{,}305$)

	Model 1		Model 2		Model 3	
Fixed part	***B***	***SE***	***B***	***SE***	***B***	***SE***
Constant	25.952***	.211	22.194***	.469	22.152***	.469
Individual level						
Age [a]			.052***	.009	.052***	.008
Educational attainment [b]			.343***	.048	.335***	.039
Employment status [c]			.318**	.143	.316**	.108
Religious involvement [d]			-.067	.065	-.069	.054
Urbanization[e]			.145***	.046	.147***	.040
Marital status[f]			-.193	.154	-.185	.118
Parental status[g]			-1.473***	.161	-1.470***	.135
Autonomy			.235**	.095	.246***	.064
Country level						
Expenditures on families and children[h]			.200	.230	1.334**	.427
Cross-level interaction						
Autonomy * expenditures on families and children					-.244**	.077
Random part						
Variance (autonomy)	.193***	.084	.021***	.030	.0003***	.002
Variance (constant)	6.126	2.623	1.576	1.023	1.021	.641
Covariance (autonomy, constant)	-1.001	.441	-.127	.159	-.018	.068
Variance (residual)	9.831	.213	9.101***	.197	9.101***	.196
Log likelihood	-11,075.004		-10,897.957		-10,893.278	

Notes: [a] In years. [b] Scale: 0–6. [c] 1 = employed, 0 = not employed. [d] Factor scores. [e] Scale:1 -5. [f] 1 = married or widowed, 0 = else [g] 1 = has child(ren), 0 = no children. [g] in % of GDP, centered around the mean.
*$p < .05$. **$p < .01$. ***$p < .001$.



Note: Predicted values are for a 25-year old woman who is unmarried, childless, employed, has average scores on educational attainment, religious involvement and urbanization.