Attitudes about voluntary childlessness across Europe:

The role of individual and cultural factors

Eva-Maria Merz

Aart C. Liefbroer

Netherlands Interdisciplinary Demographic Institute

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Abstract

This paper uses data from the European Social Survey 2006 to study attitudes on childlessness across Europe. Little is known about the extent to which such attitudes differ across Europe and what factors cause potential cross-national variation. Attitudes turn out to differ substantially across Europe. Multi-level models show that these attitudes vary both across individuals and among countries. The results of the present study indicate that especially cultural factors, such as individual religiousness, education and gender equality in a country were important factors associated with approval of childlessness. Interestingly, most variation in attitudes on childlessness was explained by macro-level factors, especially gender equality.

During the last decades, the prevalence of childlessness has increased enormously, across Europe (Dykstra, 2009). Still, strong differences in levels of childlessness are apparent. For instance, the percentages of childless women born between 1960 and 1964 vary from a low of 5 in Bulgaria and 6 in Slovenia to a high of 24 and 27 in Germany and Switzerland respectively (Dykstra, 2009). Previous work has mainly studied individual, structural and cultural determinants of fertility *behavior* (e.g., Bagozzi & Van Loo, 1978; Freijka, 2008; Freijka & Sobotka, 2008; Friedman, Hechter, & Kanazawa, 1994; Morgan & Berkowitz King, 2001; Rijken & Liefbroer, 2009). At the same time, relatively little attention has been paid to *attitudes about* fertility behavior and how they are shaped (Koropeckyj-Cox & Pendell, 2007a), especially in a comparative perspective (Liefbroer & Fokkema, 2008). This is unfortunate, as attitudes, for example age deadlines, have been shown to be important for major life course transitions, such as leaving the parental home (Billari & Liefbroer, 2007; Settersten, 2003) and it is likely that fertility intentions and the decision of becoming a parent or staying childless, are associated with attitudes too (Koropeckyj-Cox & Pendell, 2007a).

Not only has the prevalence of childlessness increased during the last decades, but the same is true for the societal acceptance of childlessness (Koropeckyj-Cox & Pendell, 2007a; Thornton & Young-DeMarco, 2001). This shift in attitudes and values is observed mainly in Western countries (Liefbroer & Fokkema, 2008), but is likely to vary among countries with diverging historical, religious, cultural and structural contexts. For example, in the post-communist countries of Eastern Europe societal acceptance of voluntary childlessness has only recently started to increase (Sobotka, 2004). Knowledge about how attitudes about fertility behavior are shaped both within and across countries is scarce. Hence, the aim of the present study is to increase our knowledge about how attitudes about childlessness are shaped in different cultural contexts, both theoretically and empirically. First, we discuss the role of *individual* determinants, such as age, gender and education in shaping attitudes about childlessness. We then discuss the role of structural and cultural determinants, i.e.

characteristics of *countries*, to illuminate the ways in which attitudes about childlessness may be shaped at the macro level. Particularly, we consider the availability of childcare facilities, level of wealth and gender quality in countries across Europe as determinants of attitudes about childlessness. In an empirical endeavor to shed light on similarities and differences in the shaping of attitudes on childlessness we use multi-level models to analyze attitudes towards childlessness across 25 European countries.

Until now, most studies examining attitudes about childlessness have been based on college student convenience samples (e.g., Koropeckyj-Cox, Romano, & Moras, 2007; Mueller & Yoder, 1997; Polit, 1978), representing a restricted group, consisting of young and high educated adults in quite stable economic circumstances. Few other studies investigated attitudes in more representative samples, such as the American National Survey of Families and Households and the American General Social Survey, but only in the U.S. (e.g., Koropeckyj-Cox & Pendell, 2007a, 2007b). Extending this previous work, the present study examined attitudes about childlessness based on a large scale sample from the European Social Survey (a more detailed description will be given in the Method section), including data on individuals from 25 European countries. The design and structure of the data offer the possibility to examine individual factors *and* cultural factors and interactions between individual and country characteristics to estimate compositional and 'real' macro effects in the shaping of attitudes about childlessness.

Individual Correlates of Attitudes about Childlessness

Societal changes, structural and cultural ones, during the last decades are associated with higher economic and personal costs of childbearing mirrored in higher education and labor market participation of women. In line with this more complex and ambivalent view of parenthood, having children has become optional and based on a personal weighing of potential costs and rewards, as has childlessness. Several individual demographic characteristics are likely to influence the shaping of attitudes about fertility behavior, such as

gender, education, occupation and age. For example, it has been suggested that the lower educated and nonworking endorsed more negative attitudes about childlessness compared to higher educated and working individuals (Koropeckyj-Cox & Pendell, 2007a). Educational ambitions and career aspirations increase the opportunity costs to become a parent, especially for women, and have been shown to influence fertility behavior (Becker, 1981; Liefbroer, 2005). Especially women tend to stronger admit that parenthood carries restrictions in female life courses (Koropeckyj-Cox & Pendell, 2007b). As a result of perceived conflicting roles of motherhood and professional life, higher educated women with good career opportunities may be more reluctant to choose for children and may hold more favorable attitudes towards childless life courses. A less clear picture emerges for men as their opportunity costs associated with parenthood are often smaller and educational and career opportunities may not be threatened by fatherhood, especially in countries that support a more traditional male breadwinner model (Kalmijn & Saraceno, 2008) and make policies accordingly. Hence we formulated the following hypothesis: Women hold more favorable attitudes towards volunteary childlessness than men. This gender effect is expected to be stronger among the highly educated than among men and women with low levels of educational attainment.

Usually, most young adults expect to have children at some point in their life but the general societal pressure to become a parent has decreased and the societal acceptance of remaining childless has increased (Koropeckyj-Cox & Pendell, 2007b). Nowadays, it is not unusual to acknowledge the negative sides of parenthood, such as strains and sacrifices in personal and professional life (Dykstra, 2009; Sobotka, 2004). Continuously postponing parenthood due to educational commitments and career opportunities, and ending up in a childless life course happens to a considerable amount of young adults and may ease the shaping of positive attitudes towards childlessness as only few adults, already at very young age clearly choose for remaining childfree (Dykstra, 2009; Testa & Grilli, 2006). Hence, older childless individuals may be less rigid and more flexible in approving and accepting

childlessness compared to younger adults, among whom many still expect to become parents. At the same time, a large body of literature has found that younger generations often hold less traditionalist and conservative attitudes about various life course transitions and ways of living compared to older generations (e.g., Hynie, Lalonde, & Lee, 2006; Lalonde & Cameron, 1993; Merz, Özeke-Kocabas, Oort, & Schuengel, 2009). Specifically, Koropeckyj-Cox and Pendell (2007a, 2007b) have shown that younger adults held more positive attitudes about volunteer childlessness compared to older adults. Hence, with respect to age, we generally expected more positive attitudes about childlessness in younger compared to older respondents. Moreover, we hypothesized an interaction between age and parent status. Because of widespread postponing parenthood and increasing childless and childfree life courses we expected older adults without children to hold more positive attitudes about childlessness than younger adults without children, who may expect to become parents later in life.

Religious denominations encourage family formation and reproduction and religious institutions often benefit families with children in terms of childcare access, financial support and family counseling (Pearce, 2002). Religion is strongly tied to family values and commitments, no matter how liberal or conservative the religious group is (Myers, 2004). For example, adults affiliated with different Christian Churches have been found to strongly emphasize obedience towards parents and put less emphasis on autonomy and independence (Mahoney, 2005). Moreover, it has been found that European women, considering themselves as belonging to one of the following religious denominations, Islam, Catholicism and Protestantism, had higher total fertility rates compared to non-religious women (Westoff & Frejka, 2007). Although in most European countries the macro-influence of religion is diminishing in times of secularization, individual religiousness may continue to influence attitudes on reproduction and childlessness. In the current study, religious people were expected to disapprove of voluntary childlessness more strongly than non-believers.

Macro Correlates of Attitudes about Childlessness

Studying childlessness requires consideration of individual as well as cultural factors and societal changes such as women's greater economic and legal independence and growing prosperity to account for differences among countries (Dykstra, 2009; Sobotka, 2004). These country differences may partly be associated with the composition of a country's inhabitants and certain individual characteristics that are present in a majority of these inhabitants, such as high religiosity or a higher average age. Additionally, is likely that certain cultural, institutional and economic influences shape attitudes about fertility behavior and childlessness. Although these cultural influences may have diminished in many Western European countries (Liefbroer, 2005; Thornton & Young-DeMarco, 2001) and the wish for autonomy and free decision making along with increased individualism (Van de Kaa, 1987) has made way for acceptance of all different kinds of demographic behavior and life course transitions, more or less explicit ideas about normative demographic behavior and about when and in what order events in the life course should occur still exist in many societies (Settersten & Hagestad, 1996). Processes of emancipation in Western Europe are reflected in considerable societal changes in attitudes and demographic behavior, emphasizing individualism, personal autonomy (Lesthaeghe & Van de Kaa, 1986; Merz, Özeke-Kocabas, Oort, & Schuengel, 2009; Mills, 2007; Van de Kaa, 1987) and gender equality, promoting higher female labor participation, women's economic independence and detachment from traditional family roles (Sobotka, 2004). These tendencies may have paved the way for more open and tolerant societies regarding attitudes with respect to demographic behavior in certain European countries whereas in other countries strong family attitudes, disapproval of childlessness and high rewards of parenthood might still be endorsed. Voluntary childlessness used to be viewed negatively; women's status of being childfree was described as socially less desirable compared to being a mother (Koropeckyj-Cox, Pienta, & Brown, 2007; Polit, 1978) and has been disapproved (Koropeckyj-Cox, Romano, & Moras, 2007; Mueller & Yoder,

1997). During the last decades the "social imperative of parenthood" (Koropeckyj-Cox & Pendell, 2007b, p. 900) has weakened and modernist and feminist movements have challenged the traditional procreationist view of family life and promoted a definition of female identity without motherhood. Thus, countries with higher gender equality, reflected by higher female labor participation, active career ambitions as well as higher economic independence of women, are expected to endorse more tolerant, positive attitudes about volunteer childlessness.

Institutional and structural factors, such as childcare availability and possibilities to combine participation in labor force and parenthood may also be important in shaping attitudes and intentions about childlessness across countries (Sobotka, 2004). Combining labor force participation and motherhood remains to be difficult in certain countries and societies (e.g., Liefbroer, 2005) reflected by shortage in child care facilities, especially for preschool children. These difficulties with flexibly combining work and parenthood in several European countries may have driven women into childlessness and at the same time shaped more positive attitudes about childlessness. Paradoxically, countries with the highest female labor force participation have the highest fertility rates (Rindfuss, Guilkey, Morgan, Kravdal, & Benjamin Guzzo, 2007); Northern European countries with more childcare facilities have relatively high birth rates compared to Central and Eastern European countries. In these countries unexpectedly low birth rates have mainly been observed following the collapse of communism and the upcoming of capitalist market economy (Sobotka, 2004). These societal transformations have confronted former socialist countries with economic restructuring and uncertainties which increased the costs of childbearing but at the same time made way for ideational changes and value shifts towards more tolerant views of individual demographic behavior (Philipov, Spéder, & Billari, 2006). The question how childcare provision associates with attitudes on childlessness across countries therefore is explorative, but we expected the effect to operate differently for parents and childless individuals.

As attitudes often lag behind behavior (Testa & Grilli, 2006) it is likely that the drastic declines in fertility in certain countries are not yet completely paralleled by positive attitudes about childlessness. Moreover, in times of economic hardship children may function as human capital and assurance in providing support and care to their parents in old age. We hypothesized that attitudes about childlessness are more positive in richer countries with a better welfare system than in poorer countries. Children in these countries do not need to function as structural capital and future caregivers to their parents (Liefbroer, 2005). As an indicator of the wealth and level of welfare of a country we used the gross domestic product (GDP) per capita as countries with a higher GDP are expected to have a better welfare system and care facilities.

Method

Procedure and Participants

The data used in the present study stem from the third round of the European Social Survey (ESS). The ESS is a cross-sectional survey conducted in many European countries, measuring changing social attitudes and values using face-to-face interviews. Data for the third round were collected during 2005 and 2006 in the following countries: Austria (AT), Belgium (BE), Bulgaria (BG), Switzerland (CH), Cyprus (CY), Germany (DE), Denmark (DK), Estonia (EE), Spain (ES), Finland (FI), France (FR), Great Britain (GB), Hungary (HU), Ireland (IE), Latvia (LV), the Netherlands (NL), Norway (NO), Poland (PL), Portugal (PT), Romania (RO), Russia (RU), Sweden (SE), Slovenia (SI), Slovakia (SK), and Ukraine (UA). The ESS intends to be representative of the residential population of each participating nation aged 15 years and older, regardless of nationality, citizenship or legal status. Anyone who had been living in the country for at least one year and who had no immediate concrete plans to return to country of origin could be selected as respondent. Strict guidelines were used to obtain a dataset of high methodological and theoretical value. An effective sample size of at least 1,500 respondents in each round (800 for countries with less than 2 million

inhabitants) was intended. Additionally, the ESS aimed at a minimum response rate of 70 %. This was not achieved in all countries and the response rates varied between 46.0 % and 73.2 %, with an average of 63.4 %. The sample sizes varied between 995 (Cyprus) and 2,916 (Germany).

In this study, information is included of a total of 47,099 respondents from 25 countries. The mean age of the respondents was 46.31 years (*SD* = 18.39) and 53.75 % was female. Characteristics of the entire sample and the key variables stratified by country are presented in Table 1.

[Table 1 about here]

Measures

Individual attitudes about childlessness. Individual attitudes about voluntary childlessness were measured with the question “How much do you approve or disapprove if a woman/man chooses never to have children?” Response options ranged from 1 = strongly disapprove to 5 = strongly approve.

Independent variables at the individual level. Variables at the individual level included age, gender, education (completed years of education), current employment situation (employed/unemployed), and parent status (having children/childless). Individual religiosity was measured as a scale including three items about the subjective self-evaluation of own religiosity (ranging from 0 = "not at all religious" to 10 = "very religious"), praying behavior and religious service attendance (answer categories to the two latter questions ranged from 1 = "every day" to 7 = "never"). All three items were coded in a similar direction and standardized. A factor analysis on these three single items pointed to one underlying factor which was labeled religiousness. Cronbach’s alpha for this three items scale was .81.

Independent variables at the country level. Variables at the country level included information about childcare facilities, gender empowerment index, and GDP. Countries’ childcare facilities were expressed as "childcare gap" in weeks (TCG; cf. Saraceno & Keck,

2008). For a period of 312 weeks (time between the birth and the sixth birthday of a child) in each country the number of weeks covered by state guaranteed parental leave and the number of weeks covered by child care service (by legal right or compulsory) has been calculated. Adding the two together and subtracting them from 312 weeks produces a measure of uncovered weeks (for a detailed overview see Saraceno & Keck, 2008). The Gender Empowerment Measure (GEM) is a measure of inequalities between men's and women's opportunities in a country. It combines inequalities in three areas: political participation and decision making, economic participation and decision making, and power over economic resources. The country scores were retrieved from the United Nations Development Programme (2009). GDP per capita in Purchasing Power Standards in the year of data collection was retrieved from the International Monetary Fund (2008) and used as a gross indicator of welfare and economic prosperity in a country.

Control variables. Although not of central interest in the current study, income and partner status have been found important in shaping attitudes about childlessness (cf., Koropeckyj-Cox & Pendell, 2007a, 2007b) and therefore have been added to our models as control variables. Partner status was included as a dummy variable (being in a relationship versus single. Because no information on actual income was available, a question on feelings about household income, *Which of the descriptions comes closest to how you feel about your household's income nowadays?* was used as a proxy. Descriptions were ranging from 1 = very difficult on present income to 4 = living comfortably on present income. Because of space limitations, a split ballot design to measure attitudes towards childlessness has been used in the ESS. About half of the respondents were asked questions about male behavior, the other half about female behavior. A dummy variable (male version = 0, female version =1) was used in our multilevel models to indicate whether the question on childlessness referred to men or women.

Statistical Analyses

Descriptive analyses of the attitude towards voluntary childlessness were performed for the whole sample and broken down by country. Multilevel random-intercept regression analysis was used to investigate the statistical effects of individual and country characteristics and their interactions (both within-level and cross-level interactions) on attitudes about childlessness. By using multilevel modeling, units from the first level of analysis (i.e. individual respondents) were treated as nested within groups at the next (second) level of analysis (i.e. countries). The aim of multilevel analyses was to estimate variance at the two levels of interest (i.e. individuals and countries). The estimation of variance at level 1 is an indicator of how individuals differ in attitudes about childlessness. At level 2, variance estimation indicates variation in attitudes about childlessness among countries. The ratio of level 2 variance to the total variance is called the intraclass correlation, and in the current study represents the extent to which residents from the *same* country are similar in their attitudes about childlessness. Analyses were conducted by using the multi-level regression procedure of MLwin with the maximum likelihood method to estimate the variance components.

Results

Descriptive Results

Table 1 presents the means and standard deviations of the core variables broken down by country. As can be seen from this table considerable variation existed among countries with respect to demographic and substantive variables. For example, employment rates ranged from 38 % in Romania to almost 70 % in Norway. With respect to attitudes on childlessness we also found considerable variation across countries and across individuals. As can be seen from Figure 1, a majority of respondents strongly disapproved of voluntary childlessness in Bulgaria, whereas in Great Britain a majority of respondents neither approved nor disapproved of childlessness and in Denmark there was a majority of respondents approving the choice of having no children.

[Figure 1 about here]

Table 2 displays an overview of macro predictors on the country level. Substantial variation among countries with regard to the three macro factors, child care gap, gender equality and GDP can be seen from this table. Gender equality and GDP were higher in countries that put more emphasis on individualization and autonomy compared to countries with a more traditional life style and former communist countries. Regarding the childcare gap this picture was less obvious and did not show a clear relation to individualization and autonomy increase tendencies..

[Table 2 about here]

Multilevel Modeling

A number of multi-level models were estimated and presented in Table 3. The first model is what is called a *totally unconditional* model or *intercept only* model (cf. Model 1 in Table 3). It is used to determine the effect of being residents of the same country on approval of childlessness. The intraclass correlation was .37, indicating substantial within country similarity (cf. Snijders & Bosker, 1999) with respect to approval of childlessness. In a next step (cf. Model 2 in Table 3), variables at the individual level (Level 1 predictors) were added to Model 1. These effects demonstrated the association between the individual-level predictors and the dependent variable and can be interpreted as regression coefficients (Jenkins, Rasbash, & O'Connor, 2003). Model 2 shows which individual characteristics (i.e. age, age squared, gender, parent status, partner status, employment status, income satisfaction, religiosity and education) significantly predicted attitudes on childlessness. Age was positively, age squared negatively associated with approval of childlessness. In other words, younger and older respondents showed higher disapprovals of childlessness compared to the middle-aged. Women approved more of childlessness compared to men, whereas parents showed lower values on approval of childlessness than the childless. Respondents currently employed and single showed more approval of childlessness compared to their non-working,

partnered counterparts. More positive feelings about income were related to higher approval of childlessness. Higher educated respondents approved more of childlessness than the lower educated. More religious individuals approved less of childlessness compared to non-believers. Model 3 included two interaction terms between variables at the individual level, i.e. the interaction between age and parent status and between gender and education. The interaction between age and parent status displayed a non linear association with approval of childlessness which is presented in Figure 2. As can be seen from this figure, parents generally showed lower approval of childlessness compared to childless persons, although this difference was very small at young age and considerable larger at older age. A turning point in approval of childlessness around age 45 can be observed for both groups; parents and childless individuals younger and older than 45 years approve less of childlessness than the middle aged. The second interaction between gender and education was found to be non-significant.

[Table 3 and Figure 2 about here]

Adding country level factors to the model revealed the following picture (cf. Model 4 in Table 3). In countries with higher levels of gender equality more approval of childlessness was found than in countries with lower levels of gender equality. No associations between childcare gap or GDP and attitude on childlessness were found. In a last step, one cross-level interaction, between parent status and childcare gap, was added to the model (cf. Model 5 in Table 3) and was found to be associated with approval of childlessness. The difference in approval of childlessness between parents and childless individuals is larger in countries with higher childcare gaps.

Discussion

Attitudes on childlessness vary strongly across individuals and among countries. Economic, institutional and cultural factors carry different implications for individuals' approval or disapproval of voluntary childlessness. The results of the present study indicated

that especially cultural factors, such as individual religiousness, education and gender equality in a country were important factors associated with approval of childlessness. Interestingly, most variation in attitudes on childlessness was explained by macro-level factors, especially gender equality. Below, we discuss these results more fully, consider the role of cultural context in shaping norms and attitudes on fertility behavior in different countries, and offer some directions for future research.

Individual Differences in Attitudes on Childlessness

Consistent with prior work and in line with our expectations, attitudes on childlessness were associated with demographic factors such as gender, age, partner and parental status, employment situation and income. More tolerant views with respect to voluntary childlessness were found among women, singles, respondents without children, the currently employed and those satisfied with income compared to their counterparts; partnered, fathers, currently not employed and less satisfied with income. The gender difference seems not surprising considering the persistence of higher opportunity costs for women of becoming a parent (cf. Liefbroer, 2005).

Contrary to earlier research we found a non-linear age effect on attitudes about childlessness. Although it has generally been suggested that younger individuals endorse more modern and tolerant views with respect to various life domains and demographic behavior, it seems also possible that older respondents tend to become milder and more tolerant with respect to fertility attitudes compared to younger ones. Older respondents, being a parent or not, may not be in the phases of their life course anymore when fertility decisions are salient and might become more distanced with respect to childbearing attitudes whereas younger respondents, to whom fertility issues are relevant in their life course now may be more pronounced in their attitudes and additionally expect to become parents in the future, explaining their general devaluing of childlessness. Interestingly, we also found an interaction effect between age and parental status showing a general higher approval of childlessness of

childless individuals compared to parents across the investigated age range. Additionally, a peak in approval of childlessness around age 45 is found with younger and older individuals, irrespective of their parental status showing more disapproval of childlessness. Interpreting this effect is difficult but may follow a similar explanation as offered with the main effect of age. Young people, especially those without children may desire and expect to become parents in the future and question the wish of staying childlessness. The oldest respondents belong to a cohort raised at the beginning of the previous century in more traditional family homes, confronted with two wars leading to not only a wish but also a need for newborns and therefore having shaped more negative attitudes towards voluntary childlessness. The middle aged group showing the most positive attitudes about childlessness belongs to the baby-boomer generation having been confronted with exploding birth rates. More recently, this generation seems disappointed, cynic and disillusioned as it appears that the world has not changed as much as they would have wanted (O'Bannon, 2001); understanding and endorsing the wish of not bringing children into this world.

Maybe even more important than mere demographic factors, cultural aspects such as education and religiosity have been found important in shaping attitudes on childlessness. In line with previous work higher education was related to a higher approval of childlessness, especially for women (cf. Koropeckyj-Cox & Pendell, 2007b). The effect of education is likely to operate directly and indirectly in its influence on fertility attitudes. Initially, higher education carries a generally broader, more distinguished and nuanced view on various aspects of human living, including demographic behaviour leading to tolerance with respect to individual and personal decisions. Additionally, those following longer educational trajectories are confronted with higher structural constraints and increasing opportunity costs in becoming a parent along their career and may therefore tone down negative attitudes about childlessness.

Expectedly and consistent with earlier work, religious people were found to endorse more negative attitudes with respect to childlessness compared to non-believers. Additional analyses (not shown here) revealed that religious denomination did not matter additional to the general religiosity effect. However, previous research (cf. Koropeckyj-Cox & Pendell, 2007a) has shown that Jewish respondents were more likely than members from other religious groups to endorse negative prescriptive attitudes about childlessness in the US. It would have been interesting to compare this result to European data; yet in the current sample, Jews and Muslims formed a relatively small part precluding the possibility of comparing them to other Christian religious groups. By and large, churches strongly and often explicitly value marriage, childbearing and family norms which apply to all monotheistic denominations. Although in most Western countries the influence of religion is diminishing in times of secularization, *individual* religiousness seems to continue its influence on family formation and normative behavior.

Country Differences in Attitudes on Childlessness

Most important to the present study was the explaining power of country level predictors. Adding these macro factors, i.e. GDP, gender equality and childcare availability, increased the explained variance of the model by 22 % on the individual and 30 % on the country level even though two of the factors (GDP, childcare), did not provide significant effects on attitudes about childlessness. Gender equality however was strongly associated with positive attitudes about childlessness. Countries with high gender equality, such as Scandinavia, (Oláh & Bernhardt, 2008) implying strong individualization, and more emphasis on individual autonomy and decision making, emancipation and modernization compared to Southern and Eastern European countries. Due to these timely different development and advancement of changing individual attitudes, values and social norms has taken place in different countries across Europe. Recalling some of the descriptive results in the present study, the distribution of attitudes about childlessness, we have seen the highest disapproval

rates in Eastern European countries. These countries still struggling with the aftermaths of the collapsing communist regimes have faced chaos, major structural political and social changes accompanied by economic uncertainty and complex changes in fertility and living arrangements (Sobotka, 2004). However, these *behavioural* changes might not have been paralleled by developments in norms and attitudes (Sobotka, 2004). Changes in beliefs and values often lag behind the development of behaviour (Testa & Grilli, 2006) or may even remain distinct from the prevalent behaviour because consequences of attitudes are usually less drastic and immediate than consequences of certain behaviour.

After the collapse of the communist regimes, a very strict liberal market economy has been established in these former communist countries. Most Eastern European and former Soviet countries have experienced the transition from socialist to liberal market economy as characterized by shrinking GDP, increasing poverty (Listhaug & Aalberg, 1999) and a significant rise in the direct costs of children leading to an immense fertility decline (Koytcheva & Philipov, 2008). Formerly socialist regimes have been characterized by greater equity, job security and coverage with childcare facilities enabling the combination of work and family life and high birth rates. For example in Bulgaria, having children used to be a widespread, almost universal, norm and fertility trends were very stable. Although the fertility rate in Bulgaria has seriously declined since the 1990s most women do have at least one child. Childlessness rates are much lower in Bulgaria compared to most Western European countries (Koytcheva & Philipov, 2008). More traditional family norms and values may nowadays still be dominant because the upcoming of more autonomy and individualization just started. Previous work has shown that, for example in Bulgaria, the division of household labour is rather traditional which might indicate a more conservative value pattern with regard to family and demographic issues. Struggling with the reduced possibilities of combining work and family, the increased insecurity and complexity of daily live, the high poverty rates may

change behaviour but people may want to retain their “old” and familiar norms, values and attitudes about demographic behaviour to create security and comfort.

No main effect of the availability of childcare facilities on attitudes about childlessness was observed. However, less structural childcare facilities as one consequence of the dominating market economy now prevailing in the former communist and socialist countries did operate differently for individuals who are parents and those who are not. What used to exist widespread and easily accessible for the whole society has become scarce and expensive. This loss in access equality makes childcare exclusive and affordable for a selected group in society only. Having children may have become luxury and regarded as status increasing. Parenthood may work as differentiation mechanism to stay distinct from a lower status childless group. Being a parent might give meaning to life and provide security in times of economic hardship and major societal changes. Acquiring and maintaining social status through having children then creates and maintains social inequality. Individuals already having children in these countries may consider having children with all its investments in terms of commitment, time and money as important and providing parents with social status and capital and hence show higher disapproval of childlessness. In countries with a smaller care gap the access is more evenly distributed and easier also for individuals with less resources which makes it less a subject of attention and concern. Attitudes on childlessness then may be more similar.

Limitations and Concluding Remarks

Despite the complexity of the presented results, the totality of data and theory suggests that attitudes about voluntary childlessness are formed through the influence of demographic and cultural factors, differently across various European countries. Through analysis of a large, geographically representative, and ethnically diverse dataset including the majority of EU member countries, the current study offers an extension of previous research about factors relevant to the shaping of attitudes about fertility decision making. According to the theory of

planned behavior (TPB; Ajzen, 1991) the intention of a particular act is the immediate determinant and single best predictor of a certain behavior. Attitudes influence behavioral intentions, which precede and determine actual behaviors. Strong relationships between attitudes and behavior in a wide variety of demographic transitions has been suggested (Barber, Axinn, & Thornton, 2002) and investigating childbearing behavior and changing fertility rates across Europe requires a thorough investigation of the shaping of norms, attitudes and changes in intentions. The current study provided some insight in this first step of the fertility decision making process; attitudes about childbearing behavior.

These strengths noted, the current report is not without limitations. First, it is worth noting that the ESS is not a longitudinal survey. In the current study we have hypothesized, based on theory and previous results that individual and cultural factors influence fertility attitudes but the reverse might also be true. Ongoing research on attitudes with respect to demographic behavior requires longitudinal data to be able to detect causal relations between demographic and cultural factors and fertility attitudes, intentions and behavior. Additionally, shortcomings have to be noted with respect to the macro and policy indicators obtained from secondary sources. Especially, the childcare availability measure, although combining several indicators such as parental leave and state supported care facilities, has its shortcomings because it does not take into account more detailed financial aspects and benefits.

Furthermore, the current report did not *explicitly* test for ethnic variation in the association between individual and cultural factors and childlessness attitudes between specific countries. Indeed, our descriptive analyses indicated ethnic variation in individual factors, country differences in macro-level indicators and the distribution of approval of childlessness. The structure of the present data required a multilevel approach taking into account the dependence of observations within one country but concrete differences between specific countries were not investigated. A closer look at cultural and ethnic differences in

family formation and the shaping of fertility attitudes should be a key agenda for cross-cultural social research.

In sum, the current study expands on previous work linking individual and cultural factors to fertility attitudes. Specifically, it provides new insights in explaining cross-national differences in the process of fertility decision making. In particular, changes in the role of women and the concomitant changes in gender equality and care arrangements are found to be very important determinants of attitudes towards childlessness.

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Table 1

Study Characteristics Broken Down by Country

	Age, *M* (*SD*)	Gender, % female	Partner, % yes	Education, *M* (*SD*)	Currently employed, % yes	Childless, % yes	Religiosity, *M* (*SD*)	Income satisfaction, *M (SD)*	Approval childlessness, *M (SD)*
AT (*n* = 2,405)	41.94 (17.34)	53.75	60.64	12.53 (3.06)	62.65	39.07	.09 (.96)	3.21 (.75)	2.88 (.98)
BE (*n* = 1,798)	46.19 (18.64)	53.28	63.9	12.10 (3.68)	50.83	32.48	-.22 (.93)	3.13 (.84)	3.51 (1.10)
BG (*n* = 1,400)	47.94 (17.29)	60.04	69.47	11.18 (3.46)	45.47	18.62	-.20 (.80)	1.86 (.80)	1.57 (.89)
CH (*n* = 1,804)	47.61 (18.06)	53.37	67.29	13.36 (3.74)	62.29	33.26	.18 (.93)	3.35 (.76)	3.11 (.84)
CY (*n* = 995)	44.60 (16.92)	52.63	68.75	11.29 (4.01)	53.45	29.35	.84 (.71)	2.94 (.75)	2.29 (1.02)
DE (*n* = 2,916)	48.15 (17.92)	50.62	60.01	13.19 (3.42)	53.18	34.33	-.32 (.96)	3.00 (.75)	2.86 (.74)
DK (*n* = 1,505)	49.78 (17.51)	50.96	68.17	13.17 (5.13)	63.19	25.85	-.35 (.78)	3.60 (.64)	4.33 (.88)
EE (*n* = 1,517)	47.41 (19.30)	56.49	56.10	12.25 (3.16)	57.81	29.14	-.49 (.78)	2.71 (.74)	2.05 (.81)
ES (*n* = 1,875)	46.20 (18.96)	51.66	61.26	11.68 (5.36)	54.86	37.08	-.06 (1.04)	3.13 (.75)	3.11 (.99)
FI (*n* = 1,896)	48.74 (19.02)	51.53	64.56	12.41 (4.25)	52.74	31.80	-.05 (.84)	3.08 (.64)	3.53 (1.07)
FR (*n* = 1,986)	45.84 (17.47)	51.26	70.09	12.47 (4.09)	56.99	27.90	-.44 (.91)	3.11 (.71)	2.89 (1.11)

GB (*n* = 2,394)	47.30 (18.78)	52.50	62.85	13.43 (4.01)	58.51	31.27	-.27 (.99)	3.22 (.78)	3.20 (.73)
HU (*n* = 1,518)	48.25 (18.02)	57.72	61.06	11.74 (3.83)	47.17	24.68	-.14 (1.00)	2.47 (.80)	2.38 (.89)
IE (*n* = 1,800)	44.15 (17.56)	51.72	61.16	12.72 (3.54)	56.02	35.82	.61 (.95)	3.32 (.73)	3.02 (.75)
LV (*n* = 1,960)	42.44 (19.27)	60.00	44.95	11.68 (3.60)	51.79	39.59	-.25 (.89)	2.41 (.84)	2.37 (.97)
NL (*n* = 1,889)	47.17 (17.24)	52.47	69.08	13.16 (4.57)	62.60	32.63	-.16 (1.02)	3.29 (.78)	3.76 (1.05)
NO (*n* = 1,750)	45.89 (18.12)	49.09	64.69	13.36 (3.80)	69.43	30.74	-.39 (.86)	3.44 (.70)	3.90 (.98)
PL (*n* = 1,721)	44.14 (18.59)	52.46	58.00	11.51 (3.29)	47.49	31.82	.94 (.79)	2.68 (.64)	2.62 (1.02)
PT (*n* = 2,222)	48.50 (18.88)	58.99	65.37	7.71 (4.95)	49.37	27.17	.46 (.95)	2.50 (.84)	3.07 (.89)
RO (*n* = 2,139)	46.11 (18.49)	52.31	57.22	10.68 (3.99)	37.91	31.00	.82 (.73)	2.22 (.90)	2.22 (.89)
RU (*n* = 2,437)	43.86 (18.39)	58.39	55.67	12.03 (3.32)	54.27	27.65	-.32 (.87)	2.15 (.84)	1.82 (.80)
SE (*n* = 1,927)	47.21 (18.70)	50.60	63.78	12.58 (3.64)	64.50	31.29	-.51 (.80)	3.48 (.70)	3.49 (.87)
SI (*n* = 1,476)	46.76 (18.88)	54.81	59.96	11.62 (3.65)	47.56	30.15	-.04 (.97)	3.30 (.75)	2.84 (1.04)
SK (*n* = 1,766)	43.43 (17.89)	50.74	56.57	12.45 (3.27)	54.53	31.94	.38 (1.08)	2.57 (.84)	2.43 (.89)
UA (*n* = 2,002)	48.72 (18.37)	57.26	63.43	11.50 (3.67)	41.65	20.47	.25 (.94)	1.95 (.77)	1.59 (.81)
Total (*N* = 47,098)	46.31 (18.39)	53.75	61.86	12.07 (4.11)	54.31	30.93	-.01 (1.00)	2.88 (.91)	2.85 (1.14)

Table 2

Overview Country Level Characteristics

	TCG	GEM	GDP
AT (*n* = 2,405)	131.08	.79	36.22
BE (*n* = 1,798)	39.38	.85	33.69
BG (*n* = 1,400)	140.1	.61	10.29
CH (*n* = 1,804)	-	.66	38.92
CY (*n* = 995)	133.37	.58	25.82
DE (*n* = 2,916)	107.82	.83	32.43
DK (*n* = 1,505)	29.85	.88	35.90
EE (*n* = 1,517)	78.39	.64	19.14
ES (*n* = 1,875)	120.34	.79	28.77
FI (*n* = 1,896)	137.03	.89	32.86
FR (*n* = 1,986)	34.82	.72	31.89
GB (*n* = 2,394)	112.32	.78	33.35
HU (*n* = 1,518)	78.63	.57	18.25
IE (*n* = 1,800)	150.12	.70	40.67
LV (*n* = 1,960)	97.57	.62	15.30
NL (*n* = 1,889)	102.56	.86	36.83
NO (*n* = 1,750)	51.92	.91	50.20
PL (*n* = 1,721)	203.52	.61	14.88
PT (*n* = 2,222)	148.36	.69	20.82
RO (*n* = 2,139)	-	.50	10.43
RU (*n* = 2,437)	-	.49	13.17
SE (*n* = 1,927)	33.79	.91	34.87
SI (*n* = 1,476)	96.07	.61	24.97
SK (*n* = 1,766)	104.46	.63	17.87
UA (*n* = 2,002)	-	.46	6.25

Table 3

Multilevel Regression Models with Individual and Country Variables Predicting Approval of Childlessness (N = 35270)

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Estimate	*SE*	Estimate	*SE*	Estimate	*SE*	Estimate	*SE*	Estimate	*SE*
Fixed parameters level 1										
Constant	2.957***	.143	2.482***	.139	2.512***	.139	.316	.812	.316	.811
Split ballot			.116***	.010	.116***	.010	.116***	.010	.116***	.010
Age			.156***	.014	.125***	.015	.125***	.015	.125***	.015
Age squared			-.020***	.002	-.013***	.002	-.013***	.002	-.013***	.002
Gender			.079***	.010	.053	.031	.053	.031	.053	.031
Partner status			-.055***	.012	-.062***	.012	-.062***	.012	-.061***	.012
Parent status			-.218***	.014	-.131***	.021	-.131***	.021	-.131***	.021
Employment status			.037**	.012	.032**	0.12	.032**	.012	.032**	.012
Income satisfaction			.041***	.007	.044***	.007	.043***	.007	.043***	.007
Education			.018***	.001	.017***	.002	.017***	.002	.017***	.002
Religiousness			-.135***	.006	-.135***	.006	-.135***	.006	-.134***	.006

Interaction terms										
Age*parent status					-.046***	.007	-.046***	.007	-.046***	.007
Gender*education					.002	.002	.002	.002	.002	.002
Fixed parameters level 2										
GEM							3.009**	1.084	3.012**	1.083
GDP							.190	.119	.189	.119
TCG							.014	.082	.037	.082
Interaction term										
Parent status*TCG									-.033**	.011
Random part										
Level 2 variance	.430	.133	.383	.118	.382	.118	.115	.036	.115	.036
Level 1 variance	.883	.007	.825	.006	.824	.006	.824	.006	.824	.006
Derived part										
Rho	.327		.317		.317		.122		.122	
-2 Log likelihood	95832.031		93448.680		93408.555		93383.383		93373.969	
Deviance test	$\chi^2(10) = 2383.351$***		$\chi^2(2) = 40.125$***		$\chi^2(3) = 25.172$***		$\chi^2(2) = 9.141$***			

Note. Gender, partner status, parent status and employment status are dummy coded such that 1=female, having a partner, being a parent, being currently employed. Age was scaled in steps of ten years. Switzerland, Romania, Russia and Ukraine are excluded from the multivariate analyses because of missing values on the macro variable TCG.* $p < .05$, ** $p < .01$, *** $p < .00$

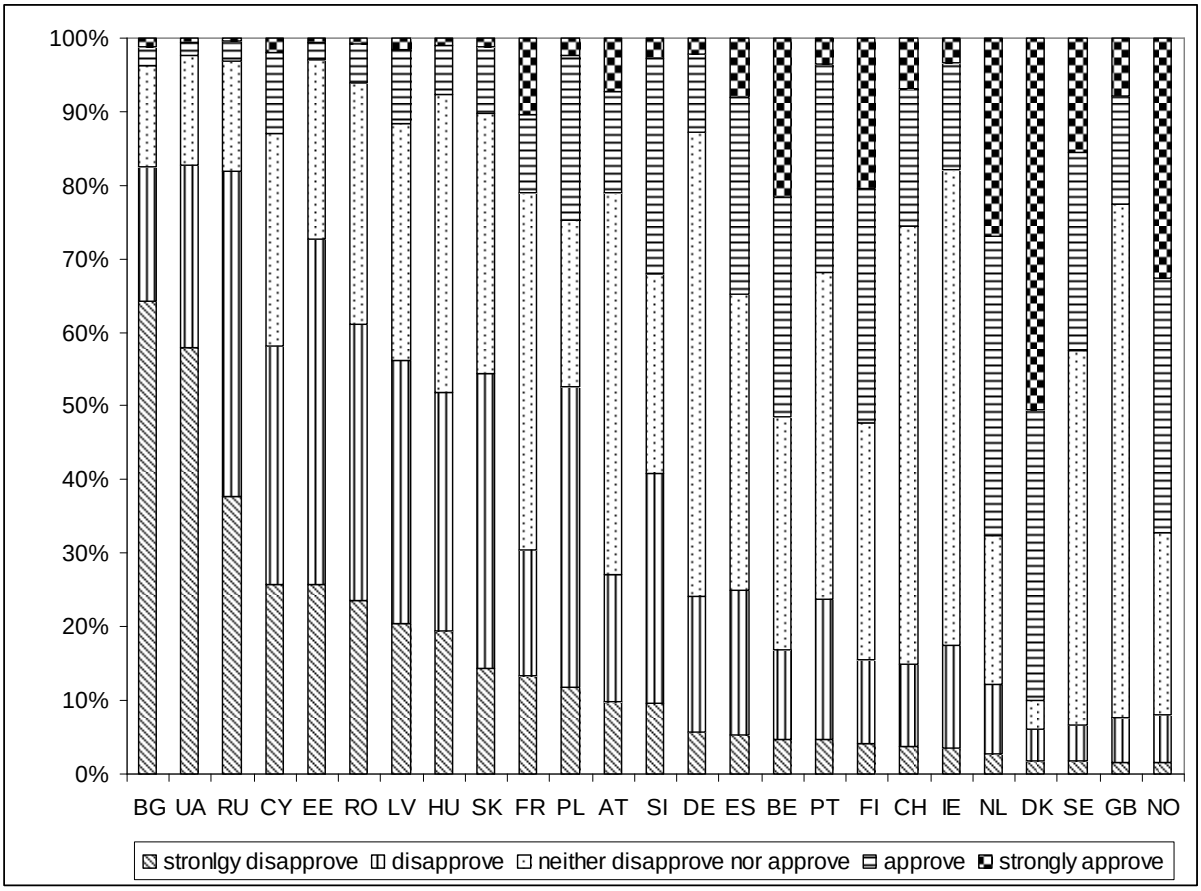

Figure 1. Distribution of attitudes on childlessness across countries.

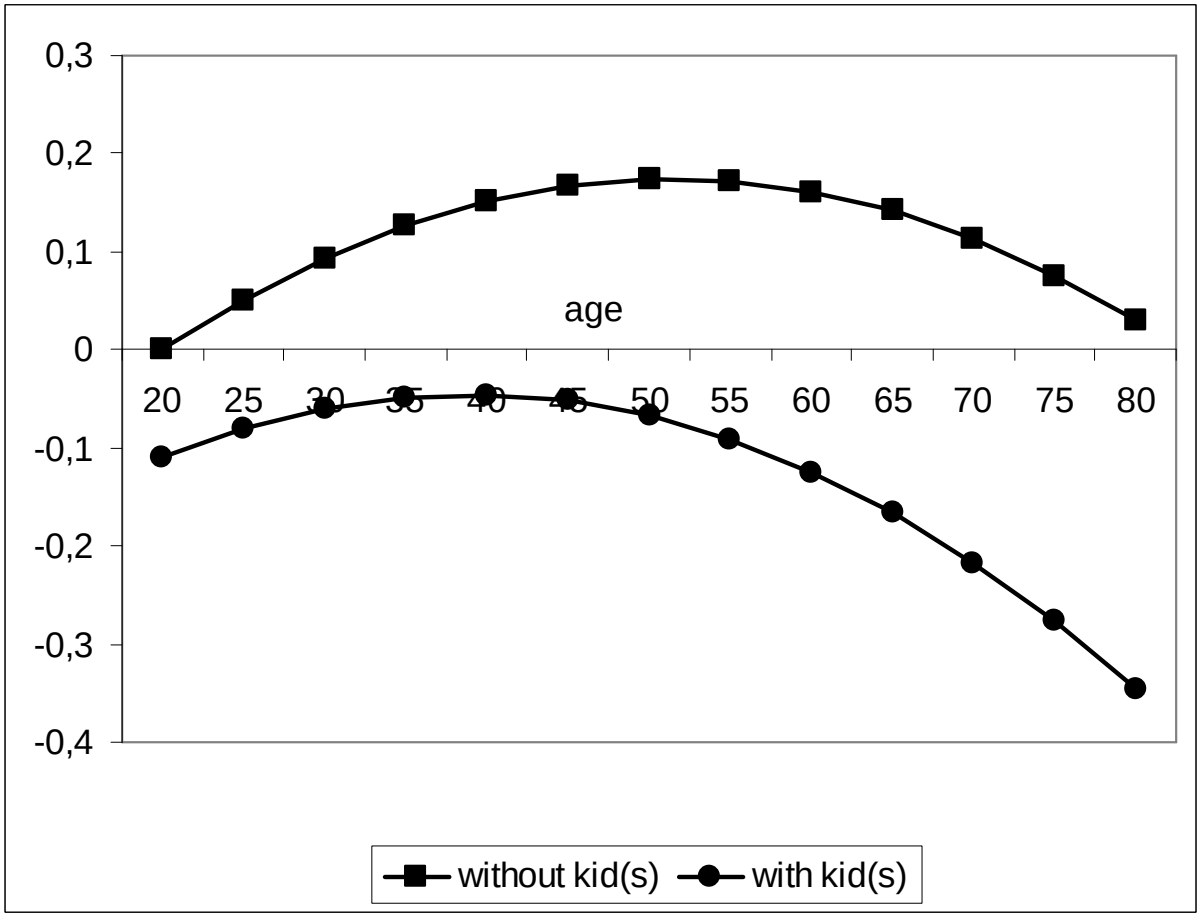

Figure 2. The relation between age, parental status and approval of childlessness.