

Single motherhood and life satisfaction in comparative perspective: Do institutional and cultural contexts explain the life satisfaction penalty for single mothers?

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Abstract

Life satisfaction research regularly identifies single mothers as a relatively unhappy group. This comparative study refines this view by assessing how broader institutional and cultural contexts shape the life satisfaction of single mothers. Using data from the European Social Survey for 24 European countries, this study compares the life satisfaction of single mothers to that of partnered mothers and childless singles. The analysis shows that generous family benefits, extensive child-care provision, and high levels of gender equality are associated with smaller life satisfaction penalties for single mothers, whereas the cultural climate around single motherhood is not related to the life satisfaction of single mothers. Overall, the life satisfaction gap between single mothers and childless singles is substantially smaller than that between single mothers and partnered mothers. Moreover, single women residing in countries with supportive family policies and high levels of gender equality are as happy as childless singles. This latter finding challenges the notion that single motherhood inevitably reduces women's life satisfaction.

Key words: life satisfaction, single motherhood, parenthood, cross-country comparison

Introduction

Throughout most western countries, the number of single-parent families has constantly increased over the past few decades (see, Heuveline et al. 2003; Sobotka and Toulemon 2008). In many European countries, more than 15% of children live in single-parent households (Chzhen and Bradshaw 2012), most of which are headed by women. This trend has been of major concern to family researchers and policy makers given the potentially negative consequences of single motherhood. One such outcome is that single mothers report being less satisfied with their lives than partnered mothers (Frey and Stutzer 2000; Meier et al. 2016; Nelson et al. 2013; Stanca 2012). This life satisfaction penalty for single mothers is commonly attributed to the higher levels of emotional and financial stress and strain that accompany long-term single parenting (Avison et al. 2007; Nelson et al. 2014; Nomaguchi and Milkie 2003).

Several studies addressed the life satisfaction of single mothers, but most of these uses data from the United States, where there is generally low government support for parents. As a result, we know relatively little about single mothers' life satisfaction in other countries, and we do not know if macro-level factors such as family policies affect the life satisfaction penalty for single mothers. The present study addresses this gap in the literature and aims to offer a comprehensive description of the association between single motherhood and life satisfaction from a cross-national perspective.

My study builds on and extends recent research (Aassve et al. 2012; Aassve et al. 2015; Glass et al. 2016) illustrating that the life satisfaction of parents differs widely between countries. This cross-country variation has been attributed particularly to differences in social policies between countries. A major aim of the present study was to investigate whether country-level characteristics affect the life satisfaction of single mothers and partnered mothers differently, and whether these characteristics account for the discrepancies in life satisfaction between these two groups.

In my analysis, I focused on four country-level characteristics that prior research has identified as crucial determinants of mothers' subjective well-being: the provision of public child care, the generosity of family benefits, the overall level of gender equality, and societal attitudes towards single motherhood.

To provide a broader picture of how single motherhood affects life satisfaction, I also compared the life satisfaction of single mothers to that of childless singles. This analysis responds to previous research by Ifcher and Zarghamee (2014) suggesting that single mothers are less happy than other women not only because they have to shoulder the burdens of child-rearing alone, but also because they lack the benefits of an intimate relationship. Ifcher and Zarghamee (2014) found that single mothers are as happy as single childless women when adjusting for differences in socio-economic status. As this finding indicates, when evaluating the life satisfaction penalty for single mothers, it is crucial to compare single mothers not merely with partnered mothers, but also with childless singles.

Another important feature of my study is that it examined how employment moderates the life satisfaction penalty for single mothers. For mothers, there are advantages and disadvantages of being employed outside the home. Maternal employment provides a source of identity and self-worth, and reduces financial strain, but also generates role strain and time pressures. The benefits and costs of employment might, however, differ between single mothers and partnered mothers. Consequently, paid employment could increase or reduce the life satisfaction disadvantage of single mothers. Moreover, the association between employment and the life satisfaction of single mothers might vary by policy contexts. Therefore, I examined whether the effect of employment on single mothers' life satisfaction differs between contexts with low and high institutional support for parents.

Background

Parental well-being is highly contingent on the level of institutional and societal support for parents. In particular, the existence of family policies providing benefits such as child care and parental leave have been identified as potential determinants of parental life satisfaction and happiness (Aassve et al. 2015; Glass et al. 2016). Prior research also linked parental life satisfaction to vacation and sick leave policies (Glass et al. 2016) and the overall levels of gender equality in a society (Aassve et al. 2015). Such society-level characteristics might account for differences in life satisfaction not only between parents and non-parents, but also between single mothers and partnered mothers. In the following, I describe how context factors can affect the life satisfaction disadvantage experienced by single mothers. I also argue that to obtain a full picture of the life satisfaction disadvantage, it is essential to compare single mothers to both partnered mothers and childless singles. Finally, I discuss how paid employment might moderate the life satisfaction penalty for single mothers.

Institutional and cultural context factors and single mothers' life satisfaction

Arguments that single mothers are less satisfied with their lives than other women are usually based on the notion that single mothers are exposed to higher psychosocial and financial stress and strain (Avison et al. 2007; Cunningham and Knoester 2007; Dziak et al. 2010). Single mothers are particularly vulnerable to financial stress because of their typically lower wages and sole responsibility for providing for their family (Aassve et al. 2005; Hilton et al. 2001). Income support policies such as child allowances and child tax credits can substantially reduce the financial hardships faced by low-income families (Brady and Burroway 2012; Misra et al. 2012) and increase their overall well-being. One would therefore expect single mothers in countries that pro-

vide generous financial support to families to experience lower life satisfaction penalties than those in countries with little or no financial support.

Single mothers also experience exceptionally high levels of role overload, time pressure, and work-family conflict because of the absence of support from a spouse or live-in partner (e.g., Byron 2005; Meier et al. 2016). In a qualitative study conducted by Richards and Schmiege (1993), single mothers identified role overload as their second-greatest problem after financial worries. Role overload and time pressures can be reduced by child care services, which relieve parents of some of their care duties (Bird 1997; Mirowsky and Ross 2002). I expect that child care provision benefits single mothers more than partnered mothers, and that the life satisfaction penalty is smaller in countries that provide extensive child care.

Another potential determinant of the life satisfaction of single mothers is the level of gender inequality within a country. Lower levels of gender inequality imply better labor market opportunities for women and less gender discrimination. Single mothers experience more disadvantage and discrimination in the labor market than other women (Güngör and Biernat 2009; Klett-Davies 2007), and are therefore affected to a higher degree by societal gender inequality. Previous cross-country research highlighted the detrimental effect of gender inequality by showing that women, relative to men, are happier in countries with high levels of gender equality (Tesch-Römer et al. 2008). Moreover, the association between gender equality and life satisfaction is stronger for mothers than for childless women (Aassve et al. 2015). In this study, I test the hypothesis that societal gender inequality also accounts for cross-country differences in the life satisfaction penalty for single mothers, and that the life satisfaction penalty is smaller in countries with high levels of societal gender equality.

Finally, one might hypothesize that single mothers' life satisfaction is affected by the degree to which single parenthood is socially accepted within a society. Social approval and behavioral

confirmation are fundamental sources of psychological well-being (Lindenberg 2001). Deviations from social expectations results in social stigma and have negative effects on well-being and self-concept (Christensen et al. 2004; Kaiser and Major 2004). Previous research has provided suggestive evidence supporting the hypothesis that societal disapproval of single motherhood negatively affects life satisfaction by showing that single mothers are worse off in countries with a strong two-parent family norm (Stavrova and Fetchenhauer 2015). A recent qualitative study from Poland, a country with very conservative family norms, provides some insight into how societal norms affect the life satisfaction of single mothers (Baranowska-Rataj et al. 2014). Most of the 16 interviewed single mothers reported feeling that they were viewed negatively by others. They stated that they were exposed to “unpleasant situations” at church or at school (Baranowska-Rataj et al. 2014: 1467). These reports indicate that societal attitudes can affect a person’s life satisfaction even if that person does not share these attitudes herself. Also Stavrova and Fechtenhauer (2015) showed that the cultural climate affects the life satisfaction of single parents irrespective of their personal values and attitudes. In light of these findings, I expect that single mothers experience larger life satisfaction penalties in countries where societal approval of single motherhood is low.

Single mothers compared to partnered mothers and childless singles

The life satisfaction penalty of single motherhood can be evaluated by comparing single mothers with partnered mothers, or by comparing single mothers with childless singles. Most quantitative studies on the subjective well-being of single mothers use partnered mothers as a comparison group. However, these studies do not provide a full picture of the single motherhood penalty, as they do not reveal whether single mothers are less satisfied because they have to raise children without a partner’s support or because they lack the benefits of an intimate relationship. Because

being in a stable relationship significantly enhances life satisfaction and happiness (Mikucka 2016; Wadsworth 2016; Waite and Gallagher 2000), a large proportion of the life satisfaction penalty experienced by single mothers can probably be attributed to the lack of an intimate relationship rather than to having a child (Ifcher and Zarghamee 2014).

Indeed, studies comparing the well-being of single mothers and childless singles found no clear evidence that single mothers are less happy than their childless counterparts. Whereas some studies have found that single mothers experience lower levels of happiness and life satisfaction than childless singles (Nelson et al. 2013; Nomaguchi and Milkie 2003), others report non-significant effects of parenthood on the subjective well-being of single women (Aassve et al. 2012; Baranowska-Rataj et al. 2014; Ifcher and Zarghamee 2014; Kohler et al. 2005). It has to be noted, though, that these studies differ greatly with regard to their model specifications. Most notably, most studies control for income (Aassve et al. 2012, Ifcher and Zarghamee 2014, Nomaguchi and Milkie 2003) or income satisfaction (Baranowska-Rataj et al. 2014). Financial well-being, however, is a crucial mediator in the association between single motherhood and life satisfaction. Thus, controlling for income may lead to misinterpretations of the association between single motherhood and life satisfaction, because low income often is a main reason for low levels of life satisfaction among single mothers.

Qualitative studies even argue that single motherhood can, under some circumstances, bring benefits to women's lives and that some single mothers fare better in terms of happiness and life satisfaction than their childless counterparts. These studies highlight that children are a major source of affection for single mothers (Baranowska-Rataj et al. 2014), bring a sense of purpose and meaning to their lives (SmithBattle 2000), and enhance their self-esteem (Edin and Kefalas 2005). Thus, comparing the life satisfaction of single mothers with that of partnered mothers might exaggerate the life satisfaction disadvantage of single motherhood. To provide a more

comprehensive assessment of the life satisfaction penalty for single mothers, this study compares the life satisfaction of single mothers with that of partnered mothers and childless singles.

Employment status

Paid employment has proven to have ambivalent effects on mothers' subjective well-being. On one hand, it is associated with various rewards, and these rewards may be greater for single mothers than for other women. For instance, paid employment is a key factor limiting financial hardship among single mothers (Brady and Burroway 2012; Misra et al. 2012). Also non-pecuniary benefits of work, such as self-esteem, are greater for single women than for partnered women (Demo and Acock 1996). On the other hand, working parents are particularly vulnerable to dissatisfaction arising from work-family conflicts (Mattingly and Sayer 2006). These adverse consequences of paid employment may be greater for single mothers due to the absence of help and support from a spouse or live-in partner.

Research on the effects of paid employment on single mothers' life satisfaction is scarce. A recent study by Harkness (2016) based on UK data shows that mental health improves significantly more among single mothers than among partnered mothers after they enter paid work. Based on this, I expect that employment is more important for the life satisfaction of single mothers than for that of partnered mothers, and that the life satisfaction gap between single and partnered mothers is smaller among gainfully employed mothers than among non-employed mothers. Moreover, I hypothesize that the effect of employment on the life satisfaction of single mothers is contingent on a country's family policies. Because employed single mothers experience greater levels of work-family conflict than employed partnered mothers (Byron 2005), they should benefit more from public childcare provision. Non-working single mothers are affected particularly

severely by economic hardship (Misra et al. 2012), and should benefit more from the provision of financial support to families than their partnered counterparts.

Data and Method

Data

The data for this study were derived from the European Social Survey (ESS). The ESS is conducted biannually and provides high-quality data for cross-national comparison. For this study, I used data from the first six rounds of the ESS (2002-2016). However, not all countries participated in all rounds. For instance, Iceland, and Lithuania participated in only two rounds, and Austria participated in only three rounds (see Table A1).

I excluded seven countries (Croatia, Israel, Russia, Ukraine, Turkey, Switzerland, Luxembourg) with missing information on the country-level indicators, and one country (Italy) with fewer than 30 single mothers in the sample. The final sample contained data for women between the ages of 18 and 59 from 24 East and West European countries.¹ Because I examined the life satisfaction of mothers with minor children, I excluded all mothers whose youngest child was 18 years or older. This resulted in a total sample size of 55,632 women of whom 4,676 were single mothers. The country-specific sample size ranged from 324 in Iceland to 3,741 in Ireland, and the number of single mothers ranged from 43 in Iceland to 593 in Great Britain (see also Table 2).

Micro-level variables

¹ Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Great Britain, Greece, Hungary, Iceland, Ireland, Lithuania, Netherlands, Norway, Poland, Portugal, Slovenia, Slovakia, Spain, Sweden.

The dependent variable in my analysis was the level of women's life satisfaction. The life satisfaction variable in the ESS is based on a question that asks respondents "All things considered, how satisfied are you with your life as a whole nowadays?" The response scale ranges from 0 (completely dissatisfied) to 10 (completely satisfied).

The primary explanatory variables were partnership status and parental status. Regarding partnership status, I distinguished between partnered (married or cohabiting) women and single women. Parental status was measured by a dummy variable indicating the presence of minor children in the household (yes/no). Various individual characteristics may confound the association between single motherhood and life satisfaction, as single mothers differ from other women in various socio-demographic characteristics that also affect life satisfaction. In many European countries, single mothers are less often gainfully employed and have lower levels of education than partnered mothers (Jaehrling et al. 2015; Jaumotte 2003; Millar and Rowlingson 2001). In addition, single mothers report lower levels of self-assessed health (Rousou et al. 2013). Health, however, is a crucial predictor of life satisfaction (Argyle 2003). Single mothers may also differ from partnered mothers with respect to the number and age of their children. Another potential confounder is the experience of a divorce or separation, which has strong negative effects on subjective well-being (e.g. Leopold and Kalmijn 2016).

In the multivariate analysis, I accounted for these confounding factors. With regard to education, I distinguished among four educational groups: less than lower secondary, lower secondary, upper secondary, and tertiary. Employment status is represented by an indicator for whether the respondent is gainfully employed or not. In preliminary analysis, I tested a more finely grained indicator for employment by differentiating between part-time employment (<35 hours per week), full-time employment (35-49 hours per week), and long working hours (50+ hours per week). These analyses showed no significant differences in life satisfaction between these three

groups of employed women. I therefore used a binary indicator for paid employment (yes/no). Self-assessed health was captured by the question “How is your health in general?” with four response categories varying from very good to very bad.

Number and age of children was captured by three variables indicating the number of children in three age groups (0-5 years, 6-12 years, 13-17 years). These three variables were centered to their grand mean.² Being divorced or separated was controlled for by adding a variable to the model that indicated whether the respondent had ever experienced dissolution of a marriage or non-marital cohabitation. Unfortunately, the ESS does not provide information about the starting and ending dates of former unions. Thus, it was not possible to distinguish between women who became single mothers through divorce or separation and those who became single mothers outside a marital or cohabiting union. Finally, I controlled for women’s age.

I did not control for women’s income because it plays a key mediating role in the relationship between single motherhood and life satisfaction. Other potential mediators in this association are women’s employment status and health. However, regression models with and without employment status and health as control variables yielded similar results. Because employment status and health can also function as confounders, I decided to keep both variables in the model.

Table 1 provides descriptive statistics for life satisfaction and the explanatory variables. Single mothers were less satisfied with their lives than partnered mothers and childless singles. Notable differences also appeared with regard to health and education: Single mothers reported lower levels of education and worse health than other women. Contrary to the results of other studies (e.g. Jaehrling et al. 2015), single mothers were not less often gainfully employed than partnered mothers (63% vs. 62%). However, single mothers less often reported having pre-school-aged

² Because these variables are centered to their grand mean, the coefficient for the binary motherhood variable reflects the gap in life satisfaction between childless women and mothers, with average numbers of children in each age group.

children than partnered mothers. This could explain the relatively high labor market participation of single mothers, as mothers of kindergarten-aged children are particularly likely to stay at home.

– Table 1 about here –

Macro-level variables

The macro-level variables were taken from databases provided by Eurostat, the UN, the OECD, and by the European Value Survey. Table A1 in the appendix summarizes these variables. Family benefits were measured as the percentage of GDP spent on social protection benefits for children and families. According to the European System of Integrated Social Protection Statistics (ESS-PROS), these benefits include all transfers to families and children, in cash or in kind, intended to relieve them of the financial burden of several risks and needs. This indicator is provided by Eurostat for all survey years and ranges from 0.8% in Poland to 4.1% in Denmark.

Child care was measured in terms of the percentage of children aged 0-2 years enrolled in formal child care.³ This indicator is provided by the OECD Family Database for 2003, 2007, and 2010. I assigned the information for 2003 to the ESS data from 2002 and 2004, the information for 2007 to the data from 2006 and 2008, and the information for 2010 to the data from 2010 and 2012. Enrolment rates ranged from 2.0% in Poland (in 2003) to 65.7% in Denmark (in 2010). I used the percentage of children aged 0-2 to construct the child care indicator, because child care

³ Strictly speaking, the present study examines the association between child care enrolment (instead of child care provision) and mothers' life satisfaction. Unfortunately, international databases such as the OECD Family Database, Eurostat, and the UNECE database only provide information on child care enrolment. Due to these data limitations, cross-country studies usually use childcare enrollment—either implicitly or explicitly—as an indicator for childcare provision (e.g. Boeckmann et al. 2015; Hook 2010; Treas et al. 2011).

for infants and toddlers is explicitly designed to help families balance care and employment, whereas programs for children aged 3 to 6 are primarily focused on early education (Gornick and Meyers 2003; Misra et al. 2011). I interpreted the availability of child care for 0-2-year-olds as a proxy for child care in general. Countries with generous child care services for under-3-year-olds usually also offer extensive child care for older children and out-of-school care, but not vice versa (Pettit and Hook 2005; Steiber and Haas 2009).

To measure a country's level of gender equality, I used the Gender Empowerment Measure (GEM) provided by the United Nations Development Programme (UNDP). The GEM was created to measure women's abilities to participate actively in economic and political life and their command over economic resources. It is constructed from the combination of the percentage of female members of the country's parliament, the percentage of positions as legislators and managers held by women, the percentage of professional and technical positions held by women, and women's share of earned income compared to that of men. Because this index was not calculated for years later than 2007, I assigned the GEM for 2007 (UNDP 2007) to all rounds of the ESS. The GEM ranges from 0 to 1 with higher values representing greater gender equality.

The normative context can be indicated by descriptive and injunctive norms. Descriptive norms are typical patterns of behavior, generally accompanied by the expectation that people will behave according to these patterns (Kitts and Chiang 2008). With regard to single motherhood, the descriptive norm could be measured by the percentage of births to unmarried women (e.g. Stavrova and Fetchenhauer 2015). Injunctive norms describe prescriptive rules or normative expectations specifying what people should do. Studies on the impact of the normative context on subjective well-being often refer to both types of norms (Kalmijn 2010; Stavrova and Fetchenhauer 2015; Verbakel 2012). However, some scholars (e. g. Brennan et al. 2013) argue that descriptive norms primarily reflect social practices, and thus affect behavior rather than emo-

tions. Injunctive norms, in contrast, relate to people's perceptions of what most other people approve or disapprove of (Cialdini et al. 1991). Consequently, people should experience positive emotions when complying with injunctive norms and negative emotions when violating them (see, Christensen et al. 2004).

In this study, I measured the normative context by a country's injunctive norm. The injunctive norm was indicated by aggregated personal attitudes towards single motherhood, which were obtained from European Value Survey (EVS) data. In 2008, the EVS asked the respondents if they would approve or disapprove if "a woman wants to have a child as a single parent, but she does not want to have a stable relationship with a man". To create a country-level index, I calculated the percentage of respondents in each country who approve of single mothers, so that higher index values reflect higher approval of single motherhood. This indicator ranges from 25.0 (in Cyprus) to 88.6 (in Iceland).

In the analysis, all country-level indicators were z-standardized. To control for country differences in wealth, I also included a variable reflecting the gross domestic product (GDP) per capita.

Method

For the multivariate analysis, I used multi-level regression modeling. I took into account that the data contain three levels: respondents (Level 1) are nested within rounds (Level 2), which are nested within countries (Level 3). I estimated a three-level random coefficient model and allowed the effect of the indicators for parenthood and partnership status to vary between country-years. To test whether the association between motherhood and life satisfaction is moderated by context factors, I included cross-level interactions between the country-level variables and the indicators for motherhood and partnership status, respectively. I present separate models for each cross-

level indicator in the results section. Because statistical causality is difficult to establish in cross-sectional research, the results presented here need to be interpreted as statistical associations rather than causal effects.

Results

In a first step, I examined whether, and to what extent, the discrepancies in life satisfaction between single mothers and partnered mothers as well as between single mothers and childless singles vary between countries. In a second step, I investigated whether the context factors—childcare provision, family benefits, gender inequality, and societal attitudes towards single motherhood—account for cross-country differences in the life satisfaction penalty for single mothers. In a third step, I analyzed whether the association between employment and life satisfaction is stronger for single mothers than for partnered mothers, and whether the effect of employment on the life satisfaction of single mothers is contingent on a country's family policies.

Cross-country variation of the life satisfaction penalty for single mothers

Table 2 displays the results of the country-specific analysis. For each country, I regressed women's life satisfaction on their family situation and a set of sociodemographic characteristics. With regard to the family situation, I distinguished between partnered mothers, partnered women without children, single mothers, and single women without children. Table 2 displays coefficients from two model specifications. Model 1 shows the gap in life satisfaction between single mothers and partnered mothers, and Model 2 shows the life satisfaction gap between single mothers and childless singles. The coefficients for the sociodemographic characteristics are not reported.

– Table 2 about here –

Model 1 in Table 2 showed that the life satisfaction gap between single mothers and partnered mothers was statistically significant in all but two countries (Iceland and Slovenia). Model 1 also indicates that the magnitude of the life satisfaction gap between partnered mothers and single mothers varied greatly between countries. The smallest (statistically significant) gap occurred in Denmark ($b=0.434$), and the largest gap in Poland ($b=1.625$). A different picture emerged when comparing the life satisfaction of single mothers to that of childless singles (Model 2). In most countries, the gap between these two groups was substantially smaller than that between single and partnered mothers. Moreover, the life satisfaction gap between single mothers and childless singles was statistically significant (at $p < 0.1$) in only 13 out of 24 countries. Remarkably, single mothers in Denmark ($b = 0.465, p < 0.01$) and Finland ($b=0.266, p < 0.1$) were significantly happier than single women without children.

Country-level factors and the life satisfaction penalty for single mothers

In the next step of the analysis, I examined if the broader context helps explain cross-country variation in the life satisfaction penalty for single mothers. I built the regression models in two stages. First I examine gaps in life satisfaction between single mothers and partnered mothers. Consequently, this analysis is restricted to (partnered and single) mothers. I examined whether the association between partnership status and life satisfaction is moderated by the country-level factors under examination. The second set of models examined gaps life satisfaction gap between single mothers and childless singles. This analysis is restricted to single women (with and without children) and examined whether the association between parental status and life satisfaction is moderated by country-level factors.

Single mothers vs. partnered mothers

The models shown in Table 3 compared the life satisfaction of single mothers to that of partnered mothers. I first estimated a main effects model that reports the effect sizes of partnership status, socio-demographic characteristics, and the country-level indicators (Model 1). The coefficient for the single motherhood variable indicated that, on average, single mothers were significantly less satisfied with their lives than partnered mothers. Mothers' life satisfaction was also lower when they were not gainfully employed, less educated, older, and in bad health. Moreover, mothers' life satisfaction varied by their children's age. The number of children younger than 6 years was positively associated with mothers' life satisfaction, whereas the number of older children was not related to life satisfaction. This finding is in line with previous research showing that life satisfaction increases in the years around childbirth and decreases thereafter (Myrskylä and Margolis 2014; Pollmann-Schult 2014). Generally, mothers residing in wealthy, high-GEM countries were more satisfied with their lives than mothers in poorer, low-GEM countries. Surprisingly, the main effects for family benefits and public childcare provision were statistically insignificant, suggesting that neither of these two types of policies affect the life satisfaction of mothers when country differences in gender inequality and wealth are accounted for.

– Insert Table 3 about here –

Models 2-5 addressed the question of whether, and to what extent, the life satisfaction gap between single mothers and partnered mothers is conditioned by the four context factors. This was done by including in each model a cross-level interaction between a country-level indicator and the partnership status variable. The interaction effects in Models 2-4 were positive and statistically significant, suggesting that generous family benefits, extensive childcare provision, and high

levels of gender equality benefit single mothers more than partnered mothers. The insignificant cross-level interaction between parental status and societal attitudes towards single motherhood (Model 5) indicates that the life satisfaction disadvantage of single mothers was unrelated to the cultural climate around single motherhood.

The associations between the context factors and the life satisfaction disadvantage of single mothers are graphically represented in Figure 1. The figure shows the variation of the average marginal effect (y-axis) between countries with unsupportive and supportive characteristics towards single mothers (x-axis). Following the advice of Preacher, Curran, and Bauer (2006), I defined countries with unsupportive characteristics as those whose country-level indicators scored at 1 standard deviation below the mean of the respective indicator. Likewise, I defined countries with supportive characteristics as those whose respective country-level indicators scored at 1 standard deviation above the mean of the respective indicator. Figure 1 reveals that the single motherhood penalty in life satisfaction was considerably lower in countries with supportive policies for parents and high levels of gender equality. However, the life satisfaction disparity between single mothers and partnered mothers was still substantial and statistically significant even in countries with high levels of support and gender equality.

– insert Figure 1 about here –

Single mothers vs. childless singles

In the next step of my analysis, I investigated how single mothers fare in terms of life satisfaction when compared to childless single women. Model 1 in Table 4 indicates that single mothers were significantly less satisfied than childless single women. However, the gap in life satisfaction between single mothers and childless singles was considerably smaller than that between single

mothers and partnered mothers (see Model 1 in Table 3). Again, a strong association between the gender empowerment indicator and women's levels of life satisfaction emerged, whereas the other country-level indicators were unrelated to women's life satisfaction.

In Models 2-5, I added cross-level interactions between the motherhood indicator and the county-level indicators to address the question of whether, and to what extent, the four country-level characteristics under examination account for differences in life satisfaction between single mothers and childless singles. The positive and statistically significant interaction effects in Models 2-4 indicate smaller differences in life satisfaction between single mothers and childless singles in countries with supportive family policies and higher levels of gender equality. In fact, the interactions were so large that they nullified the statistical effects of single motherhood: In countries with high levels of support and gender equality, single mothers and childless singles experienced similar levels of life satisfaction (see Figure 2). However, the life satisfaction gap between single mothers and childless singles was not correlated with a country's attitudes towards single motherhood (Model 5).

– insert Figure 2 about here –

Employment status and the life satisfaction penalty for single mothers

In the final step of the analysis, I investigated whether single mothers benefit more from being gainfully employed than partnered mothers, and whether the statistical effect of paid work on single mothers' life satisfaction is contingent on the four country-level characteristics under examination. To test this, I added three-way interactions between parental status, employment sta-

tus, and the country-level characteristics as well as the respective two-way interactions to the model (Table 5).

– insert Table 5 about here –

The findings showed that paid employment was generally associated with higher levels of life satisfaction. According to the positive and statistically significant interaction effect between partnership status (“single”) and employment status (“employed”) in all four models, the effect size for employment was larger for single mothers ($b \approx 0.48$, $p < .05$) than for partnered mothers ($b \approx 0.17$, $p < .05$). Thus, although single mothers experience greater levels of work-family conflict, they seem to benefit more from the rewards of paid work, such as income, status, and self-esteem, than partnered mothers. The three-way interaction effects tested whether the discrepancies in life satisfaction between employed single mothers and employed partnered mothers varied across contexts. All three-way interaction effects were statistically insignificant, suggesting that the four country-level characteristics affected the life satisfaction of employed single mothers and employed partnered mothers in a similar manner. Thus, contrary to my expectations, I found no evidence that single employed mothers benefit more from public childcare provision than partnered employed mothers, or that single non-employed mothers benefit more from generous family benefits than partnered non-employed mothers.

Discussion

Prior research repeatedly linked raising children without the presence of a partner to low levels of life satisfaction. The findings presented here indicate that the life satisfaction penalty for single mothers is not uniform across countries, but is shaped by a country’s family policy and its level

of gender equality. Generous family benefits, extensive childcare provision, and high levels of gender equality are associated with smaller disparities in life satisfaction between single mothers and other women.

The principle aim of this study was to investigate whether the broader social and political context accounts for the life satisfaction penalty of single motherhood. The answer to this question depends on whom we are comparing single mothers to. Single mothers are significantly less satisfied with their lives than partnered mothers, even in countries with supportive family policies and high levels of gender equality. Life satisfaction differences between single mothers and childless singles, in contrast, are fairly small. Moreover, supportive family policies and high gender equality seem to eliminate the disadvantage in life satisfaction of single mothers when compared to childless singles. In these supportive contexts, most single mothers would not have been better off if they had remained childless.

The findings presented demonstrate that it is important to carefully choose a comparison group when evaluating the life satisfaction penalty for single mothers. Most previous quantitative studies painted a bleak picture of single mothers' subjective well-being because they compared single mothers' life satisfaction with that of partnered mothers. However, single mothers differ from partnered mothers not only in that they have to raise a child without a partner's help, but also in that they lack the benefits of an intimate relationship. The small life satisfaction differences between single mothers and single childless women suggest that a substantial part of the single motherhood penalty arises from being single rather than from being a single mother.

In contrast to previous research (Stavrova and Fetchenhauer 2015), I found no evidence that societal norms affect the life satisfaction of single mothers. Apparently, policies that reduce financial hardship and time constraints by providing family benefits and child care play a much greater role in the life satisfaction of single mothers than the cultural climate around single moth-

erhood. Thus, non-conformity to societal norms and expectations seems to add little additional stress on top of the financial and psychological strain that single mothers already experience. Stavrova and Fechtenhauer's (2015) findings to the contrary may result from the fact that they limited their study to the cultural context. However, institutional and normative contexts are interrelated and mutually reinforcing: Countries with progressive family norms are more likely to have supportive family policies and higher levels of societal gender equality (Yu 2015). Therefore, limiting the analysis to only one contextual aspect, such as social norms, can easily lead to misinterpretations.

Paid employment has shown a positive association with mothers' life satisfaction, and this association is significantly greater for single mothers than for partnered mothers. This suggests that single mothers benefit more from employment than their partnered counterparts, notwithstanding the greater psychological stress and work-family conflict that employed single mothers experience. This is consistent with previous research showing that paid employment is more important for the financial well-being of single mothers than for that of partnered mothers (Misra et al. 2012). However, contradicting my assumptions, family policies do not affect the life satisfaction of employed single mothers and employed partnered mothers to different degrees. Both groups seem to benefit equally, for instance, from child care provision.

This study is not without limitations. In particular, its cross-sectional perspective limits the possibility to draw causal conclusions. In addition to the causal arguments outlined in the background section above, at least two possible non-causal explanations can be identified to account for reduced levels of life satisfaction among single mothers. The first involves selection processes, whereby women with low levels of life satisfaction are selected into divorce and single motherhood. There is some evidence supporting this hypothesis, showing that partnered mothers who report higher levels of depressive symptoms have an increased likelihood of separating

(Goldscheider et al. 2013). A second, related explanation refers to unobserved differences between single mothers and partnered mothers that are correlated with life satisfaction. Single mothers may differ from other women in personality traits and in whether or not the parenthood was planned. With the current data, it was not possible to test these alternative explanations. Nevertheless, a causal effect of single motherhood on women's life satisfaction is undisputed and has been found in studies controlling for selection processes and unobserved heterogeneity (Baranowska-Rataj et al. 2014; Leopold and Kalmijn 2016). Although the present study could not identify causal effects of single motherhood, it provides valuable descriptive insights into cross-national differences in the life satisfaction penalty for single mothers, and into how this penalty varies between contexts. Overall, the findings presented in this study suggest that supportive family policies and high levels of gender equality greatly increase the life satisfaction of single mothers and substantially reduce the life satisfaction gap between single mothers and other women.

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Table 1 Women's Characteristics by Partnership and Parenthood Status: Descriptive Statistics

Variable	Partnered childless		Partnered mothers		Single childless		Single mother	
	M	SD	M	SD	M	SD	M	SD
Life satisfaction	7.30	2.07	7.21	2.12	7.00	2.07	6.12	2.43
Number and age of children								
N children aged 0-5 years	n/a		0.57	0.71	n/a		0.35	0.57
N children aged 6-12 years	n/a		0.70	0.80	n/a		0.63	0.72
N children aged 13-17 years	n/a		0.48	0.67	n/a		0.51	0.65
Employment status (in %)								
Gainfully employed	67.6		62.1		52.6		63.2	
Economically inactive	20.4		30.2		5.1		20.5	
In education	5.6		1.5		32.8		3.5	
Unemployed	6.5		6.2		9.5		12.8	
Divorced or separated (in %)	n/a		n/a		27.2		77.7	
Education (in %)								
Less than lower secondary	5.8		5.5		3.1		7.8	
Lower secondary	10.3		13.2		1.71		20.6	
Upper secondary	47.2		48.8		51.2		46.6	
Tertiary	32.4		32.6		28.7		25.0	
Health status (in %)								
Very good	30.8		30.9		36.3		26.1	
Good	47.5		49.1		46.0		48.2	
Fair	18.5		17.5		15.2		21.5	
Bad	3.3		2.5		2.5		4.3	
Age (in %)								
18-29 years old	14.9		4.3		52.2		8.3	
30-39 years old	36.5		34.5		24.5		29.2	
40-49 years old	28.4		46.5		13.2		44.7	
50-59 years old	20.1		17.7		10.1		17.8	
Number of cases	12,897		22,611		15,448		4,676	

Table 2 Linear Regression Models Predicting Women’s Levels of Life Satisfaction from Parental and Partnership Status and Covariates

	Model 1: Single mother vs. partnered mothers		Model 2: Single mothers vs. childless singles mothers		N of cases	N of single mothers
	<i>b</i>	<i>SE</i>	<i>b</i>			
Slovenia	-0.203	0.235	-0.228	0.294	1775	86
Iceland	-0.356	0.222	-0.330	0.346	324	43
Denmark	-0.434**	0.118	0.465**	0.167	2192	151
Finland	-0.501**	0.111	0.266 [†]	0.142	2713	161
Estonia	-0.532**	0.152	-0.315	0.227	1911	200
Portugal	-0.534**	0.150	-0.257	0.205	2776	279
Netherlands	-0.626**	0.098	0.024	0.133	3029	258
Hungary	-0.710**	0.184	0.003	0.238	2251	194
Sweden	-0.746**	0.116	-0.204	0.168	2527	200
Norway	-0.811**	0.116	0.161	0.169	2481	212
Lithuania	-0.814**	0.251	-1.224**	0.399	739	96
United Kingdom	-0.963**	0.103	-0.619**	0.144	3267	593
Ireland	-0.965**	0.120	-0.314*	0.146	3741	463
Bulgaria	-0.995**	0.248	-0.623 [†]	0.350	1432	119
Belgium	-1.130**	0.129	-0.428*	0.175	2567	179
Slovakia	-1.149**	0.207	-0.722**	0.274	1857	147
Austria	-1.206**	0.264	-0.033	0.310	1743	59
Czech Republic	-1.207**	0.154	-0.152	0.224	2125	217
Germany	-1.282**	0.130	-0.578**	0.171	3858	289
France	-1.315**	0.149	-0.352 [†]	0.208	2763	304
Greece	-1.348**	0.234	-0.415	0.273	2644	100
Spain	-1.367**	0.171	-0.867**	0.208	3060	128
Cyprus	-1.416**	0.269	-0.578 [†]	0.335	1052	65
Poland	-1.625**	0.200	-0.994**	0.249	2805	133
Total					55,632	4,676

Notes: All models control for employment status, education, age, being separated or divorce, health, number and age of children, survey wave.

[†] $p < 0.1$. * $p < 0.05$. ** $p < 0.01$.

Table 3: Multilevel regression models predicting the life satisfaction of mothers from partnership status, country-level characteristics, and covariates

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE		SE	b	SE	b	SE	b	SE
Single (vs. partnered)	-0.95**	0.05	-0.96**	0.05	-0.98**	0.05	-0.96**	0.05	-0.96**	0.05
Gainfully employed	0.22**	0.03	0.22**	0.03	0.22**	0.03	0.22**	0.03	0.22**	0.03
Divorced or separated	-0.13	0.07	-0.14*	0.07	-0.15*	0.07	-0.15*	0.07	-0.13	0.07
Education ¹										
Lower secondary	0.19**	0.06	0.19**	0.06	0.20**	0.06	0.19**	0.06	0.19**	0.06
Upper secondary	0.41**	0.06	0.42**	0.06	0.41**	0.06	0.41**	0.06	0.41**	0.06
Tertiary	0.64**	0.06	0.64**	0.06	0.64**	0.06	0.64**	0.06	0.64**	0.06
Age ²										
30-39 years old	-0.12*	0.06	-0.13*	0.06	-0.12*	0.06	-0.12*	0.06	-0.13*	0.06
40-49 years old	-0.14*	0.06	-0.14*	0.06	-0.14*	0.06	-0.14*	0.06	-0.14*	0.06
50-59 years old	-0.19**	0.07	-0.19**	0.07	-0.19**	0.07	-0.19**	0.07	-0.19**	0.07
Number and age of children										
N children 0-5 years old	0.11**	0.02	0.11**	0.02	0.11**	0.02	0.11**	0.02	0.11**	0.02
N children 6-12 years old	-0.02	0.02	-0.02	0.02	-0.02	0.02	-0.02	0.02	-0.02	0.02
N children 13-17 years old	-0.02	0.02	-0.02	0.02	-0.02	0.02	-0.02	0.02	-0.02	0.02
Health status ³										
Good	-0.55**	0.03	-0.55**	0.03	-0.55**	0.03	-0.55**	0.03	-0.55**	0.03
Fair	-1.29**	0.04	-1.29**	0.04	-1.29**	0.04	-1.29**	0.04	-1.29**	0.04
Bad	-2.16**	0.07	-2.16**	0.07	-2.16**	0.07	-2.17**	0.07	-2.16**	0.07
Country level indicators										
Family benefits	-0.08	0.07	-0.10	0.07	-0.08	0.07	-0.08	0.07	-0.08	0.07
Child care provision	-0.06	0.06	-0.06	0.06	-0.09	0.06	-0.06	0.06	-0.06	0.06
Gender empowerment (GEM)	0.40**	0.12	0.41**	0.12	0.40**	0.12	0.39**	0.12	0.41**	0.12
Societal attitudes	0.12	0.09	0.12	0.09	0.12	0.09	0.12	0.09	0.12	0.09
GDP (log.)	0.50**	0.14	0.50**	0.14	0.50**	0.14	0.49**	0.14	0.50**	0.14
Cross-level interactions										
Family benefits*Single			0.10*	0.05						
Child care provision* Single					0.17**	0.05				
GEM* Single							0.10*	0.05		
Societal attitudes* Single									0.03	0.05
Intercept	2.31	1.47	2.31	1.48	2.29	1.48	2.34	1.47	2.31	1.48
Level 3 Variance		0.19		0.19		0.19		0.19		0.19
Level 2 Variance		0.05		0.05		0.05		0.05		0.05
Level 1 Variance		3.66		3.66		3.66		3.66		3.66
Random slope: Single		0.13		0.13		0.11		0.12		0.13
N of countries /individuals		24/27,287		24/27,287		24/27,287		24/27,287		24/27,287

Notes: ¹Reference group: Less than lower secondary education. ²Reference group: 18-29 years old. ³Reference group: Very good.

* $p < 0.05$. ** $p < 0.01$.

Table 4: Multilevel regression models predicting the life satisfaction of single women from parental status, country-level characteristics, and covariates

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B	SE		SE	b	SE	b	SE	b	SE
Mother (vs. childless)	-0.32**	0.08	-0.32**	0.08	-0.35**	0.08	-0.31**	0.08	-0.33**	0.08
<i>Country-level indicators</i>										
Family benefits	-0.05	0.06	-0.07	0.06	-0.04	0.06	-0.04	0.06	-0.04	0.06
Child care provision	0.01	0.06	0.01	0.06	-0.04	0.06	0.01	0.06	0.01	0.06
Gender empowerment (GEM)	0.33*	0.09	0.34*	0.09	0.33*	0.09	0.30*	0.09	0.34*	0.09
Societal attitudes	0.12	0.07	0.12	0.07	0.13	0.07	0.12	0.07	0.11	0.07
GDP (log.)	0.26**	0.10	0.27**	0.10	0.29**	0.10	0.27**	0.10	0.27**	0.10
<i>Cross-level interactions</i>										
Family benefits*Mother			0.19**	0.05						
Child care provision*Mother					0.25**	0.05				
GEM*Mother							0.25**	0.04		
Societal attitudes *Mother									0.06	0.05
Intercept	4.61**	1.06	4.62**	1.06	4.35**	1.06	4.61**	1.06	4.62**	1.06
Level 3 Variance		0.13		0.13		0.13		0.13		0.13
Level 2 Variance		0.04		0.04		0.04		0.04		0.04
Level 1 Variance		3.80		3.80		3.80		3.80		3.80
Random slope: Mother		0.18		0.16		0.13		0.12		0.18
N of countries /individuals		24/20,124		24/20,124		24/20,124		24/20,124		24/20,124

Notes: All models control for employment status, education, age, being separated or divorced, health, number and age of children, survey wave.

* $p < 0.05$. ** $p < 0.01$.

Table 5 Multilevel regression models predicting the life satisfaction of mothers from partnership status, employment status, country-level characteristics, and covariates

Variable	Country-level indicator:							
	Family benefits		Child care		GEM		Societal attitudes	
	B	SE	b	SE	b	SE	B	SE
Single (vs. partnered)	-1.16**	0.06	-1.19**	0.07	-1.16**	0.07	-1.18**	0.06
Gainfully employed	0.17**	0.03	0.17**	0.03	0.16**	0.03	0.17**	0.03
Country-level indicator	-0.14*	0.07	-0.07	0.06	0.39*	0.16	0.07	0.14
Single*Employed	0.30*	0.07	0.31**	0.07	0.31**	0.06	0.32**	0.07
Single * Country-level indicator	0.12	0.07	0.21**	0.06	0.10	0.06	0.22**	0.06
Employed* Country-level indicator	0.04	0.03	-0.01	0.02	-0.03	0.02	-0.03	0.03
Single*Employed*Country-level indic.	-0.03	0.07	-0.08	0.06	0.01	0.06	-0.06	0.06
Intercept	2.81	1.44	2.82	1.45	2.89	1.44	2.92*	1.44
Level 3 Variance	0.20		0.21		0.20		0.20	
Level 2 Variance	0.05		0.05		0.05		0.05	
Level 1 Variance	3.68		3.68		3.69		3.68	
Random slope: single	0.12		0.10		0.11		0.09	
N of countries /individuals	24/27,287		24/27,287		24/27,287		24/27,287	

Notes: All models control for education, age, being separated or divorced, health, number and age of children, survey wave.
 * $p < 0.05$. ** $p < 0.01$.

Fig 1 Predicted life satisfaction gap between single mothers and partnered mothers

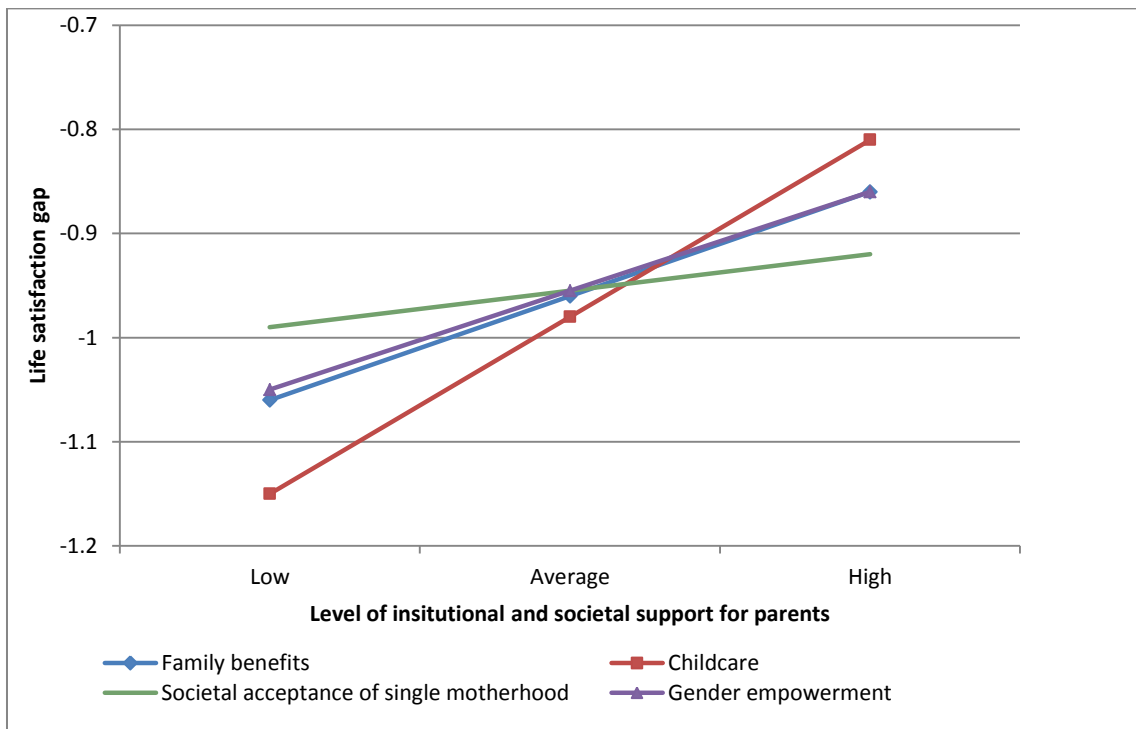


Fig 2 Predicted life satisfaction gaps between single mothers and childless singles

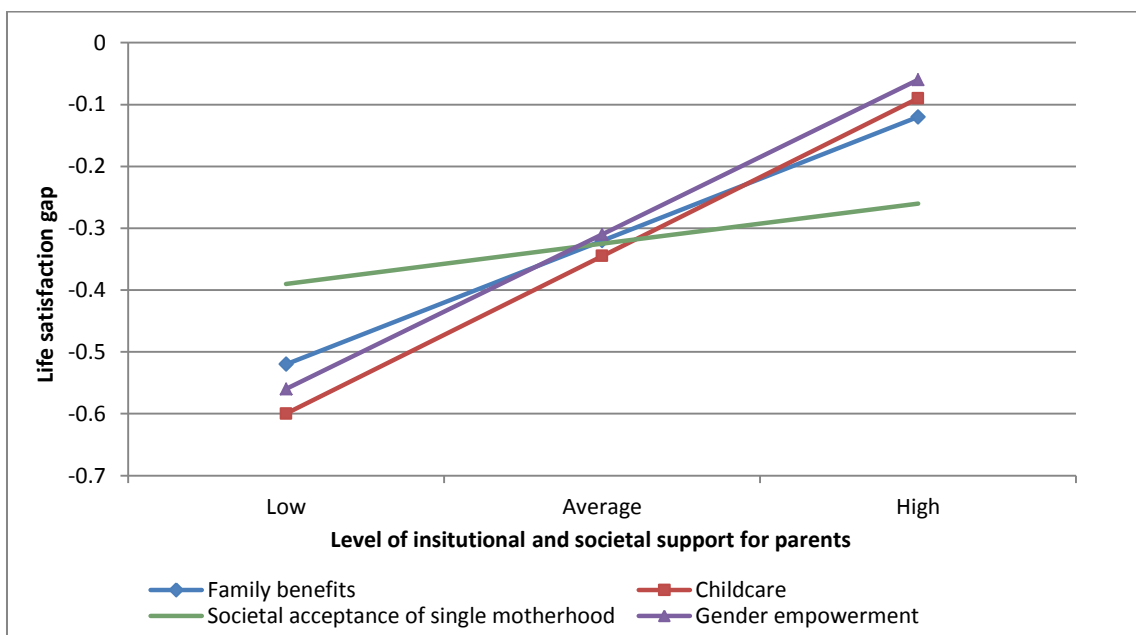


Table A1: Country-level indicators for child care provision, family benefits, gender equality, and societal attitudes towards single mothers

Country	Family benefits						Child care provision			GEM	Societal attitudes
	2002	2004	2006	2008	2010	2012	2003	2007	2010	2007	2008
Belgium	2.0	2.0	2.0	2.1	2.2	2.1	33.6	45.0	39.2	0.850	55.7
Bulgaria	- ^a	- ^a	n/a	n/a	1.9	1.7	- ^a	14.6	9.6	0.606	45.9
Cyprus	- ^a	- ^a	1.2	1.9	1.9	1.5	- ^a	24.3	31.4	0.580	25.0
Czech Republic	1.4	1.4	- ^a	2.0	2.0	1.8	3.0	2.6	4.0	0.627	51.1
Germany	3.2	3.2	2.8	2.7	3.1	3.1	9.0	15.5	23.1	0.831	42.0
Denmark	3.7	3.8	3.6	3.8	4.1	3.7	56.1	65.7	65.7	0.875	68.4
Estonia	1.4	1.6	1.4	1.7	2.2	1.7	18.1 ^b	17.0	23.6	0.637	50.2
Spain	0.9	1.1	1.2	1.3	1.5	1.4	11.3	39.3	39.3	0.794	80.0
Finland	2.8	2.8	2.8	2.8	3.2	3.2	21.3	25.0	27.7	0.887	41.9
France	2.4	2.4	2.6	2.5	2.5	2.5	28.0	42.0	48.0	0.718	58.3
United Kingdom	1.7	1.6	1.4	2.7	3.2	3.1	27.1	44.8	42.0	0.783	40.5
Greece	1.6	1.5	- ^a	1.5	1.8	- ^a	7.0	14.2	11.3	0.622	46.4
Hungary	2.4	2.4	2.7	2.7	2.9	2.6	6.7	9.0	10.9	0.569	52.7
Ireland	2.3	2.4	2.4	2.9	3.2	3.0	15.0	29.0	28.8	0.699	40.4
Netherlands	1.1	1.2	1.4	1.1	1.2	1.0	29.5	54.9	60.6	0.859	57.3
Norway	3.0	3.0	2.7	2.7	3.1	3.0	29.5	47.3	54.0	0.910	41.3
Poland	1.0	1.0	0.9	1.3	1.3	0.8	2.0	9.1	6.9	0.614	49.0
Portugal	1.3	1.2	1.1	1.2	1.3	1.2	12.7	32.5	45.9	0.682	35.0
Sweden	2.8	2.8	2.8	2.9	2.9	3.0	44.1	46.7	46.7	0.906	52.6
Slovenia	2.0	1.9	1.9	1.7	2.1	2.1	32.5 ^b	35.9	41.8	0.611	60.3
Slovakia	- ^a	1.7	1.6	1.5	1.7	1.7	4.9 ^b	3.0	3.0	0.630	28.4
Lithuania	- ^a	- ^a	- ^a	- ^a	2.2	1.4	- ^a	- ^a	15.6	0.669	66.1
Austria	2.9	3.0	2.8	- ^a	- ^a	- ^a	5.2	10.9	- ^a	0.788	42.1
Iceland	- ^a	3.0	- ^a	- ^a	- ^a	2.6	47.6	- ^a	55.7	0.862	88.6

Family Benefits: Percentage of GDP spent on benefits (in cash or kind) to children and families. Source: Eurostat. Child care provision: Proportion of children aged 0-2 enrolled in formal child care. Source: OECD Family Database. GEM=Gender Empowerment Measure. Source: Societal attitudes: Proportion of people approving of women who want to have a child outside a stable relationship. Source: European Value Survey 2008.

^a) data is not provided by the ESS; ^b) refers to 2006. n/a=Country-level indicator is not available.