

**Single motherhood and life satisfaction: The effect of financial strain, work-life conflict
and cultural norms**

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Abstract

Research on parental well-being usually stresses that single mothers are significantly less happy than partnered mothers. This study provides new insights into the effect of single motherhood on life satisfaction by investigating the extent to which the single motherhood penalty in life satisfaction results from higher levels of stress and strain. Using data from the European Social Survey for 25 European countries, my analysis shows that lower levels of life satisfaction among single mothers result partly from higher levels of financial hardship and work-life conflict. The size of the single motherhood penalty also depends on the cultural context. Mothers in countries with stronger cultural support for single parenthood report smaller penalties than mothers in countries with less cultural support. However, differences in life satisfaction between single mothers and single non-mothers are fairly small, suggesting that the single motherhood penalty stem rather from being single than from being a parent. This finding clearly challenges the notion that single motherhood inevitably reduces women's life satisfaction and substantiates qualitative findings suggesting that also single motherhood can yield important benefits.

Introduction

Throughout Europe, the number of single-parent families has constantly increased over the past few decades. Currently, in many European countries, more than 15% of children live in single-parent households (Chzhen and Bradshaw 2012), which are mostly headed by women. This trend has been of major concern to both family researchers and policy makers given social and economic disadvantages associated with single motherhood. Single mothers have been consistently found to be at a higher risk of poverty (Van Lancker et al. 2015) and to experience higher levels of psychosocial distress and depression than their partnered counterparts (Cunningham and Knoester 2007; Demo and Acock 1996; Evenson and Simon 2005; Lansford et al. 2001). Single mothers also report lower levels of social support, social involvement as well as less contact with their family and friends than partnered mothers (Cairney et al. 2003).

There is also consistent evidence that single mothers are significantly less satisfied with their lives than their partnered counterparts (see, for overviews, Hansen 2012; Nelson et al. 2014). These single motherhood penalties in life satisfaction are commonly attributed to the higher

levels of financial and psychological stress and strain that accompany long-term single parenting. Nevertheless, studies comparing the well-being of single mothers and childless singles have produced rather inconclusive results. Whereas some studies have found that single parents experience lower levels of happiness and life satisfaction than childless singles (e.g. Nelson et al. 2014; Nomaguchi and Milkie 2003), others report non-significant (Aassve et al. 2012; Baranowska-Rataj et al. 2014) or significantly positive effects (Kohler et al. 2005; Myrskylä and Margolis 2014) of parenthood on the subjective well-being of singles. Moreover, qualitative studies have shown that single motherhood can in some circumstances bring benefits to women's lives, and that some single mothers fare better 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).

These seemingly contradictory findings suggest that the relationship between single motherhood and life satisfaction is more complex than commonly thought. The objective of this study is to provide a more comprehensive analysis of the association between single motherhood and life satisfaction. An important contribution of this study is to disentangle the effect of having a child without a partner from the effect of being single. Most previous studies on single mothers' well-being compare single mothers to partnered mothers. Consequently, these studies 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. Given that living with a partner significantly enhances life satisfaction and happiness (Waite and Gallagher 2000), a great proportion of the life satisfaction penalty experienced by single mothers might be attributable to living without a partner rather than to having a child. My research responds to Nelson et al. (2014: 881) to develop an understanding of how marital status moderates parents' well-being by determining "whether its effects are due to the benefits of marriage, the costs of singlehood, or something specific about parenting with or without a partner".

A related contribution of this paper is that it explores the extent to which the reduced life satisfaction among single mothers can be attributed to elevated levels of financial hardship and work-life conflict. Previous studies often refer to greater financial and psychological stress and strain as a major source of the single motherhood penalty. However, with some exceptions (Avison et al. 2007; Cunningham and Knoester 2007; Dziak et al. 2010) much of this research did not explicitly investigate how these factors mediate the relationship between single

motherhood and life satisfaction. Moreover, most studies on mediating factors have been on small community-based samples (Avison et al. 2007; Dziak et al. 2010). In this study, I explore the potential role of financial stress and work-life conflict as explanations for any observed differences in life satisfaction between single mothers and other women using a population-based sample.

Finally, this study seeks to investigate the impact of the normative context on single mothers' life satisfaction. Apart from being socially and economically disadvantaged, single mothers are often stigmatized because of non-conformity to social norms and expectations. Non-conformity, in turn, has been associated with negative emotional outcomes (Christensen et al. 2004). This raises the question of whether, and to what extent, the low levels of life satisfaction experienced by single mothers result from social disapproval of single motherhood.

Examining the consequences of single motherhood on life satisfaction is not only crucial for our understanding of the well-being of single mothers, but is also relevant for understanding the well-being of their children. Children living in single-parent families report more emotional and behavioral problems than children in two-parent families (Brown 2004; Carlson and Corcoran 2001; Lansford et al. 2001). Previous research indicating that lower levels of maternal life satisfaction are associated with increased levels of social-emotional problems among children suggest that the association between single motherhood and child well-being is mediated by mothers' happiness and life satisfaction (Berger and Spieß 2011; Carlson and Corcoran 2001; Nikolaou 2015). Thus, factors increasing single mothers' psychological well-being also enhance child well-being. High maternal life satisfaction alleviates the negative effects of single motherhood on child outcomes and constitutes "an avenue through which non-married mothers can produce high quality children" (Nikolaou 2015: 1).

Using data from the European Social Survey (ESS) from 2004 and 2010 for 27 European countries, I find that single mothers are significantly less satisfied than partnered mothers. The lower levels of life satisfaction among single mothers can be partly explained by their greater exposure to financial strain and work-life conflict. Remarkably, single mothers are not less satisfied than single non-mothers when differences in financial strain and work-life conflict are accounted for. Furthermore, the results of this study suggest that the life satisfaction penalty for single mothers is not uniform across countries, but is shaped by the cultural context. Generally, single mothers report higher levels of life satisfaction in liberal countries than those in traditional countries. In countries with liberal attitudes towards single parenthood, non-employed single

mothers are even significantly more satisfied than childless singles. These results challenge the notion that single motherhood inevitably leads to reduced life satisfaction.

Background

Becoming a parent is both a rewarding and burdensome experience. On one hand, parenthood is associated with emotional rewards. Being a parent conveys a sense of responsibility and feelings of greater meaning in life (Nelson et al. 2014). At the same time, however, parenthood is associated with various financial and psychosocial burdens. Explanations for why single mothers experience lower levels of life satisfaction than partnered mothers are usually based on the notion that single mothers are more exposed to stress and strain. Four main explanations for the single motherhood gap in life satisfaction have been proposed.

The first explanation refers to the negative consequences of financial hardship on well-being. Financial hardship has been identified as a key determinant of psychological distress (Mirowsky and Ross 2003), and single mothers are disproportionately affected by economic strains due to their sole responsibility for the households' financial needs. Moreover, single mothers are more likely than their partnered counterparts to be employed in lower paying jobs, thus earning lower wages (see Dziak, 2010: 2). Therefore, financial hardship is usually seen as a major contributor to reduced levels of subjective well-being among single mothers.

A second explanation focusses on the effect of employment on subjective well-being (see, Hope et al. 1999). On one hand, paid employment is associated with various rewards. It not only generates income, but also increases self-esteem and social status. Consequently, being gainfully employed is an important predictor of mothers' well-being (Berger 2013), and the positive effects of paid employment have been found to be particularly strong for single mothers (Demo and Acock 1996). However, in many European countries, such as the UK, France and Germany, single mothers are less often gainfully employed than partnered mothers (Jaehrling et al. 2015), and are thus less likely to experience the benefits of paid work. This view suggests that differences in life satisfaction between single and partnered mothers relate to dissimilarities in the employment rates.

On the other hand, working parents are particularly vulnerable to dissatisfaction arising from the stress of work-life conflicts (Mattingly and Sayer 2006). For single mothers, the adverse consequences of paid employment might be particularly strong due to the absence of help and support from a spouse or live-in-partner. In a qualitative study conducted by Richards and

Schmiege (1993), single mothers identified tasks overload as their second greatest problem next financial worries. In addition, the fact that single mothers are more likely than partnered mothers to be employed in lower status jobs with poor working conditions increases their exposure to work-family conflict (Dziak et al., 2010). This view suggests that employed single mothers are less satisfied with their lives than employed partnered mothers because they are more exposed to work related stress.

A third, related explanation involves reduced access to instrumental and emotional support for single mothers. Most single mothers face the burdens of household work and childcare on their own, while partnered mothers are able to share these tasks. Single mothers may also experience more stress than partnered mothers due to their sole responsibility for their children's emotional and physical well-being: child-related concerns adversely affect parents' psychological well-being, and these effects have been found to be stronger for single mothers than for married mothers (Greenberger and O'Neil 1990). These arguments and findings suggest that single mothers are less satisfied than partnered mothers due to the inability to share the burdens of parenting with an (intimate) partner.

A fourth explanation refers to cultural norms. Single mothers' life satisfaction might be 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 norms may lead to reduced levels of life satisfaction, as they can increase feelings of guilt and shame (Jones and Kugler 1993). For instance, Kalmijn (2010) found that in religious societies the negative effects of divorce on subjective well-being are stronger than in secular societies. Likewise, social disapproval of single motherhood might contribute to lower levels of life satisfaction among single mothers. Indeed, recent research has shown that single mothers are particularly worse off in settings with a strong two-parent family norm (Stavrova and Fetchenhauer 2015). Attitudes towards single parenthood have been found to vary greatly between West European countries. Only one in eight Finn, but every other Italian holds negative attitudes towards single motherhood (Moreno and Marí-Klose 2013). Thus, one would expect the life satisfaction gap between single mothers and partnered mothers to be smaller in countries with strong cultural support for single parenthood.

The life satisfaction of employed single mothers might also be affected by cultural attitudes towards maternal employment. Past research suggested that cultural beliefs towards the employment of wives and mothers exert a significant effect on employed mothers' happiness

(Treas et al. 2011). Attitudes towards maternal employment vary widely in Europe: more than 80% of Hungarians, but less than 20% of Norwegians agree with the statement that pre-school aged children suffer when their mothers work outside the home (Buber-Ennsner and Panova 2014). Thus, in many countries, employed mothers not only experience high levels of work-family conflict; they are also more prone to the feeling of guilt and shame in the face of cultural expectations of intensive mothering. Employed single mothers might even be more vulnerable to traditional family norms opposing maternal employment than their partnered counterparts because of their already disadvantaged social position. As a consequence, the life satisfaction penalty for employed single mothers might be smaller in countries with less traditional attitudes towards maternal employment.

All four explanations suggest that single mothers are less satisfied than partnered mothers because they face greater financial and psychological burdens of parenting. However, these explanations are less helpful for addressing possible differences in life satisfaction between single mothers and childless singles. Single mothers undoubtedly experience greater stress and strain than childless singles, which should result in lower levels of life satisfaction. Nevertheless, unlike childless singles, single mothers reap emotional benefits from being a parent. Therefore, after adjusting for differences in financial and psychological stress and strain, single mothers should be equally or even more satisfied with their lives than their childless counterparts.

Data and Method

Data

The data for this study are derived from the European Social Survey (ESS). The ESS is conducted biannually and provides high-quality data for cross-national comparisons. The survey uses either a single- or multi-stage random probability sampling procedure to interview respondents aged 15 or older. Each ESS administration consists of a core module and several rotating modules. The core module provides information on respondents' sociodemographic characteristics as well as the reported level of life satisfaction, whereas the rotating modules provide in-depth information on various themes. This study uses data from the second and fifth ESS round (2004 and 2010), which contain information on work-family balance and well-being.

The analysis is based on data from 27 East and West European countries¹. I limited the sample to countries that were Members of the European Union or the European Free Trade Association (EFTA) at the time of the interview. I further restrict the sample to women between the ages of 18 and 59. Because I am scrutinizing the effect of having minor children on parental life satisfaction in this study, I exclude all empty-nest mothers. Finally, I removed all respondents from the sample who were permanently disabled. This results in a total sample size of 19,139 women. The country-specific sample size per survey wave ranges from 147 in Iceland to 1,291 in Ireland.

Variables

The dependent variable in my analysis is the respondents' level of life satisfaction. The life satisfaction variable in the ESS is based on a question that asks respondents how satisfied they are with their lives. The response scale ranges from 0 (completely dissatisfied) to 10 (completely satisfied).

The primary explanatory variables are partnership and parental status. Regarding partnership status, I distinguish between partnered (married or cohabiting) women and single women. Parental status is indicated by the presence of minor children in the household. Other important variables are work-to-family conflict, family-to-work conflict, and financial strain. Work-to-family conflict occurs when work interferes with family life, and family-to-work conflict occurs when family life interferes with work. To measure the respondents' work-to-family conflict, I create an index variable by summing up the responses to the questions "How often do you find that your job prevents you from giving the time you want to your partner or family?" and "How often do you feel too tired after work to enjoy the things you would like to do at home?" Both items have values ranging from 1 (never) to 5 (always), so higher values of the index variable indicate higher levels of work-to-family conflict (Cronbach's alpha = 0.68). For the analysis, I standardize this index variable (mean = 0, standard deviation = 1).

Family-to-work conflict was measured by the summed responses to the questions "How often do you find that your family responsibilities prevent you from giving the time you should to your job?" and "How often do you find it difficult to concentrate on work because of your family

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

responsibilities?” Again, the response set ranges from 1 (never) to 5 (always), so higher levels on the index variable indicate higher levels of family-to-work conflict (Cronbach’s alpha=0.74). Unfortunately, the latter question was not administered in Round 2 of the ESS. Therefore, family-to-work conflict was measured for these respondents only by the responses to the first question. To make this information comparable between Round 2 and Round 5, I standardize the index variable using the rounds-specific means and standard deviations.

Financial strain is measured by a question asking respondents how they feel about their household income. Responses range from 1 to 4, higher responses indicate greater financial strain (1=“living comfortably on present income”; 4= “finding it very difficult on present income”).

Furthermore, I controlled for age in years (linear and quadratic), education (in years), employment status (full-time employment, part-time employment, economically inactive, unemployed), and social class according to the Erikson Goldthorpe Class scheme (Erikson and Goldthorpe 1992). Past research suggested that the reduced life satisfaction of single mothers may to some extent reflect the negative consequences of divorce (Hope et al. 1999). Therefore, when comparing single mothers to childless singles I added a variable to the model that indicated if the respondent has experienced dissolution of a marriage or nonmarital cohabitation. Unfortunately, the ESS does not provide information about the starting and ending dates of former unions. Therefore, 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.

Table 1 provides descriptive statistics for life satisfaction and the explanatory variables. Single mothers reported significantly lower levels of life satisfaction than partnered mothers and childless singles. Notable differences existed also with regard to work-life conflict; employed single mothers experienced higher levels of work-to-family conflict and family-to-work conflict than partnered mothers. Discrepancies between single mothers and other groups of women also emerged with respect to financial strain: 48% of single mothers, but only 27 % of partnered mothers and childless singles reported financial difficulties. Contrary to the results of other studies (e.g. Jaehrling et al. 2015), single mothers were not less often employed than partnered mothers (64% vs. 60%). However, significantly less single mothers reported to have pre-school-aged children than partnered mothers (29% vs. 45%). This could explain their high labor market participation.

– Table 1 about here –

Cultural norms towards single parenthood and maternal employment were measured by using information from the 2008 data of the European Value Survey (EVS). The EVS measured the respondents' attitudes towards single parenthood by asking if they agree (coded 0) or disagree (coded 1) to the statement that “children need both parents to grow up happily”. To create a country-level index, I calculated for each country the percentage of respondents who agree with this statement. Higher index values thus reflect higher approval of single parenthood. This variable ranges from 1.7 (in Greece) to 48.9 (in Sweden). The country-level measure for attitudes towards maternal employment were calculated from the responses to two statements: “A working mother can establish just as warm and secure a relationship with her children as a mother who does not work”, and “A pre-school child is likely to suffer if his or her mother works”. The responses are coded on a 1 to 4 scale, from strongly agree to strongly disagree. After reverse-coding the first item, I constructed a country-level index by summing the two items for each respondent ($\alpha=0.63$) and calculating the country mean. Higher values indicate a more favourable view towards maternal employment. This variable ranges from 4.9 (in Cypress) to 7.0 (in Norway). In the analysis, both country-level indicators were z-standardized. To control for countries' 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 estimated a random coefficient model and allowed the effect of the indicators for parenthood and parental status to vary between contexts. To test whether the effect of children on parents' life satisfaction is moderated by cultural attitudes towards single motherhood and maternal employment, I included cross-level interactions between the attitude indicators and the indicators for parenthood and partnership status. The relatively small number of level 2 units prohibited the inclusion of more than one macro-level indicator at a time. Therefore, I present separate models for each macro-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 the first set of analysis, I examined the effect of parenthood and partnership on women's life satisfaction. The coefficients from Model 1 in Table 1 indicated that partnered women were significantly more satisfied with their lives than single women. Being a mother, however, has no significant effect on life satisfaction. Model 1 also shows that gainfully employed women were more satisfied than economically inactive women (e.g. homemakers) and unemployed women. Model 2 tested whether the effect of parenthood on life satisfaction differed between single and partnered mothers. According to these estimates, being a mother was positively associated with life satisfaction for partnered women ($b=0.14$, $p=0.00$), but negatively for single women. Single mothers were significantly less satisfied with their life than both partnered mothers ($b=0.98$, $p=0.00$) and childless singles ($b=0.31$, $p=0.00$).

– Table 2 about here –

Model 3 investigated whether the interactive effects of parenthood and union status vary by women's employment status. Technically, this model tested for a three-way interaction between parenthood, union status, and employment status. For the ease of interpretation, I collapsed the two categories of employment (part-time and full-time) and the two categories for non-employment (unemployed and homemaker) into two single groups. On basis of the coefficients shown in Model 3, I calculated the predicted levels of life satisfaction for the eight subgroups (Figure 1). These findings can be interpreted in various ways. First, the results suggest that the effect of parenthood on the life satisfaction of partnered and single women strongly depends on whether or not they are gainfully employed. The greatest effect of parenthood on life satisfaction was observed for partnered, non-employed women ($b=0.44$, $p=0.00$). Also, partnered employed women reported a significant, but much smaller, positive parenthood effect ($b=0.14$, $p=.03$). Employed single women, in contrast, were significantly less satisfied when they have a child ($b=-0.27$, $p=0.00$). Single non-employed mothers report similar levels of life satisfaction than single, non-employed childless women ($b=-0.09$, $p=0.40$).

Second, the findings shown in Figure 1 indicate that the effect of employment varies between partnered mothers and single mothers. Although single mothers experienced greater levels of work-life conflict than partnered mothers, the positive effect of paid work was much larger for the former ($b=0.70$, $p=.00$) than for the latter ($b=0.20$, $p=.00$). This finding suggests that single

mothers benefit more from the rewards of paid work—such as income, status, self-esteem—than partnered mothers. Thus, life satisfaction gaps between single mothers and partnered mothers are widened by lower employment rates among single mothers.

– Figure 1 about here –

In the following steps of the analysis, I examined if differences in life satisfaction between single mothers and partnered mothers as well as between single mothers and childless singles are attributable to differences in financial strain and work-family conflict. Furthermore, I investigated whether cultural norms towards single motherhood and mother's employment modify the effect of single motherhood on life satisfaction.

Single mothers vs. married mothers

The models shown in Table 3 compare the levels of life satisfaction of single mothers to that of partnered mothers. To take into account differences between employed and non-employed women in the effect of parenthood on the life satisfaction, the analysis was stratified by employment status. Model 1 indicates that both employed and unemployed single mothers were significantly less satisfied than their partnered counterparts. However, the single parenthood penalty was greater for non-employed mothers than for employed mothers. A Wald chi-square statistic for testing the difference between the coefficients indicate that the difference is statistically significant ($\chi^2=4.1$, $df=1$). The difference in the effect size may be attributable to greater financial strain among non-employed mothers. Model 2 in Table 3 added variables controlling for financial strain and—for employed mothers only—work-life conflict to the model. The addition of these variables resulted in a substantial reduction of the single mother penalty for both employed and non-employed women, suggesting that stress and strain partially mediate the negative effect of single motherhood on life satisfaction. The single motherhood penalty was still larger for employed than for non-employed women; however, the coefficients were no longer significantly different ($\chi^2=0.8$; $df=1$). In supplementary analyses for employed mothers (results not shown), financial strain and work-life conflict were entered into the model separately, in order to gauge the extent to which these factors explain the decrease of the single motherhood coefficient from Model 1 to Model 2. I found that financial strain accounts for almost the entire reduction in the coefficient. A model that controlled for financial strain (but not for work-family

conflict) yielded a single motherhood coefficient of $b=0.54$, whereas a model that controlled for work-family conflict (but not for financial strain) yielded a coefficient of $b=0.83$. Thus, financial strain is much more relevant than psychological stress for the life satisfaction of employed single mothers.

Nevertheless, even after controlling for financial strain and work-life conflict, single mothers were significantly less satisfied with their lives than partnered mothers. This remaining life satisfaction gap can be attributed to two factors. First, single mothers lack the emotional benefits of an intimate relationship with a partner. Second, single mothers may suffer from social disapproval of single motherhood.

– Insert Table 3 about here –

Models 3 and 4 examined whether cultural attitudes towards single parenthood and maternal employment contribute to the life satisfaction gap between single and partnered mothers. To do so, I added a country level indicator reflecting cultural norms towards single parenthood and a cross-level interaction between the norm indicator and the single motherhood variable to the model (Model 3). Neither the main effect for norms towards single parenthood nor the interaction term were statistically significant, suggesting that the life satisfaction gap between partnered and single mothers is unaffected by cultural norms towards single parenthood. However, as indicated by the significant interaction effect in the upper panel of Model 4, stronger cultural support for maternal employment is associated with smaller life satisfaction differences between employed partnered mothers and employed single mothers. Net of differences in financial strain and work-life conflict (see Figure 1a, solid line), the estimated motherhood penalty was not statistically significant in countries where support for maternal employment is highest. However, supplementary analyses that did not control for financial strain and work-life conflict showed a significant single motherhood penalty across all contexts (see Figure 2a, dashed line). Thus, the motherhood penalty for employed women can be attributed to a combined effect of elevated financial stress, high work-life conflict, and a strong cultural bias against maternal employment.

– insert Figure 2 about here –

Single mothers vs. childless singles

In the final step of my analysis, I investigated how single mothers fare when compared to childless single women. Model 1 in Table 4 indicates that employed single mothers were less satisfied than employed childless single (upper panel). When controlling for financial strain and work-life conflict, the differences in life satisfaction between employed single mothers and their childless counterparts became insignificant (Model 2, upper panel). Thus, the lower levels of life satisfaction among employed single mothers are completely explained by their greater exposure to financial strain and work life conflict when compared to employed childless singles.

A slightly different pattern emerges when comparing non-employed single mothers to non-employed childless singles. Irrespective of differences in financial strain, non-employed single mothers reported similar levels of life satisfaction than their childless counterparts (Model 1, lower panel). Moreover, after adjusting for differences in financial strain (Model 2, lower panel), the effect of being a single mother even became positive and statistically significant. Thus, if having a child was not accompanied by financial stress, being a single mothers would be beneficial for non-employed singles. This finding supports the notion that having a child is accompanied by a greater sense of purpose and meaning in life and increased self-esteem for single women.

– Insert Table 4 about here –

In Models 3 and 4, I added the country-level indicators for attitudes towards single parenthood and maternal employment, and their cross-level interactions with single motherhood. This addressed the question of whether, and to what extent, cultural beliefs account for differences in life satisfaction between single mothers and childless singles. The statistically significant interaction effect between cultural attitudes towards single parenthood and the single motherhood-indicator (Model 3) shows that differences life satisfaction differences between single mothers and childless singles are contingent upon cultural support for single parents. In countries with strong cultural support for single mothers, both employed and non-employed mothers were more satisfied with their lives than childless singles, net of differences in financial strain and work-life conflict (see Figure 2b and 2d, solid lines). Supplementary analyses showed that in countries with strong cultural support for single parents, irrespective of possibly greater financial strain, non-employed single mothers were significantly more satisfied than childless

singles (Figure 2d, dashed line). Finally, Model 4 tested whether cultural support for maternal employment affects single mothers' life satisfaction. The significant interaction effect in the upper panel of the table indicates that the life satisfaction gap between employed single mothers and their childless counterparts is contingent upon the cultural support for maternal employment. As can be seen in Figure 2c (solid line), in countries with strong cultural support, employed single mothers are significantly more satisfied with their lives than employed childless singles, net of differences in financial strain and work-life conflict. When removing controls for financial strain and work-life conflict from the model, the effect for being a single mother became insignificant in countries with liberal norms towards maternal employment and significantly negative with traditional norms towards maternal employment (Figure 2c, dashed line).

Discussion

Previous research often painted a bleak picture of single mothers' subjective well-being. Single mothers were usually found to experience higher levels of psychological distress and depression, and lower levels of happiness and life satisfaction than partnered mothers. In this study, I examined the extent to which the single motherhood penalty in life satisfaction results from elevated levels of financial hardship and work-life conflict as well as from social disapproval of single motherhood and maternal employment. I also explored if the claim of a single motherhood penalty holds true when comparing single mothers to single non-mothers. In most previous studies single mothers were compared with married mothers, but not with single non-mothers. Consequently these studies were not able to disentangle the effects of raising a child without a partner from the effect of being single.

Consistent with past research, my findings suggest that lower levels of life satisfaction experienced by single mothers are strongly related to their greater exposure to financial hardship when compared to partnered mothers. Employed single mothers also suffer from greater exposure to work-life conflict than their childless counterparts. Nevertheless, despite higher levels of work-life conflict among single mothers, being gainfully employed is more beneficial for single mothers than for partnered mothers. Thus, creating better employment opportunities for single mothers can reduce the life satisfaction gap between single and partnered mothers.

The size of the single motherhood penalty also depends on the cultural context. Mothers in countries with stronger cultural support for single parenthood report smaller penalties than mothers in countries with less cultural support. In addition, employed single mothers are more

vulnerable to normative disapproval of maternal employment. In countries where strong normative proscriptions against maternal employment are in place, the penalty for employed single mothers is larger than in countries with more supportive attitudes toward maternal employment. Thus, cultural norms play a crucial part in shaping single mothers' life satisfaction. Social disapproval of single motherhood seems to further intensify the psychological stress that single mothers already face.

However, life satisfaction differences between single mothers and single non-mothers are fairly small, suggesting that the single motherhood penalty arises rather from being single than from being a parent. Therefore, single mothers are less satisfied than partnered mothers not only due to higher burdens of parenthood, but also due to the forgone emotional benefits of a partnership. The life satisfaction deficit of single mothers when compared to single non-mothers can be completely attributed to higher levels of financial strain and work-life conflict. Particularly for non-employed single women, the benefits of motherhood seem to exceed the costs. Notwithstanding the financial and psychological burdens of parenthood and social stigma that often accompanies single motherhood, non-employed single mothers are not less satisfied with their lives than their childless counterparts. This finding accords with Edin and Kafelas (2005) conclusion that for low educated women with poor job prospects, children bring validation, purpose, companionship, and order to their lives. Non-employed single mothers in liberal countries even report higher levels of life satisfaction than their childless counterparts, unconditional of differences in stress and strain. These results clearly challenge the notion that single motherhood inevitably reduces women's life satisfaction and substantiate qualitative studies suggesting that single motherhood can bring important benefits by evoking positive feelings of affection and self-esteem.

This study is not without limitations. Particularly, the cross-sectional perspective of my study limits the possibility to draw causal conclusions. In addition to the causal explanations outlined in the Background section, at least two non-casual 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 single motherhood. Here is some evidence supporting this hypothesis, showing that partnered mothers who report higher levels of depressive symptoms will have an increased likelihood of separating (Goldscheider et al. 2013). However, panel regression analyses controlling for selection effects still found a strong negative effect of single motherhood on life satisfaction (Baranowska-Rataj et al. 2014). A

related explanation is that lower levels of well-being experienced by single mothers compared to partnered mothers result from greater vulnerability to stressful experiences. That is, given similar levels of stress and strain, single mothers respond more negatively to stressful situations than married mothers. However, past studies found no evidence that single mothers' reaction to stress and strain is more negative than those of partnered mothers (Avison et al. 2007; Simon 1998). Thus, although selection processes and unobserved heterogeneity may contribute to the life satisfaction gap between partnered and single mothers, becoming a single mother indisputably has a causal effect on life satisfaction.

In all, the findings presented here demonstrate that the impact of life satisfaction on single motherhood is more ambivalent than usually acknowledged. Clearly, single motherhood diminishes the well-being gains and heightens the stress from having a child. However, raising a child without a partner also derives emotional rewards that single non-mothers do not experience. The extent to which single mothers experience life satisfaction deficits (when compared to partnered mothers) or gains (when compared to single non-mothers) depends on the level of financial and psychological strain mothers' experience, and the degree to which single mothers face social disapproval.

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

Variable	Partnered non-mother		Partnered mothers		Single nonmother		Single mother	
	M	SD	M	SD	M	SD	M	SD
Life satisfaction	7.26	2.05	7.20	2.10	6.70	2.17	6.11	2.33
Employment status								
Full-time (>=35 h/week)	64.9		42.9		64.2		45.9	
Part-time (1–34 h/week)	12.6		17.5		12.5		18.6	
Economically inactive	13.6		32.7		7.2		21.8	
Unemployed	8.9		6.9		16.1		13.7	
Age (in years)	36.24	11.25	37.75	7.19	32.77	11.21	38.16	8.17
Divorced or separated	n/a		n/a		32.7		86.2	
Education (in years)	13.74	3.59	13.30	3.50	13.90	3.49	12.89	3.40
Social Class (Erikson-								
Higher service class	0.15		0.13		0.13		0.09	
Lower service class	0.29		0.27		0.27		0.25	
Routine non-manual workers	0.36		0.36		0.41		0.40	
Self-employed	0.05		0.07		0.03		0.05	
Skilled workers	0.06		0.06		0.06		0.08	
Unskilled workers	0.09		0.10		0.09		0.14	
Work-family conflict ^a	-0.01	0.97	0.02	0.97	-0.14	0.99	0.05	0.99
Family-work conflict ^a	-0.12	0.93	0.07	0.98	-0.23	0.99	0.17	1.05
Financial strain								
Living comfortably on present	0.37		0.28		0.26		0.11	
Coping on present income	0.44		0.45		0.47		0.41	
Difficult on present income	0.15		0.20		0.19		0.31	
Very difficult on present	0.04		0.07		0.08		0.17	
Number of cases	2,882		9,984		4,196		2,056	

^a Gainfully employed women

Table 2 Multilevel regression models predicting life satisfaction from partnership status, parental status, and covariates

Variable	Model 1		Model 2		Model 3	
	<i>B</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Partnered	0.76**	0.03				
Mother	-0.02	0.05				
Employment status						
Full-time(>= 35 h/week) (Ref.)	0.00		0.00			
Part-time (1–34 h/week)	0.01	0.04	0.01	0.04		
Not gainfully employed	-0.10**	0.04	0.10**	0.04		
Unemployed	-1.08**	0.05	1.08**	0.05		
Partnered childless (Ref.)			0.00		0.00	
Partnered mother			0.14**	0.05	0.42**	0.09
Single childless			-0.53**	0.05	-0.90**	0.10
Single mother			-0.84**	0.07	-0.96**	0.11
Employed (full- or part-time)					0.51**	0.09
Partn. childless*Employed (Ref.)					0.00	
Partnered mother*Employed					-0.29**	0.10
Single childless*Employed					0.40**	0.12
Single mother*Employed					0.20**	0.13
Age (in years)	-0.10**	0.01	-0.10**	0.01	-0.11**	0.01
Age squared / 100	0.11**	0.02	0.10**	0.02	0.12**	0.02
Education in years	0.07**	0.01	0.07**	0.01	0.07**	0.01
Intercept	8.71**	0.25	9.28**	0.25	8.90**	0.26
Country-level Variance	0.46**	0.13	0.48**	0.14	0.46**	0.15
Individual level Variance	3.84**	0.04	3.83**	0.04	3.87**	0.04
Random slope: Mother	0.03*	0.01	0.02*	0.01	0.03*	0.01
N of countries /individuals	27 / 18,287		27 / 18,265		27 / 18,265	

Note: All models include indicator variables for the survey year.

† $p < .1$ * $p < .05$. ** $p < .01$.

Table 3 Multilevel regression models predicting life satisfaction for employed and non-employed mothers from partnership status, work-family conflict, financial strain, and covariates

Variable	Model 1		Model 2		Model 3		Model 4	
	<i>B</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Employed Mothers (N=7,096)								
Single	-0.87**	0.06	-0.52**	0.07	-0.55**	0.07	-10.56**	0.06
Full-time (vs. part-time)	-0.08	0.05	0.04	0.05	0.04	0.05	0.04	0.05
Education (in years)	0.03**	0.01	0.02*	0.00	0.02*	0.00	0.02*	0.00
Age	-0.03	0.03	-0.05 [†]	0.03	-0.05 [†]	0.03	-0.05 [†]	0.03
Age squared	0.01	0.03	0.04	0.03	0.04	0.03	0.04	0.03
Work-to-family conflict			-0.18**	0.03	-0.19**	0.03	-0.19**	0.03
Family-to-work conflict			-0.17**	0.03	-0.17**	0.03	-0.17**	0.03
Financial strain ^a								
- Coping on present income			-0.51**	0.05	-0.51**	0.05	-0.52**	0.05
- Difficult on present income			-1.26**	0.07	-1.26**	0.07	-1.27**	0.07
- Very difficult on pres. inc.			-2.28**	0.11	-2.29**	0.11	-2.28**	0.11
<i>Country indicators and cross-level interactions</i>								
Norms towards single parenthood					0.09	0.10		
Single x Norms tow. single parenthood					0.10	0.06		
Norms towards maternal employment							0.09	0.09
Single x Norms tow. maternal employ.							0.16**	0.06
Gross domestic product	0.02**	0.00	0.01**	0.00	0.01**	0.00		
Intercept	8.38**	0.55	9.27**	0.53	9.25**	0.53	9.26**	0.53
Country-level Variance		0.40		0.22		0.21		0.21
Individual level Variance		3.24		2.78		2.78		2.78
Random slope: Single		0.02		0.03		0.03		0.02
Non-employed mothers (N=4,359)								
Single	-1.17**	0.14	-0.65**	0.13	-0.66**	0.13	-0.65**	0.14
Unemployed	-0.92**	0.09	-0.62**	0.09	-0.63	0.09	-0.63**	0.09
Education (in years)	0.09**	0.01	0.05**	0.01	0.04**	0.01	0.05**	0.01
Age	-0.07**	0.03	-0.09**	0.03	-0.09**	0.03	-0.09**	0.03
Age squared	0.07*	0.04	0.08*	0.04	0.08*	0.04	0.08*	0.04
Financial strain ^a								
- Coping on present income			-0.48**	0.09	-0.48**	0.09	-0.48**	0.09
- Difficult on present income			-1.44**	0.10	-1.45**	0.10	-1.44**	0.10
- Very difficult on pres. inc.			-2.54**	0.12	-2.54**	0.12	-2.54**	0.12
<i>Country indicators and cross-level interactions</i>								
Norms towards single parenthood					0.14	0.09		
Single x Norms tow. single parenthood					0.20	0.14		
Norms towards maternal employment							0.06	0.09
Single x Norms tow. maternal employ.							0.12	0.13
Gross domestic product	0.02**	0.00	0.01**	0.00				
Intercept	9.06**	0.55	10.02**	0.55	10.02**	0.56	10.02**	0.56
Country-level Variance		0.33		0.17		0.15		0.16
Individual level Variance		4.53		4.05		4.05		4.05
Random slope: Single		0.21		0.21		0.15		0.15

Note: All models for employed mothers also control for social class (Erikson-Goldthorpe class scheme). All models include indicator variables for the survey year. ^aReference group: living comfortably on present income.

[†] $p < .1$ * $p < .05$. ** $p < .01$.

Table 4 Multilevel regression models predicting life satisfaction employed singles and non-employed singles from parental status, work-family conflict, financial strain, and covariates

Variable	Model 1		Model 2		Model 3		Model 4	
	<i>B</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Employed Singles (N=2,975)								
Mother	-0.21**	0.08	0.14	0.09	0.10	0.09	0.10	0.09
Full-time (vs. part-time)	0.10	0.07	0.24**	0.08	0.26**	0.09	0.23**	0.09
Education (in years)	0.03**	0.01	0.03**	0.01	0.03**	0.01	0.03**	0.01
Age	-0.18*	0.07	-0.06	0.08	-0.06	0.08	-0.06	0.09
Age squared	-0.07**	0.02	-0.09**	0.03	-0.09**	0.03	-0.09**	0.03
Work-to-family conflict	0.08**	0.03	0.11**	0.03	0.10**	0.03	0.10**	0.03
Family-to-work conflict			-0.20**	0.05	-0.20**	0.05	-0.20**	0.05
Financial strain ^a			-0.14**	0.05	-0.15**	0.05	-0.15**	0.05
- Coping on present income								
- Difficult on present income			-0.49**	0.08	-0.50**	0.08	-0.50**	0.08
- Very difficult on pres. inc.			-1.21**	0.10	-1.21**	0.11	-1.22**	0.11
<i>Country indicators and cross-level interactions</i>								
Norms towards single parenthood					0.09	0.09		
Single x Norms tow. single parenthood					0.16*	0.07		
Norms towards maternal employment							0.11	0.09
Single x Norms tow. maternal employ.							0.16*	0.04
Gross domestic product	0.01**	0.00	0.01**	0.00	0.01**	0.00	0.01**	0.00
Intercept	8.60**	0.41	8.89**	0.47	8.89**	0.47	8.88**	0.47
Country-level Variance	0.24		0.18		0.16		0.15	
Individual level Variance	3.68		3.25		3.25		3.25	
Random slope: Single	0.02		0.01		0.00		0.00	
Non-employed singles (N=1,405)								
Mother	0.29	0.20	0.40 [†]	0.21	0.39*	0.21	0.40 [†]	0.21
Unemployed	-0.39**	0.14	-0.26 [†]	0.14	-0.27*	0.13	-0.26 [†]	0.14
Education (in years)	0.10**	0.02	0.07**	0.02	0.07**	0.02	0.07**	0.02
Age	-0.22	0.16	-0.12	0.16	-0.11	0.16	-0.13	0.16
Age squared	-0.17**	0.05	-0.12**	0.04	-0.13**	0.04	-0.13**	0.04
Financial strain ^a	0.19**	0.06	0.14**	0.06	0.14**	0.06	0.14**	0.06
- Coping on present income								
- Difficult on present income			-0.59**	0.26	-0.62**	0.26	-0.59**	0.26
- Very difficult on pres. inc.			-1.46**	0.27	-1.49**	0.27	-1.46**	0.27
<i>Country indicators and cross-level interactions</i>								
Norms towards single parenthood					-0.04	0.10		
Single x Norms tow. single parenthood					0.40*	0.17		
Norms towards maternal employment							0.06	0.16
Single x Norms tow. maternal employ.							0.35	0.31
Gross domestic product	0.01*	0.00	0.01*	0.00	0.01*	0.00	0.01*	0.00
Intercept	9.24**	0.74	9.34**	0.73	9.39**	0.74	9.36**	0.73
Country-level Variance	0.02		0.01		0.01		0.01	
Individual level Variance	5.61		5.15		5.15		5.15	
Random slope: Single	0.46		0.29		0.22		0.29	

Note: All models for employed mothers also control for social class (Erikson-Goldthorpe class scheme). All models include indicator variables for the survey year. ^aReference group: living comfortably on present income.

[†] $p < .1$ * $p < .05$. ** $p < .01$.

Fig. 1 Predicted levels of life satisfaction from Table 2, Model 3.

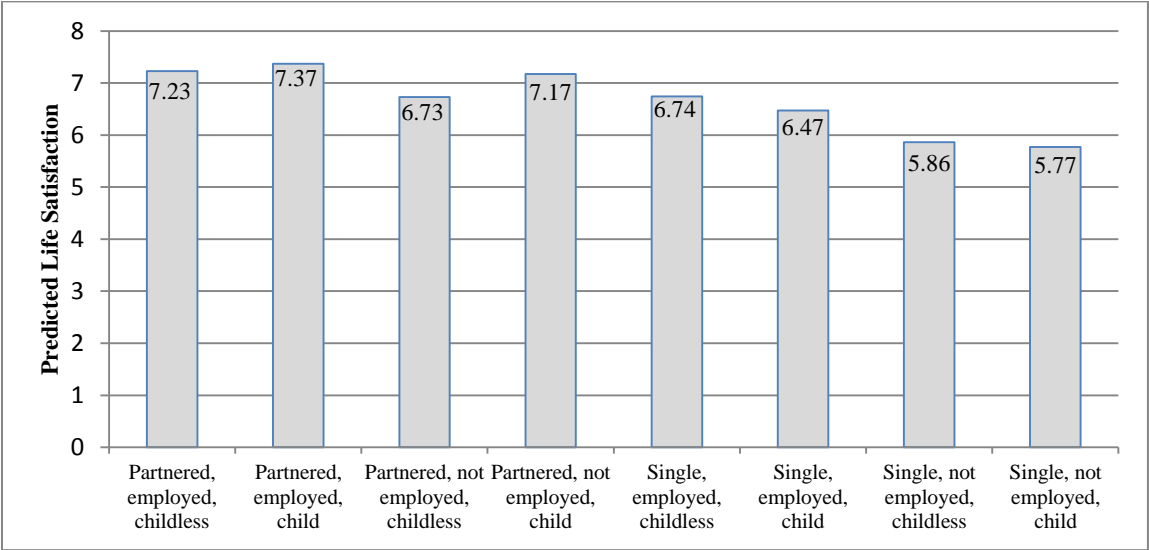


Fig. 2 Predicted life satisfaction from models displayed in Table 3 and Table 4

