




Children, unhappiness and family finances

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Abstract

The common finding of a zero or negative correlation between the presence of children and parental well-being continues to generate research interest. We consider international data, including well over one million observations on Europeans from 11 years of Eurobarometer surveys. We first replicate this negative finding, both in the overall data and then for most different marital statuses. Children are expensive: controlling for financial difficulties turns our estimated child coefficients positive. We argue that difficulties paying the bills explain the pattern of existing results by parental education and income and by country income and social support. Last, we underline that not all children are the same, with stepchildren commonly having a more negative correlation with well-being than children from the current relationship.

Keywords Children · Subjective well-being · Age · Financial difficulties · Eurobarometer

JEL classification codes D14 · I31 · J13

1 Introduction

In this paper, we examine well-being data from the USA, Europe and ten other non-European countries¹ on the correlation between children and subjective well-being. Much of the existing literature reports that this correlation is negative. We replicate this result, both in regressions that control for income and ones that do not. We find, however, that once we take account of the respondent's ability to pay their bills, then the sign switches and children are positively correlated with parental happiness.

¹China, India, Israel, Japan, Mexico, New Zealand, the Philippines, South Africa, Surinam and Taiwan.

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Financial distress therefore helps to explain the negative relationship between children and well-being.

As Cetre et al. (2016) note, subjective well-being scores are usually well-behaved, in that they produce estimated coefficients that match our intuitions. On the contrary, the estimated coefficients on children do not always fit well with the sentiment of many that (at least for evolutionary reasons) children should produce well-being. While some analyses have produced positive correlations, these do not apply to all parents equally, and other works have concluded that there is a negative relationship between children and parental well-being.² Kahneman et al. (2004) concluded that childcare was only slightly more enjoyable than housework or commuting to work.

The effect of children in general may well be different from that of young children. The lags and leads analysis in Clark et al. (2018) suggest that life satisfaction rises at birth but then turns negative when the child is aged two. However, the slope in life satisfaction as the child ages then looks to be positive (at least for mothers), and it is intriguing to speculate on what its shape might be as the children age.³ While economists in general tend to prefer individual fixed effect estimation to cross-sectional analysis, the former mechanically puts more weight on young children (due to its requirement that the parent be observed both before and after the childbirth), and most existing panels are not long enough for us to say much about the relationship between children and parental well-being in panel analysis when the former are in their teens or older.⁴ Cross-sectional analysis, on the contrary, allows us to consider children of all ages.

As well as calculating an average effect for all children, sometimes distinguishing by (young) child age, it is of interest to ask which parents do better (or worse) as children come around. Existing work suggests that the relationship between children and parental well-being is more likely to be positive in richer countries, with one interpretation being that children are more likely to be chosen there (see McLanahan and Adams 1987). We (almost) exclusively look at developed countries here, and so we might expect a positive correlation between children and well-being. As we will see below, this is not the case.⁵

Children are also more likely to be associated with higher subjective well-being for older parents. The positive effects of children in Deaton and Stone (2014) are found for parents who are aged 34–46, and in Margolis and Myrskylä (2011), the estimated coefficients on children for those aged under

² Clark et al. (2018) discuss a number of results from the existing literature, available in Online Annex 5 at <http://cep.lse.ac.uk/origins/onlinematerial.pdf>. These broadly show a divergence of findings in the cross-sectional literature, with negative estimated coefficients in, for example, Aassve et al. (2015), Alesina et al. (2004), Deaton and Stone (2014) and Stanca (2012), but small positive correlations in Aassve et al. (2012) and Cetre et al. (2016). Fixed effect analysis tends to produce more positive findings: see Clark et al. (2008), Stutzer and Frey (2006) and Figure 5.6 in Clark et al. (2018).

³ The length of the SOEP panel does allow Myrskylä and Margolis (2014) to consider the relationship between parental life satisfaction and a small number of children up to teen ages. They find a positive life satisfaction effect around childbirth, but no significant relationship thereafter.

⁴ A similar point applies to the instrumental variable analysis in Costa-Font et al. (2018), which relies on a 2007 parental leave reform in Germany. The children here are all fairly young.

⁵ We in addition use cross-sectional data, where there may be a bias from happy people being more likely to have children in the first place (as in Cetre et al. 2016): even so, the correlation between children and parental well-being without controlling for financial difficulties is negative.

30, 30–39 and over 40 are respectively negative, zero and positive.⁶ Herbst and Ifcher (2016) examined the relationship between parenthood and happiness using data from the General Social Survey from 1972 to 2008 and the DDB Needham Lifestyle Survey from 1985 to 2005 and found no evidence of a parental gap in well-being for those aged 45 and under. In our main analysis of Eurobarometer data below, we find marked differences in the correlation between well-being and children for “older” and “younger” parents (with a cut-off at age 45).

With respect to socioeconomic resources, one of our main areas of interest in the current paper, Margolis and Myrskylä (2011) divide their World Values Survey respondents into three income groups according to their self-reported income decile (Low = deciles 1–4, Middle = deciles 5–6 and High = deciles 7–10). Although the differences are small, for the under 40s, the relationship between children and life satisfaction is more negative for the low-income group, and there is no clear difference between the middle- and high-income groups. In the analysis of British Household Panel Survey and German Socio-Economic Panel (SOEP) data in Myrskylä and Margolis (2014), the subjective well-being trajectory of higher-educated parents is above that of less-educated parents (see their Figure 4), although the differences do not appear to be significant. On the contrary, Le Moglie et al. (2019) analyse SOEP data and suggest that the fall in life satisfaction after childbirth is larger for those with higher incomes (and especially the higher educated).

Financial resources reflect not only income but also expenditure and state-provided goods and services. As such, the broader social policy context may help explain the children-happiness correlation. Glass et al. (2016) compare the happiness levels of couples with and without children from 22 countries using data from the 2007 and 2008 waves of the International Social Survey Programme and the 2006 and 2008 European Social Surveys. They found that although children lowered happiness in some countries, parents in other nations experienced a happiness *surplus*. For example, compared with childless couples, parents in Norway and Hungary were happier, whereas parents in Australia and Great Britain were less happy than their childless counterparts. The country with the largest happiness deficit related to children was the USA. Glass and co-authors estimate a smaller parental status happiness gap in countries with more-generous family policies (covering policies such as paid leave and vacation and childcare assistance) relative to less-generous countries.

Our major finding from the analysis of both Eurobarometer and International Social Survey Programme data is that family finances play a key role. Once we control for the difficulty in paying bills or making ends meet, the negative correlation between children and life satisfaction disappears and becomes positive. We also find evidence that children under the age of ten are associated with higher happiness, but this is less the case for children aged 10–14. There are also differences by the age of the respondent.

In addition, we underline that the correlation between parental well-being and the presence of children at older ages depends critically on whether the children are your own. It is well-known that separation and divorce are associated with lower well-being, although work has identified adaptation over time to these phenomena. Our findings

⁶ See also Stanca (2012) for evidence from the World Values Survey.

here show, however, that separation and divorce may continue to play a role in the longer run via the presence of stepchildren.

The remainder of the paper is organized as follows. Section 2 describes our data from the American General Social Survey and the Eurobarometer. Section 3 then presents our main regression results, estimating the relationship between children and life satisfaction for 15 marital status/children groups and then demonstrating the importance of family finances in explaining the pattern of results. Section 4 obtains similar results using comparable international data from the 2017 International Social Survey Programme (ISSP): once we control for difficulty in “making ends meet”, children up to the age of eighteen are associated with greater well-being. Last, Section 5 concludes.

2 US and European data

We here analyse US and European data to set out the relationship between children and well-being. We first illustrate the common finding that children are associated with lower well-being using data from the US General Social Survey, as used in Blanchflower and Oswald (2004), from 1972 to 2018. The happiness question in the GSS is “taken all together, how would you say things are these days—would you say that you are very happy (=3), pretty happy (=2), or not too happy (=1)?” (GSS question #157). The numbers in parentheses refer to how we coded the variable.

We regress happiness on age and its square, gender, a black ethnicity dummy, years of education, seven labour-force status dummies, four marital status dummies, year and region dummies and a dummy variable for there being any children in the household. The results are shown in Table 1, for the whole sample and then separately for men and women.⁷ Columns 1, 3 and 5 do not control for income. In each of these three regressions, the estimated coefficient on the children present variable is negative and statistically significant. We then add income as a control, to see if this helps explain the negative correlation between children and happiness: as can be seen in columns 2, 4 and 6, this is not the case as the estimated coefficient remains negative and significant in all cases.

Controlling for income therefore does not suffice to turn the estimated children coefficient positive. But income is only one component of family finances: the other part is expenditure. To measure financial stress, we need to know the relationship between the two. Income and financial stress are not necessarily monotonically related: some lower-income households do not have financial problems, while some middle-class households are stressed. The GSS unfortunately does not include information on financial distress, but other surveys do. We first consider large-scale European data from multiple repeated Eurobarometer cross-section surveys, producing an unbalanced panel of countries. Section 4 will supplement this European data with international evidence on life satisfaction and subjective well-being from the 2017 ISSP survey, covering 31 countries in both the developed and the developing world.

⁷ The regressions here, and in the rest of the paper, are OLS. We have checked that all of our main results hold in ordered logit and ordered probit regressions.

Table 1 Happiness, children and income: GSS 1973–2018

		Male		Female		
Age	-.00675 (7.09)	-.00983 (9.47)	-.00808 (5.47)	-.00963 (6.07)	-.00609 (4.86)	-.01035 (7.49)
Age ² /100	.00893 (9.17)	.01208 (10.34)	.01010 (6.59)	.01170 (7.09)	.00842 (6.61)	.01273 (8.97)
Male	-.04778 (8.54)	-.04943 (8.37)				
Any children	-.03304 (4.62)	-.03061 (4.05)	-.01713 (1.58)	-.0227 (1.99)	-.04355 (4.50)	-.03729 (3.62)
Income	No	Yes	No	Yes	No	Yes
Constant	2.3501	2.4347	2.3163	2.3665	2.3433	2.4674
Adjusted <i>R</i> ²	.0851	.0913	.0892	.0862	.0867	.0952
<i>N</i>	59,575	52,182	26,328	23,378	33,247	28,738

All regressions include year and region controls and individual controls, including include race, years of education, and marital and labour force status dummies. Income here appears as 12 dummy variables. *T*-statistics are in parentheses

The Standard Eurobarometer series has been running for over 45 years now, having been established in 1974. There are several surveys a year, consisting of interviews with around 1000 respondents in each participating country.⁸ Not all of the surveys include questions on life satisfaction but an increasing proportion over time do. The Eurobarometer life satisfaction question is “On the whole, are you very satisfied, fairly satisfied, not very satisfied or not at all satisfied with the life you lead?”. The possible responses are Very satisfied (=4), Fairly satisfied (=3), Not very satisfied (=2) and Not at all satisfied (=1), with the figure in parentheses showing how we code the variable in our empirical analysis.

We have merged together life satisfaction data from 42 Eurobarometer surveys over the 11-year period from 2009 to 2019.⁹ Prior to 2009, the Eurobarometer surveys only recorded marital status and did not provide information on the presence of children. These surveys produce a total of nearly one and a quarter million observations across all twenty-eight EU countries plus Albania, Iceland, Macedonia, Montenegro, Serbia, Turkish Cyprus and Turkey in the post-recession period. The data files include, in addition to the above four-step life satisfaction variable, a number of standard variables that appear in life satisfaction equations, including age, gender, marital status, schooling and labour force status¹⁰ (Blanchflower and Oswald, 2004, 2008, 2019).

⁸ This standard series is augmented by Special and Flash Eurobarometers on specific issues.

⁹ These are the forty-two Eurobarometer surveys we use—2009 = #71.3; 2010 = #73.4; #74.2; 2011 = #75.3; #75.4; #76.3; 2012 = #77.4; #78.1; 2013 = #79.3; #79.4; #80.1; #80.2; 2014 = #81.1; #81.4; #81.5; #82.3; #82.4; 2015 = #83.1; #83.2; #83.3; #83.4; #84.2; #84.3; #84.4; 2016 = #85.2; #86.1; #86.2; #86.3; 2017 = #87.1; #87.3; #88.3; #88.4; 2018 = #89.1; #89.3; #90.1; #90.2; #90.3; #90.4 and 2019 = #91.2; #91.3; #91.5 and #92.1

¹⁰ The labour force status categories in the Eurobarometer are Working; Responsible for ordinary shopping and looking after the home, or without any current occupation, not working; Student; Unemployed or temporarily not working; and Retired or unable to work. The schooling categories are up to 15 years, 16–19 years, 20+ years, Still Studying and No full-time education.

There are 1,246,028 observations on life satisfaction in our pooled data file across 2009–2019. Over these years, on the one-to-four scale, mean life satisfaction is 2.95 with a standard deviation of 0.79. Over time, mean life satisfaction rose from 2.87 in 2009 in the EU countries to 3.04 in 2019. Appendix Table 10 reports the average life satisfaction scores by country for 2009, 2015 and 2019, for the countries which appear in all three of these years. We can see (in the last column) that the 2019 values are higher than those in 2009 for every country except Belgium, Cyprus and Sweden, showing the broad recovery in well-being following the start of the financial crisis. In contrast to the 2018 World Happiness Report, which used the Cantril ladder, we do not conclude that Finland has the highest well-being level: it here ranks seventh in terms of life satisfaction in our most recent 2019 data after, in order, Denmark, the Netherlands Sweden, Ireland, the UK and Luxembourg (<http://worldhappiness.report/ed/2018/>). Greece has the lowest life satisfaction score, having dropped below Bulgaria in 2012. Italy ranks fifth from last.

Our key right-hand side variables refer to the respondent's current marital status and the presence and number of children *living in the household*. The Eurobarometer also usefully indicates (for the partnered) whether these children are from the current relationship. The data are reported separately depending on whether the respondent is single, married, living with a partner (which we will call cohabiting), divorced or separated or widowed. We also know the number of children under the age of ten and between ten and fourteen who are living in the household. As in some of the existing literature, we also analyse the relationship between children and parental well-being separately for older and younger adults (using age 45 for the cut-off between the two).¹¹

The exact marital status question is shown in Appendix Table 11, along with the numbers of observations for those with and without children. We exclude the 13,464 cases where the respondent did not answer the question, leaving a sample of 1,235,408. Overall, 38.3% of the sample was living with children in the household (473,570/1,235,408). As might be expected, those aged under 45 are more likely to live with children than those aged 45 and over (49.1% versus 31.1%). We also know that 26.2% of the sample was living with one or more children under the age of fifteen, with 48.1% of those aged under 45 in this category versus 11.1% for those aged 45 and over and only 4.1% for those aged 60 and over.

Appendix Table 12 then presents the average life satisfaction scores (on the one-to-four scale) across Table 11's different marital/children situations. The numbered elements in the top panel allow us to identify individuals who are married or remarried (statuses 1–4), who account for 53.6% of the sample, those cohabiting (5–8; 11.1%), single and living alone (9 and 10; 17.9%), divorced or separated (11 and 12; 7.7%) and widowed (13 and 14; 9.8%). It is in addition possible to identify the 38.3% of the sample who have children at home (2–4; 6–8; 10, 12 and 14). The most satisfied group is singles living with a partner without children (with a life satisfaction score of 3.04). The divorced and widowed have lower life satisfaction than the single or married, and the least satisfied are the widowed with children (2.63), followed by the divorced or

¹¹ The presence of any children in the household rises from 49% at age thirty to a peak of 75% at age 42 and then falls rapidly to 58% at age 50. As we only know about children who live in the household, we miss out adult children who have left home. This is another reason to split the sample by age, as under 45s who do not currently live with children are more likely never to have had any.

separated with children (2.73). Within both marriage and single, those without children are a little more satisfied with their lives than those with children.

The second panel of Table 12 shows the well-being differences by marital status (regardless of the presence of children): the divorced, separated and widowed are less satisfied than singles, those living together or the married. The third panel carries out an analogous regrouping for presence of children regardless of marital status: in the raw Eurobarometer data, respondents with children at home are less satisfied than those without children. Last, we not only know whether these respondents have children, but also how many there are and how old they are. The bottom panel of Table 12 refers to the number of children aged up to 10 and the number of young adolescent children aged 10–14: it is clear that younger children are associated with higher levels of life satisfaction than are adolescent children.

While these raw data differences are of interest, they do not necessarily reveal the relationship between life satisfaction and children or marital status, as there are many other potential confounders at work here, such as financial constraints and age. In order to hold these factors constant, we turn to regression analysis to produce *ceteris paribus* estimates: this is the subject of the next section.

3 Children and life satisfaction in the Eurobarometer

We now look at the relationship between children and happiness controlling for a number of other variables. Table 2 shows the estimates from standard OLS life satisfaction equations, first for the whole sample and then separately by age and then gender. Our key control variables here are a dummy for children being present in the household, derived from the marital status variable in Appendix Table 12, and a simple set of marital status dummies (cohabiting, single, divorced/separated, and widowed; the omitted category is married). We also include a quadratic in age, and dummies for gender, schooling, labour force status and year, as well as a full set of country dummies. Life satisfaction is higher for the educated and those in work and lower for the unemployed. The estimated coefficients on the year dummies rise over time.

In these regressions, the presence of children is associated with *lower satisfaction*, as is often found in the literature (although the effect size is small here). The estimated children coefficient in the first column, at $-.017$, is significant with a t -statistic of 11.5. The estimated coefficients on the other control variables are consistent with those in the existing literature, in particular revealing a U shape between life satisfaction and age (see Clark et al. 1996; Blanchflower and Oswald 2008; Blanchflower 2020a, b), which is estimated in column 1 to minimize at age fifty-three. We also find markedly lower levels of life satisfaction for the divorced, separated and widowed. The pattern of the estimated coefficients on the country variables (not shown here for space reasons) is also consistent with that in earlier work, being higher in the Nordic countries, lowest in Greece and low in a number of Eastern European countries.

The finding of a negative coefficient on the children present variable is repeated for both males and females and for those age forty-five and above. In the second column, this estimate is insignificantly different from zero for those aged under forty-five.

We now move on to try to understand why much of the existing literature, as well as our initial analysis reported above, has largely concluded that children are not

Table 2 Life satisfaction, narrow marital status and children: Eurobarometer 2009–2019

	All	Age < 45	Age ≥ 45	Male	Female
Children present	-.0173 (11.53)	.0037 (1.40)	-.0127 (6.35)	-.0143 (6.14)	-.0228 (11.42)
Cohabiting	-.0794 (36.42)	-.0688 (23.26)	-.0815 (22.91)	-.0729 (23.11)	-.0819 (27.04)
Single	-.1603 (77.01)	-.1308 (42.26)	-.1970 (64.80)	-.1461 (47.60)	-.1667 (58.14)
Divorced/separated	-.2450 (102.13)	-.2751 (56.04)	-.2347 (85.27)	-.2467 (63.24)	-.2403 (78.57)
Widowed	-.2025 (84.80)	-.1921 (18.07)	-.1906 (76.30)	-.2201 (48.47)	-.1894 (65.04)
Age	-.0221 (96.19)	-.0297 (26.72)	-.0037 (4.46)	-.0231 (67.71)	-.0210 (67.39)
Age ² /100	.0209 (91.42)	.0330 (19.02)	.0065 (10.35)	.0221 (64.67)	.0197 (63.91)
Male	-.0323 (25.52)	-.0313 (15.88)	-.0356 (18.35)		
Constant	3.4525	3.5150	2.9107	3.4824	3.3939
Adjusted <i>R</i> ²	.2615	.2237	.2413	.2665	.2587
<i>N</i>	1,245,017	506, 741	738,276	570,513	674,504

All regressions include 34 country dummies, 5 schooling dummies, 10 year dummies, and 4 labour force status dummies. Marital status refused/unknown is included but not shown. The excluded category is married. *T*-statistics are in parentheses

associated with higher well-being. It turns out that any negative children coefficient frequently switches sign once we control for the difficulties that the household may have in paying their bills. Children are expensive, and difficulties in paying bills are likely highly stressful.

3.1 Difficulties paying bills and happiness

Why do children have such different effects according to their parents' marital status and other characteristics? One possibility is that many parents with children struggle to pay their bills for food, accommodation, clothing, etc. In this respect, Eurobarometer respondents were asked "During the last twelve months, would you say you had difficulties to pay your bills at the end of the month?", with the response categories almost never/never (= 1), occasionally (= 2) and most of the time (= 3). This is a useful question in our context, as it picks up that children are not equally expensive across countries.

Appendix Table 13 reports the distribution of financial difficulties by the values of our combined marital status and children variable. The single and the married without children have the least difficulty paying bills, with the highest percentage figures for having difficulty paying bills most of the time being found for the single and divorced/separated living with children. In addition, at the bottom of this table, this difficulty broadly rises with the number of children. As such, part of the subjective well-being impact of children might be mediated by financial difficulties. Financial difficulties reduce happiness, as expected, just as income raises happiness (Blanchflower and Oswald 2004).

The fact that children increase subjective well-being more for parents with higher education could then reflect that children are less associated with financial distress for the better educated. This is indeed what our data show. Appendix Table 14 lists the

proportion of individuals who say they “Never or almost never” have difficulty paying their bills by schooling level (based on age left school: ALS) and age across all years. The overall total also includes individuals who did not provide an answer to this question.

For those under the age of 45, the percentage who never have difficulty in paying bills is eight percentage points lower with children present for those with the lowest level of education, but the analogous gap is only half this figure (at four percentage points) for those with higher levels of education and zero for the best educated. The differences for those aged 45 or more are even more striking: the percentage who never have difficulty in paying bills is nearly twenty percentage points lower with children present for those with the lowest levels of education, with analogous figures for medium (ALS 16–19) and higher (ALS 20+) education of 13 and 12 percentage points respectively.

To see whether financial difficulties attenuate the effect of children on life satisfaction, we explicitly introduce them into the life satisfaction equation in Table 3. As expected, the estimated coefficients on the “difficulty paying bills” dummies are extremely significant and negative, with t values of over 100; they are a little larger in size for the older age group.

Arguably, the most interesting aspect of Table 3 is that, overall, for both men and women and for both age groups, the coefficient on the children present variable is now significantly positive. Comparing the (negative) estimated coefficient in Table 2 with its positive counterpart in Table 3, we see that the difference between the two is about 0.03. This is equivalent to half of the difference between marriage and cohabitation and around the same size as the estimated coefficient on male.

Controlling for financial difficulties, we then find that children are associated with *greater* happiness. This appears to solve the puzzle in the literature. It seems crucial to control for the household’s financial circumstances, and once we do so, the sign on the child present variable switches sign. We now carry out a number of further tests to show that result is very stable across changes in specification.

Table 4 first splits the sample into sixteen richer and nineteen poorer countries, as defined by GDP per capita. The poor-country grouping consists of fifteen former Communist countries in Eastern Europe (Albania, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia) plus four poorer Western countries (Cyprus, Greece, Turkey and Turkish Cyprus). The richer countries are Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Spain, Sweden and the UK. Columns 1 and 3 do not control for financial difficulties: in the richer countries, the coefficient on the children variable is significantly negative, whereas for poorer European countries it is insignificantly different from zero. However, once the financial difficulties that children presumably help bring are controlled for in columns 2 and 4, the children coefficients in both rich and poor countries become significantly positive. Children are thus associated with higher subjective well-being in both richer and poorer countries once the financial difficulties they likely induce are controlled for.

In Table 5, we replace the children present (1,0) dummy with two variables for first the number of children in the household under the age of ten and then the number aged 10–14 (these are the two child age categories that the Eurobarometer supplies). The

Table 3 Life satisfaction, difficulty in paying bills, marital status and children: Eurobarometer 2009–2019

	All	Age < 45	Age ≥ 45	Male	Female
Children present	.0078 (5.39)	.0290 (11.25)	.0041 (2.12)	.0043 (1.93)	.0062 (3.21)
From time to time difficulty paying bills	-.2772 (190.57)	-.2447 (113.19)	-.2980 (151.76)	-.2860 (130.61)	-.2698 (138.60)
Most of the time difficulty paying bills	-.6269 (301.70)	-.5571 (177.90)	-.6682 (240.30)	-.6343 (199.21)	-.6186 (225.27)
Cohabiting	-.0508 (24.03)	-.0429 (14.86)	-.0560 (16.32)	-.0504 (16.49)	-.0494 (16.84)
Single	-.1259 (62.35)	-.1021 (33.77)	-.1513 (51.59)	.1249 (41.90)	-.1231 (44.23)
Divorced/separated	-.1783 (76.62)	-.2024 (42.27)	-.1680 (63.05)	-.1910 (50.47)	-.1685 (56.75)
Widowed	-.1650 (71.45)	-.1650 (15.95)	-.1515 (62.83)	-.1865 (42.42)	-.1493 (52.97)
Age	-.0195 (87.43)	-.0228 (20.72)	-.0061 (7.68)	-.0203 (61.27)	-.1085 (61.37)
Age ² /100	.0173 (77.78)	.0224 (13.10)	.0066 (10.87)	.0183 (55.07)	.0162 (54.00)
Male	-.0367 (29.77)	-.0373 (19.30)	-.0380 (23.64)		
Constant	3.5955	3.6063	3.2104	3.6149	3.5440
Adjusted R ²	.3181	.2753	.3491	.3215	.3161
N	1,224,914	494,867	730,047	560,649	664,265

All regressions include 34 country dummies, 5 schooling dummies, 10 year dummies, and 4 labour force status dummies. Marital status refused/unknown and pay bills refused are included but not shown. The excluded categories are married and never have difficulty paying bills. *T*-statistics are in parentheses

results are reported separately by age group, with the same controls as in the previous tables. The number of young children always enters significantly positively for younger adults, independently of controlling for difficulty in paying bills. On the contrary, teenagers are associated with happiness in the younger sample only when financial difficulties are controlled for in column 2. Children of all ages attract negative significant estimated coefficients for the older age group in column 3 without financial controls; when these latter are introduced in column 4, both children variables attract positive and significant coefficients.

Table 6 moves on from the simple children and marital status variables above, replacing them by the combined fifteen marital status and children variables that were presented in Appendix Table 11. The happiest group in the first column are the married with no children (the excluded category): every other group has significantly lower life satisfaction, controlling for the variables listed above. Singles living alone with children and the widowed and divorced/separated with or without children are especially dissatisfied (with respect to the former, Stavrova and Fetchenhauer (2015) suggest that the size of the effect reflects the norm of children having two parents). Regarding the married, it is notable that children from previous marriages are associated with a more

Table 4 Life satisfaction, difficulty in paying bills, marital status and children in richer and poorer countries: Eurobarometer 2009–2019

	Richer countries		Poorer countries	
Children present	-.0213 (10.61)	.0075 (3.84)	.0004 (0.17)	.0186 (8.63)
From time to time difficulty paying bills		-.2782 (134.54)		-.2708 (132.31)
Most of the time difficulty paying bills		-.6057 (189.61)		-.6257 (224.16)
Cohabiting	-.0809 (29.55)	-.0511 (19.16)	-.0725 (21.09)	-.0481 (14.45)
Single	-.1973 (76.00)	-.1566 (61.82)	-.1077 (32.53)	-.0846 (26.40)
Divorced/separated	-.2581 (84.34)	-.1933 (64.72)	-.2349 (63.41)	-.1676 (46.75)
Widowed	-.2102 (64.28)	-.1811 (56.95)	-.1758 (50.79)	-.1360 (40.74)
Age	-.0159 (53.20)	-.0146 (49.88)	-.0251 (71.20)	-.0219 (64.17)
Age ² /100	.0163 (55.55)	.0137 (56.95)	.0223 (62.79)	.0184 (53.18)
Male	-.0332 (19.93)	-.0387 (23.87)	-.0340 (17.78)	-.0368 (19.86)
Constant	3.3311	3.4803	2.7802	3.1564
Adjusted R ²	.2371	.2900	.1755	.2399
N	613,650	603,089	631,367	621,825

All regressions include the appropriate country dummies, 5 schooling dummies, 10 year dummies and 4 labour force status dummies. Marital status refused/unknown and pay bills refused are included but not shown. The excluded categories are married and never have difficulty paying bills. *T*-statistics are in parentheses. The analysis excludes survey #71.1, which does not have the difficulty paying bills question coded in this way. The poorer countries are the former Soviet bloc countries (Albania, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia) plus Greece, Cyprus, Turkey and Turkish Cyprus

negative coefficient than those from the current relationship. This continues to hold even where children from the present marriage are mixed in with those from a previous relationship.

Column 2 of Table 6 introduces the difficulty paying bills variables. The coefficient on the living with children of this marriage variable now becomes significant and positive. This is also significant and positive in the final column for women but not in the third column for men. In general, the financial implications of children explain the lion's share of the negative children coefficient for those who are married or cohabiting. For the single, divorced/separated and widowed, the children coefficient is also smaller when controlling for financial difficulties, but only of the order of one-quarter to one-half. The singles, divorced, separated and widowed with or without children are all less satisfied than the married.

As suggested by Ivanova and Balbo (2019), the married with both own and children from a previous relationship are somewhat more satisfied than the married

Table 5 Life satisfaction, difficulty in paying bills, marital status and number of children: Eurobarometer 2009–2019

	Age < 45		Age ≥ 45	
Number of children < 10 years old	.0177 (14.12)	.0279 (22.83)	-.0048 (2.30)	.0107 (5.26)
Number of children 10–14 years old	-.0043 (2.54)	.0068 (4.11)	-.0076 (3.71)	.0046 (2.32)
From time to time difficulty paying bills		-.2443 (111.77)		-.2974 (149.48)
All the time difficulty paying bills		-.5585 (176.55)		-.6675 (237.30)
Cohabiting	-.0619 (21.34)	-.0386 (13.65)	-.0802 (22.31)	-.0564 (16.24)
Single	-.1193 (41.38)	-.0958 (34.02)	-.1931 (63.66)	-.1502 (51.30)
Divorced/separated	-.2683 (54.14)	-.1962 (40.58)	-.2331 (83.81)	-.1674 (62.18)
Widowed	-.1862 (17.40)	-.1607 (15.43)	-.1889 (74.66)	-.1506 (61.65)
Age	-.0319 (27.91)	-.0248 (22.04)	-.0032 (3.90)	-.0057 (7.16)
Age ² /100	.0367 (20.51)	-.0263 (14.92)	.0619 (9.79)	.0063 (10.28)
Male	-.0319 (16.10)	-.0394 (20.28)	-.0347 (20.57)	-.0379 (23.30)
Constant	3.5334	3.6280	2.8934	3.1998
Adjusted R ²	.2239	.2756	.2917	.3491
N	496,549	484,842	721,102	713,072

All regressions include 34 country dummies, 5 schooling dummies, 10 year dummies and 4 labour force status dummies. Marital status refused/unknown and pay bills refused are included but not shown. The excluded categories are married and never have difficulty paying bills. *T*-statistics are in parentheses

with children from a previous relationship only. Children from a previous relationship could of course refer to the respondent's own children or those of their partner. As women are more likely to keep the children when a couple separate, it might be expected that the "previous relationship" children are less negatively correlated with life satisfaction for women than men (as they are more likely to be their own): this is indeed the case when looking at the estimated coefficients in the last two columns of Table 6.¹²

Appendix Table 15 also uses the broader marital status and children classifications in Table 6, showing the results both with and without the two difficulty in paying bills variables and separating by age. Controlling for financial difficulties systematically makes the estimated family coefficients less negative. For the younger age group in column 2, the married with children from that marriage are the happiest (as was the case for the whole sample); whether there are in addition children from a previous marriage makes no significant difference. For the older age group in column 4, there is no significant difference between those

¹² We are grateful to an anonymous referee for suggesting this analysis.

Table 6 Life satisfaction, broad marital status and children: Eurobarometer 2009–2019

	All	All	Men	Women
(Re-)married living with children from this marriage	-.0089 (4.75)	.0080 (4.40)	-.0037 (1.39)	.0177 (7.06)
(Re-)married living with children from a previous marriage	-.0805 (9.79)	-.0224 (2.82)	-.0410 (3.35)	-.0085 (0.82)
(Re-)married living with children from this and previous marriage	-.0446 (4.90)	.0107 (1.22)	.0161 (1.19)	.0058 (0.50)
Cohabiting without children	-.0854 (30.54)	-.0607 (22.37)	-.0625 (16.53)	-.0547 (13.97)
Cohabiting with children from this partnership	-.0679 (17.66)	-.0240 (6.45)	-.0341 (6.08)	-.0156 (3.14)
Cohabiting with children from a previous marriage	-.1004 (12.42)	-.0387 (4.95)	-.0432 (3.53)	-.0358 (3.53)
Cohabiting with children from this and previous marriage	-.0845 (6.98)	-.0108 (0.93)	-.0235 (1.27)	-.0040 (0.27)
Single living without children	-.1480 (63.67)	-.1231 (54.62)	-.1292 (40.76)	-.1086 (33.38)
Single living with children	-.2411 (48.54)	-.1429 (29.65)	-.1399 (13.91)	-.1448 (25.96)
Divorced or separated living without children	-.2377 (80.59)	-.1785 (62.47)	-.2013 (47.94)	-.1526 (38.92)
Divorced or separated living with children	-.2694 (64.48)	-.1712 (42.32)	-.1582 (17.75)	-.1714 (37.07)
Widow/er living without children	-.2002 (76.22)	-.1625 (63.94)	-.1944 (41.06)	-.1386 (44.05)
Widow/er living with children	-.2202 (44.82)	-.1704 (35.89)	-.1522 (13.84)	-.1616 (30.30)
From time to time difficulty paying bills		-.2771 (190.3)	-.2858 (30.47)	-.2693 (138.24)
Most of the time difficulty paying bills		-.6267 (301.2)	-.6345 (99.13)	-.6174 (224.47)
Age	-.0220 (95.34)	-.0194 (86.79)	-.0203 (61.01)	-.0182 (60.20)
Age ² /100	.0208 (90.91)	.0171 (77.28)	.0182 (54.74)	.0159 (53.14)
Male	-.0340 (26.63)	-.0372 (30.08)		
Constant	3.4462	3.5932	3.6183	3.5309
Adjusted <i>R</i> ²	.2619	.3183	.3218	.3165
<i>N</i>	1,242,762	1,223,153	559,808	666,345

All regressions include 34 country dummies, 6 schooling dummies, 10 year dummies and 4 labour force status dummies. Marital status refused/unknown is included but not shown. The excluded categories are married without children and never have difficulty paying bills. *T*-statistics are in parentheses

married without kids and those with children from that marriage. However, if they only have kids from a previous marriage, they are less happy than any other married group.

Table 7 reports four sets of results derived from four separate specifications for each of our thirty-five European countries and overall (in the first row). The sample size in column 5 refers to the estimates in column 1. This first column indicates the sign on the children variable using the same specification as in column 1 of Table 2; the second column then adds the two difficulty in paying bills variables. The final two columns are obtained from the same specification, including the difficulty in paying bills variables, but replacing the child present dummy by the numbers of children under 10 and 10–14. The symbols in Table 7 are as follows: + if the coefficient is positive and significant ($t \geq 1.96$), – if it is negative and significant ($t \geq 1.96$) and * if it is statistically insignificantly different from zero ($t < 1.96$).

In column 1, in the thirty-six rows, including the overall average, there are fifteen significant negatives, ten significant positives and eleven insignificant estimates. Column 2 adds the two financial variables: there are now only six significant negative children coefficients, but eighteen significant positives. In column 3 (children under age 10), there are twenty-six positives and zero significant negatives, and in column 4 (for older children), there are eight positives and only two negatives (Montenegro and Slovakia). The difference in the number of positives in columns 3 and 4 indicates that younger children are on the whole positively correlated with parental satisfaction, but teenagers rather less so.

There are of course many different institutional reasons why the relationship between parenthood and subjective well-being may differ across countries. These could be the extent to which parenthood is chosen, the institutions that determine the degree of work and family reconciliation (Le Moglie et al. 2019), social norms regarding mothers working (Preisner et al. 2018) or family allowances and formal childcare (Pollmann-Schult 2018). We here suggest that the individual-level reported degree of financial difficulty plays a role as well. Although the main effect of any national-level institutional variable will be captured in our country fixed effects in the analysis above, these institutional variables may well affect those with children differently. To investigate, we match our country-level children coefficients in column 1 of Table 7 to the 2010 figures given for family benefits in Table 2 of Pollmann-Schult (2018) for 25 countries (we have to use the 2005 figure for Austria). There is no clear pattern with respect to our Table 7 country estimates: the same average family benefit figure is found in the countries that exhibit positive and negative relationships in Table 7 (with lower family benefit figures for those where we find an insignificant coefficient).¹³

Even controlling for financial difficulties, both children and marital status continue to matter. The married and cohabiting are happier with children (from this marriage/partnership) than without children. The presence of children for the divorced, separated or widowed does not convey additional happiness compared with others with the same marital status without children. The single, divorced, separated or widowed, whether they have children or not, continue to be less happy than the married or cohabiting, whether or not the latter have children from this or a previous relationship. As we show below, these results are broadly

¹³ In our European data, we thus do not find that the children-happiness gap is correlated with family benefit scores. This is contrary to Glass et al. (2016). Note that our analysis uses different data covering only European countries and over a longer time period.

Table 7 Life satisfaction and children by country: Eurobarometer 2009–2019

	Standard	Standard and pay bills	No. of age < 10 and pay bills	No. of ages 10–14 and pay bills	Number
All	–	+	+	+	1,245,017
Albania	–	–	*	*	9305
Austria	+	+	+	*	42,496
Belgium	–	–	+	*	42,955
Bulgaria	*	*	*	*	42,250
Croatia	+	+	+	+	40,459
Cyprus	–	*	+	*	21,062
Czech Republic	+	+	+	*	42,965
Denmark	*	*	*	*	42,399
Estonia	+	+	+	+	42,140
Finland	+	+	+	+	42,222
France	–	+	+	*	42,728
Germany	+	+	+	+	64,823
Greece	–	*	*	*	42,227
Hungary	*	*	+	*	43,269
Iceland	*	+	+	*	5558
Ireland	–	+	+	*	42,247
Italy	+	+	+	*	42,670
Latvia	+	+	+	+	42,117
Lithuania	*	+	+	*	42,271
Luxembourg	–	*	*	*	21,188
Macedonia	–	*	+	+	18,813
Malta	–	–	*	*	21,072
Montenegro	*	*	*	–	9739
Netherlands	–	–	+	*	42,900
Poland	*	+	*	*	40,980
Portugal	*	+	+	*	43,168
Romania	+	+	+	*	42,908
Serbia	+	+	*	*	13,026
Slovakia	*	*	+	–	42,715
Slovenia	*	+	+	*	42,934
Spain	–	–	+	*	42,429
Sweden	*	*	+	*	43,082
Turkey	–	*	*	*	19,181
Turkish Cyprus	–	–	+	+	11,934
UK	–	*	+	*	52,785

The symbols indicate whether the coefficient on the presence of children is significantly positive (+), significantly negative (–) or insignificant (*). Column 1 is the specification from Table 2. The second column adds the two difficulty in paying bills variables, as in Table 3. The third and fourth columns replace the children present variable with the number of children by age and include the two difficulty in paying bills variables, as in Table 5. The sample sizes are for column 1

confirmed in an international data on both developing and developed countries, including four outside of Europe.

4 Evidence from the 2017 ISSP

We now move on to examine life satisfaction data from the 2017 International Social Survey Programme (ISSP) survey, as used in Blanchflower (2020a) to examine the U shape between age and well-being and Blanchflower (2020b) for the hill-shaped relationship between age and unhappiness.¹⁴ The 2017 wave of the ISSP has the advantage of not only measuring life satisfaction and children, but also both income (which was not measured in the Eurobarometer data in Section 3 above) and a measure of financial difficulties faced by the household in “making ends meet”. This wave has around 45,500 observations and covers 30 countries: fourteen EU countries (Austria, Croatia, the Czech Republic, Denmark, Finland, France, Germany, Hungary, Lithuania, Slovakia, Slovenia, Spain, Sweden and the UK), three European non-EU countries (Iceland, Russia and Switzerland), four advanced countries (Australia, Japan, New Zealand and the USA) and nine developing (China, India, Israel, Mexico, the Philippines, South Africa, Surinam, Taiwan and Thailand).

The 2017 ISSP asks respondents “All things considered, how satisfied are you with your life as a whole nowadays?”, with responses being recorded on a seven-point scale, from completely dissatisfied (1) to completely satisfied (7). The distribution of these answers is shown in Appendix Table 16.

We also have information on the number of toddlers in the household as well as the number of school-age children aged five and above. The financial difficulties question is “Thinking of your household’s total income, including all the sources of income of all the members who contribute to it, how difficult or easy is it currently for your household to make ends meet?” The answers here are coded as 1 = Very difficult, 2 = Fairly difficult, 3 = Neither easy nor difficult, 4 = Fairly easy and 5 = Very easy. The distribution, shown in Appendix Table 17, is symmetric around the modal response of “3”, with just over 20% of respondents replying either fairly easy or difficult and around 10% either very easy or difficult.

As in Section 3 above, we estimate the relationship between life satisfaction on the one hand and children and family finances on the other, conditional on a number of control variables.¹⁵ Column 1 of Table 8 shows the estimated coefficients of interest in

¹⁴ The ISSP (www.issp.org) is a cross-national collaboration programme, conducting annual surveys on diverse topics relevant to social sciences. Established in 1984 by its founding members Australia, Germany, Great Britain and the USA, the ISSP has since included members covering various cultures around the globe. Its institutional members, each of them representing one nation, consist of academic organizations, universities or survey agencies.

¹⁵ In Tables 8 and 9, the ISSP labour force status categories are In paid work, Unemployed and looking for a job, In education, Apprentice or trainee, Permanently sick or disabled, Retired, Domestic work, In compulsory military service or community service and Other. The schooling categories are in terms of Highest completed education level: No formal education; Primary school (elementary education); Lower secondary (secondary completed that does not allow entry to university: end of obligatory school); Upper secondary (programs that allows entry to university); Post secondary, non-tertiary (other upper secondary programs towards the labour market or technical formation); Lower level tertiary, first stage (also technical schools at a tertiary level); Upper level tertiary (Master, Doctor); and Cannot choose.

Table 8 Life satisfaction, children and difficulty paying bills: ISSP 2017

	(1)	(2)	(3)	(4)	(5)	(6)
Number of toddlers	.0352 (3.42)	.0572 (5.68)	.0335 (3.30)	.0514 (5.09)	.0648 (6.48)	.0635 (6.36)
Number of school-age children	-.0026 (0.40)	.0157 (2.40)	-.0053 (0.81)	.0049 (0.74)	.0176 (2.68)	.0168 (2.57)
Age	-.0291 (13.76)	-.0214 (10.25)	-.0292 (13.93)	-.0254 (11.97)	-.0201 (9.59)	-.0204 (9.73)
Age ² /100	.0292 (14.09)	.0214 (10.24)	.0296 (14.07)	.0258 (12.20)	.0202 (9.58)	.0203 (9.66)
Male	-.0002 (0.02)	-.0182 (1.72)	-.0010 (0.09)	.0029 (0.26)	-.0098 (0.88)	-.0109 (0.97)
Pay bills: very difficult		-.4759 (7.29)			-.3486 (5.34)	-.3804 (5.86)
Pay bills: fairly difficult		-.1412 (2.19)			-.0931 (1.45)	-.1221 (1.91)
Pay bills: neither		.1603 (2.49)			.1449 (2.26)	.1175 (1.84)
Pay bills: fairly easy		.3797 (5.87)			.3089 (4.77)	.2811 (4.37)
Pay bills: very easy		.6092 (9.18)			.4806 (7.22)	.4503 (6.80)
Pay bills: cannot choose		.1415 (1.86)			.1356 (1.79)	.1079 (1.43)
People can usually be trusted			-.2144 (10.02)			
Usually cannot be too careful			-.4294 (19.62)			
Almost always cannot be trusted			-.5777 (22.81)			
Cannot choose			-.5655 (15.48)			
No answer			-.3850 (4.45)			
Income score 02				.0216 (0.53)	.0251 (0.63)	.0281 (0.70)
Income score 03				.1938 (5.51)	.1626 (4.66)	.1664 (4.77)
Income score 04				.4008 (11.81)	.3182 (9.41)	.3233 (9.58)
Income score 05				.6804 (21.25)	.5532 (17.27)	.5597 (17.51)
Income score 06				.7948 (24.07)	.6364 (19.20)	.6447 (19.54)
Income score 07				.9195 (26.95)	.7252 (21.11)	.7318 (21.43)
Income score 08				1.0853 (30.06)	.8583 (23.56)	.8633 (23.87)
Income score 09						

Table 8 (continued)

	(1)	(2)	(3)	(4)	(5)	(6)
				1.1773 (23.77)	.9342 (18.78)	.9361 (18.90)
Income score 10				1.0535 (20.46)	.8584 (16.71)	.8619 (16.81)
Education dummies	Yes	Yes	Yes	Yes	Yes	No
Constant	5.7509	5.2035	5.6665	4.6513	4.6996	4.7549
Adjusted R^2	.1124	.1625	.1292	.1637	.1908	.1903
N	42,656	41,714	42,656	41,103	40,161	40,161

All regressions include country, marital status and labour force status dummies. The difficulty paying bills variable is missing for Denmark. The income controls also include Do not Know and No Answer (included but not reported) and are missing for the UK. T -statistics are in parentheses

Table 9 Unhappiness, number of children and difficulty paying bills: ISSP 2017

	(1)	(2)	(3)
Number of toddlers	-.0165 (1.85)	-.0285 (3.22)	-.0318 (3.60)
Number of school-age children	-.0021 (0.36)	-.0117 (2.02)	-.0148 (2.54)
Age	.0071 (3.87)	.0027 (1.46)	.0023 (1.21)
Age ² /100	-.0109 (5.87)	-.0059 (3.19)	-.0054 (2.86)
Male	-.1365 (13.89)	-.1218 (12.41)	-.1255 (12.63)
Pay bills: very difficult		.4851 (8.41)	.3970 (6.78)
Pay bills: fairly difficult		.2697 (4.74)	.2179 (3.77)
Pay bills: neither		.0839 (1.48)	.0632 (1.10)
Pay bills: fairly easy		-.0331 (0.58)	-.0229 (0.39)
Pay bills: very easy		-.1350 (2.31)	-.0996 (1.67)
Pay bills: cannot choose		.1144 (1.71)	.0870 (1.29)
Income score 02			.0232 (0.65)
Income score 03			-.0369 (1.19)
Income score 04			-.0999 (3.33)
Income score 05			-.2228 (7.83)
Income score 06			-.2516 (8.54)
Income score 07			-.2879 (9.43)
Income score 08			-.3383 (10.45)
Income score 09			-.3759 (8.49)
Income score 10			-.3082 (6.75)
Constant	2.2159	2.0656	1.5212
Adjusted R^2	.0616	.0843	.0941
N	42,616	41,672	40,123

All regressions include country, education, marital status and labour force status dummies. The difficulty paying bills variable is missing for Denmark. The income controls also include Do not Know and No Answer and are missing for the UK. T -statistics are in parentheses

a standard OLS life satisfaction regression. The number of toddlers variable is significantly positive, while that on the number of school-age children is insignificant. Column 2 then adds the difficulty in making ends meet variable, which is very significant; in addition, as in the Eurobarometer data discussed above, the inclusion of this variable renders both children variables positive and significant.

One worry is that both life satisfaction and financial hardship are subjective variables, so that our estimates may be contaminated by common method variance. One test is to consider a third attitudinal variable that should a priori have little relationship with children, to see if this also changed the estimated children coefficients. We experimented with a number of these, and none affected the children coefficients in the same way as financial difficulties do. Column 3 of Table 8 is illustrative and shows the results when we control for “trust in people”. Although the different levels of reported trust are strongly correlated with life satisfaction, their inclusion makes almost no difference to the estimates on the children variables.

There are difficulties constructing an income variable in the ISSP 2017 due to different exchange rates and differently coded questions. One variable does seem useful though—TOPBOT. Respondents are asked—“In our society, there are groups which tend to be towards the top and groups which tend to be towards the bottom. Below is a scale that runs from the top to the bottom. Where would you put yourself on this scale?” This is the same kind of question as used by Margolis and Myrskylä (2011) in their analysis of the World Values Survey. This question was not asked in the UK.

This subjective income variable is included as a control in column 4 of Table 8, which does not include the difficulty of paying the bills variable. The income variables attract very significant coefficients, but their inclusion does not render the estimate for the number of school-age children significant. However, reintroducing difficulty in making ends meet in column 5 does produce significant estimated coefficients on both of the children variables. Column 6 excludes the education variable, as suggested by a referee, as this may predict both income and financial difficulties. It turns out that dropping education makes little material difference to the results.

Last, Table 9 considers a measure of *unhappiness* in the ISSP data, from the question *Over the past 4 weeks how often have you felt unhappy and depressed?* The responses are on scale from 1 = Never through 5 = Very often. The distribution of this unhappiness variable appears in Appendix Table 18. There are the same pattern of results with children of all ages being associated with less unhappiness once financial difficulties are controlled for in column 2. Column adds the subjective income variable, which has little effect on the estimated children coefficients.

Overall, the ISSP results are consistent with those from the Eurobarometer surveys. Children are positively related to happiness and negatively to unhappiness once financial difficulties are taken into account. The presence of both financial difficulty and income information in the ISSP allows us to see that the largest change in the estimated children coefficients comes from the former rather than the latter.

5 Conclusion

We have here investigated the relationship between children and parental subjective well-being. In our baseline specifications using information on over one million Europeans, we find the same result as in much of the existing literature: children are not associated with higher life satisfaction. A similar result is found for school-age children in data covering not only European countries but also other advanced and developing countries. Our contribution is to help explain this perhaps counter-intuitive result by the correlation between children and financial hardship.

The Eurobarometer data has information on the difficulty individuals have in paying their bills. Controlling for this variable in life satisfaction regressions makes both the negative and the insignificant estimated children coefficients disappear in the vast majority of cases. As such, the negative estimated children coefficient reflects the correlation between children and financial difficulties. We argue that the existing results in the literature on the groups whose well-being is more likely to be positively correlated with children (those in richer countries, those with higher income, and older parents) can all be read in this light.

It is worth emphasizing that income behaves differently from financial strain here: its introduction does not render the estimated children significantly positive. Financial difficulties are obviously related to income but likely reflect the gap between income and (unobserved) expenditure. As Clark et al. (2017) note, 28% of the British Household Panel Survey respondents who said that they were worse off financially than a year ago say that this is due to lower income, but almost double that figure (50%) cite greater expenses as the cause of their financial deterioration. Expenditure data is very often not available in surveys, but we believe that questions on financial strain may be a useful proxy for the income-expenditure gap.

One drawback of the Eurobarometer data is that it measures children in the household and not whether the respondent is a parent. Older parents may no longer be living with their children: these are the empty nesters. We can partly address this by estimating our main regressions separately for those who are under the age of 45 (where it is less likely that all children have already left home) and 45 or over. Although the correlations between children and life satisfaction are often more negative for older respondents, the results for the younger respondents are similar in nature to those for the whole sample.

Not all children are equally correlated with parental life satisfaction. We first find that child age matters. In particular, younger children (those aged up to ten) appear to make parents happier, but the presence of young teenagers less so. Second, the correlation between children and life satisfaction depends on whose children they are. In our baseline results, parents with children from a previous relationship systematically report lower life satisfaction than those with children from the current relationship, with a life satisfaction gap of around 0.1 of a point. It is notable that the largest part of this gap again reflects the correlations of (step-)children with family finances: once we control for difficulties in paying

bills, the gap between own and others' children is sharply reduced in size, although it remains significant.

Marital status also matters for the relationship between children and happiness. We find few significant differences, for example, between the separated or divorced with or without children; the same conclusion applies to the single and the widowed. However, the married with children are happier compared with the married without. Both the married and those who live together, whether or not they have children, are everywhere significantly happier than those in the other marital status categories with or without children.

It is of interest to speculate how our results regarding the role of financial difficulties relate to the literature on parental well-being and institutions, as in Aassve et al. (2015), Glass et al. (2016) and Pollmann-Schult (2018). The institutions that are more favourable for parenthood may also be those that reduce financial stress. We did not find any evidence of this relationship for the family benefits index in Pollmann-Schult (2018), but there could well be other institutions that do reduce financial distress in this way.

We have here focussed on financial difficulties and considered their role in helping to explain the relationship between children and subjective well-being. There are a number of other variables that could play this role, such as time stress, the quality of intimate relationships, the type of holidays and in general the possibilities for joint leisure. Future research may shed light on the importance of these mediating variables.

We care about financial difficulties because they reduce well-being in their own right (amongst many contributions, see Deaton 2012, and Gathergood 2012). They also seem to make having children less attractive. With OECD countries having fertility rates below the replacement level of 2.1 children per woman since 1983 (OECD 2016), better insurance against financial difficulties may be one way of pushing fertility rates up again.

Our broad conclusions are twofold. First, children are associated with greater parental satisfaction in favourable financial circumstances. Second, not all children are the same. In particular, economic downturns, by increasing financial distress, will diminish the satisfaction return from children. In addition, the answer to the question "Yours or Mine?" is important, with stepchildren being systematically associated with lower life satisfaction than own children, a relationship that is also partly mediated by financial distress. This distinction will arguably become increasingly important in European countries with the shorter duration of relationships and the rise in second marriages.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Appendix

Table 10 Life satisfaction by European country, 2009, 2015, 2019 and change 2019–2009

	2009	2015	2019	Δ 2019–2009
<i>All</i>	2.86	2.99	3.04	0.18
Austria	2.97	3.17	3.28	0.31
Belgium	3.17	3.20	3.13	−0.04
Bulgaria	2.21	2.36	2.45	0.24
Croatia	2.82	2.89	2.92	0.10
Cyprus	3.15	3.07	3.12	−0.03
Denmark	3.67	3.71	3.710	0.04
Estonia	2.75	2.86	2.93	0.18
Finland	3.29	3.34	3.32	0.03
France	2.93	3.04	3.01	0.08
Germany	2.90	3.1	3.21	0.31
Greece	2.35	2.32	2.43	0.08
Hungary	2.30	2.66	2.81	0.51
Ireland	3.27	3.34	3.37	0.10
Italy	2.64	2.69	2.75	0.11
Latvia	2.43	2.83	2.89	0.46
Lithuania	2.51	2.83	2.88	0.37
Luxembourg	3.36	3.37	3.36	0.00
Macedonia	2.55	2.54	2.61	0.06
Malta	3.05	3.28	3.10	0.05
Netherlands	3.46	3.49	3.50	0.04
Poland	2.82	2.97	3.03	0.21
Portugal	2.35	2.55	2.72	0.37
Romania	2.41	2.63	2.57	0.16
Slovakia	2.73	2.80	2.91	0.18
Slovenia	30.4	3.10	3.19	0.15
Spain	2.88	2.97	3.11	0.23
Sweden	3.46	3.48	3.45	−0.01
Turkey	2.61	2.67	2.77	0.16
Turkish Cyprus	2.60	2.50	2.78	0.18
UK	3.25	3.40	3.37	0.12

Eurobarometer data 2009–2019

Table 11 Detailed marital status and children information in the Eurobarometer

Q. Which of the following best corresponds to your own current situation?

	No kids	Kids
Married or remarried		
1. Living without children	309,662	
2. Living with children from this marriage		340,256
3. Living with children from a previous marriage		6992
4. Living with children from this marriage and a previous marriage		5674
Single living with a partner		
5. Living without children	87,337	
6. Living with children from this union		38,375
7. Living with children from a previous union		7276
8. Living with children from this union and a previous union		3178
Single		
9. Living without children	199,973	
10. Living with children		21,040
Divorced or separated		
11. Living without children	64,894	
12. Living with children		30,157
Widowed		
13. Living without children	99,972	
14. Living with children		20,628
Total	761,838	473,570

Eurobarometer data 2009–2019. $N=1,235,408$. This table omits 13,464 observations for those reporting marital status “other”, do not know or refused

Table 12 Marital status, children and life satisfaction across Europe: 2009–2019

<i>All</i>	2.95
1. (Re-) Married living without children	3.01
2. (Re-) Married living with children from this marriage	2.94
3. (Re-) Married living with children from a previous marriage	2.98
4. (Re-) Married living with children from this marriage and a previous marriage	3.02
5. Cohabiting without children	3.04
6. Cohabiting with children from this partnership	3.06
7. Cohabiting with children from a previous marriage/partnership	3.04
8. Cohabiting with children from this and a previous marriage/partnership	2.99
9. Single living without children	2.99
10. Single living with children	2.96
11. Divorced or separated living without children	2.79
12. Divorced or separated living with children	2.73
13. Widow/er living without children	2.81
14. Widow/er living with children	2.63
15. Missing/Other	3.07
Single	2.99
Cohabiting	3.04
Married	2.98
Divorced/separated	2.77
Widowed	2.78
<u>Other</u>	3.03
With children	2.93
<u>Without children</u>	2.97
<i>Number of children age <10</i>	
0	2.94
1	2.96
2	3.05
3	3.08
4	2.94
≥5	2.90
<i>Number of children age 10-14</i>	
0	2.95
1	2.95
2	2.99
3	2.93
4	2.78
≥5	2.93

Eurobarometer data 2009–2019; $N = 1,243,129$

Table 13 Difficulty paying bills: Europe 2009–2019

	<i>Never</i>	<i>From time to time</i>	<i>All the time</i>
<i>All</i>	60	28	12
(Re-) Married living without children	70	22	8
(Re-) Married living with children from this marriage	55	33	13
(Re-) Married living with children from a previous marriage	54	32	14
(Re-) Married living with children from this marriage and a previous marriage	54	31	15
Cohabiting without children	61	29	10
Cohabiting with children from this partnership	56	32	13
Cohabiting with children from a previous marriage/partnership	55	31	14
Cohabiting with children from this and a previous marriage/partnership	51	32	17
Single living without children	58	30	12
Single living with children	45	34	21
Divorced or separated living without children	58	27	15
Divorced or separated living with children	42	36	22
Widow/er living without children	65	23	12
Widow/er living with children	52	31	18
With children	53	33	14
Without children	64	26	10
Number of children age <10	60	28	12
0	62	27	11
1	51	35	14
2	53	33	14
3	48	33	19
4	39	35	26
≥5	44	31	25
Number of children age 10-14	60	28	12
0	61	28	11
1	52	33	15
2	52	32	16
3	43	34	23
4	38	36	25
≥5	48	39	14

Eurobarometer data 2009–2019; $N = 1,230,515$ **Table 14** Age, years of schooling and difficulties paying bills in the Eurobarometer

	Age < 45		Age ≥ 45	
	Children	No children	Children	No children
ALS < 16	28.1	36.3	41.2	58.9
ALS 16–19	44.3	47.1	52.3	65.0
ALS 20+	65.0	63.1	70.2	82.1
Still studying	60.6	60.9	52.9	55.1
<i>All</i>	51.2	55.3	55.6	68.2

The figures are the percentage of individuals who say they “Never or almost never” have difficulty paying their bills; Eurobarometer data 2009–2019; $N = 1,230,178$

ALS age left school

Table 15 Life satisfaction, difficulty in paying bills, broad marital status and children: Europe 2009–2019

	Age < 45		Age ≥ 45	
From time to time difficulty in paying bills		-.2442 (112.87)		-.2980 (151.64)
All the time difficulty in paying bills		-.5564 (177.39)		-.6682 (240.11)
(Re-)married living with children from this marriage	0266 (6.83)	.0376 (9.92)	-.0010 (4.22)	0028 (1.26)
(Re-)married living with children from a previous marriage	-.0392 (3.16)	.0155 (1.29)	-.0897 (8.09)	-.0399 (3.73)
(Re-)married living with children from this and prior marriage	-.0063 (0.52)	.0387 (3.27)	-.0505 (3.59)	-.0002 (0.02)
Cohabiting without children	-.0579 (12.81)	-.0405 (9.20)	-.0907 (21.23)	-.0645 (15.66)
Cohabiting with children from this partnership	-.0292 (5.51)	.0032 (0.63)	-.0692 (9.27)	-.0374 (5.21)
Cohabiting with children from a previous marriage	-.0713 (6.65)	-.0181 (1.74)	-.0862 (6.75)	-.0357 (2.90)
Cohabiting with children from this and prior marriage	-.0535 (3.73)	.0081 (0.58)	-.0702 (3.00)	-.0106 (0.48)
Single living without children	-.1045 (25.45)	-.0906 (22.62)	-.1920 (59.14)	-.1510 (48.25)
Single living with children	-.1789 (26.99)	-.1015 (15.68)	-.2536 (28.94)	-.1575 (18.65)
Divorced or separated living without children	-.2555 (31.53)	-.1982 (25.05)	-.2342 (73.82)	-.1714 (55.92)
Divorced or separated living with children	-.2565 (36.79)	-.1655 (24.37)	-.2497 (46.07)	-.1564 (29.90)
Widow/er living without children	-.1358 (9.37)	-.1243 (8.80)	-.1913 (70.24)	-.1515 (57.64)
Widow/er living with children	-.2201(14.03)	-.1697 (11.13)	-.2005(38.64)	-.1519 (30.38)
Age	-.0295 (26.43)	-.0226 (20.54)	-.0036 (4.40)	-.0059 (7.51)
Age ² /100	.0327 (18.78)	.0222 (12.96)	.0645 (10.25)	.0064 (10.66)
Male	-.0340 (17.14)	-.0385 (19.82)	-.0361 (21.63)	-.0379 (23.60)
Constant	3.4955	3.5965	2.9098	3.2079
Adjusted R ²	.2243	.2756	.2917	.3493
N	505,647	494,015	737,115	729,138

All regressions include 34 country dummies, 5 schooling dummies, 10 year dummies and 4 labour force status dummies. The excluded category is married without children. Marital status refused/unknown and pay bills refused are included but not shown. *T*-statistics are in parentheses

Table 16 Life Satisfaction in the 2017 ISSP

Completely dissatisfied (1)	1.0%
Very dissatisfied (2)	2.1%
Fairly dissatisfied (3)	6.3%
Neither (4)	12.0%
Fairly satisfied (5)	39.9%
Very satisfied (6)	28.3%
Completely satisfied (7)	10.4%
<i>N</i>	43,775

Shown are the response percentages to the question *All things considered, how satisfied are you with your life as a whole nowadays?*

Table 17 Financial Difficulties in the 2017 ISSP

Very difficult (1)	11.7%
Fairly difficult (2)	23.2%
Neither easy nor difficult (3)	31.3%
Fairly easy (4)	21.7%
Very easy (5)	9.0%
Cannot choose	1.9%
No answer	1.3%
<i>N</i>	43,413

Shown are the response percentages to the question *Thinking of your household's total income, including all the sources of income of all the members who contribute to it, how difficult or easy is it currently for your household to make ends meet?*

Table 18 Unhappiness in the 2017 ISSP

Never (1)	37.1%
Rarely (2)	32.8%
Sometimes (3)	22.4%
Often (4)	5.6%
Very often (5)	2.1%
<i>N</i>	43,736

Shown are the response percentages to the question *Over the Past 4 weeks how often have you felt unhappy and depressed?*

References

- Aassve A, Goisis A, Sironi M (2012) Happiness and childbearing across Europe. *Soc Indic Res* 108:65–86
- Aassve A, Mencarini L, Sironi M (2015) Institutional change, happiness, and fertility. *Eur Soc Rev* 31:749–765
- Alesina A, Di Tella R, MacCulloch R (2004) Inequality and happiness: are Europeans and Americans different? *J Pub Econ* 88:2009–2042
- Blanchflower DG (2020a) Is happiness U-shaped everywhere? Age and subjective well-being in 145 countries. *J Pop Econ* forthcoming
- Blanchflower DG (2020b) Unhappiness and age. *J Econ Behav and Org* 176:461–488
- Blanchflower DG, Oswald AJ (2004) Well-being over time in Britain and the USA. *J Pub Econ* 8:1359–1386
- Blanchflower DG, Oswald AJ (2008) Is well-being u-shaped over the life cycle? *Soc Sci & Med* 66:1733–1749
- Blanchflower DG, Oswald AJ (2019) Do modern humans suffer a psychological low in midlife? Two approaches (with and without controls) in seven data sets. In: Rojas M (ed) *The economics of happiness: how the Easterlin Paradox transformed our understanding of well-being and progress*. Springer, New York
- Cetre S, Clark AE, Senik C (2016) Happy people have children: choice and self-selection into parenthood. *Europ J Popn* 32:445–473
- Clark AE, Oswald AJ, Warr PB (1996) Is job satisfaction U-shaped in age? *J Occup and Orgnl Psych* 69:57–81
- Clark AE, Diener E, Georgellis Y, Lucas R (2008) Lags and leads in life satisfaction: a test of the baseline hypothesis. *Econ Jour* 118:F222–F243
- Clark AE, D'Ambrosio C, Barazzetta M (2017) Childhood circumstances and young adulthood outcomes: the effects of mothers' financial problems. PSE Working Paper No. 2017-44
- Clark AE, Flèche S, Layard R, Powdthavee N, Ward G (2018) *The origins of happiness: the science of well-being over the life-course*. Princeton University Press, Princeton NJ
- Costa-Font J, Flèche S, Pagan R (2018) Parental leave, fertility and well-being. LSE, mimeo
- Deaton A (2012) The financial crisis and the well-being of Americans. *Ox Econ Papers* 64:1–26
- Deaton A, Stone AA (2014) Evaluative and hedonic wellbeing among those with and without children at home. *PNAS* 111:1328–1333
- Gathergood J (2012) Debt and depression: causal links and social norm effects. *Econ Jour* 122:1094–1114
- Glass J, Simon RW, Andersson MA (2016) Parenthood and happiness: effects of work-family reconciliation policies in 22 OECD countries. *Am Journ Soc* 122(3):886–929
- Herbst CM, Ifcher J (2016) The increasing happiness of U.S. parents. *Rev Econ of the Household* 14(3):529–551
- Ivanova K, Balbo N (2019) Cementing the stepfamily? Biological and stepparents' relationship satisfaction after the birth of a common child in stepfamilies. *J Fam Issues* 40(10):1346–1363
- Kahneman D, Krueger AB, Schkade DA, Schwarz N, Stone AA (2004) A survey method for characterizing daily life experience: the Day Reconstruction Method. *Science* December 3rd 306(5702):1776–1780
- Le Moglie M, Mencarini L, Rapallini C (2019) Does income moderate the satisfaction of becoming a parent? In Germany it does and depends on education. *J Popn Eco* 32:915–952
- Margolis R, Myrskylä M (2011) A global perspective on happiness and fertility. *Popn and Devt Rev* 37:29–56
- McLanahan S, Adams J (1987) Parenthood and psychological well-being. *Annu Rev Sociol* 13(1):237–257
- Myrskylä M, Margolis R (2014) Happiness: before and after the kids. *Demography* 51:1843–1866
- OECD (2016) *Society at a glance 2016*. OECD Social Indicators, OECD Publishing, Paris
- Pollmann-Schult M (2018) Parenthood and life satisfaction in Europe: the role of family policies and working time flexibility. *Europ J Popn* 34:387–411
- Preisner K, Neuberger F, Posselt L, Kratz F (2018) Motherhood, employment, and life satisfaction: trends in Germany between 1984 and 2015. *J Marriage and Family* 80:1107–1124
- Stanca L (2012) Suffer the little children: measuring the effects of parenthood on well-being worldwide. *J Econ Behav and Org* 81:742–750
- Stavrova O, Fetschenhauer D (2015) Single parents, unhappy parents? Parenthood, partnership, and the cultural normative context. *J Cross-Cultural Psych* 46(1):134–149
- Stutzer A, Frey BS (2006) Does marriage make people happy, or do happy people get married? *J Socio-Econ* 35:326–347

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