SINGLE-PARENT FAMILIES AND ADOLESCENTS' WELLBEING IN EUROPE: A MULTILEVEL ANALYSIS

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Abstract. This study, employing multilevel modeling, investigates adolescent subjective well-being (SWB) in single-parent families (SPFs) across Europe. It uncovers a consistent negative impact, primarily due to economic challenges, with greater penalties in regions where SPFs are more prevalent. Public family spending offers partial relief, underscoring the need for targeted interventions and comprehensive social policies to enhance adolescent SWB in single-parent families (SPFs).

1. Introduction

Household composition has evolved since the 1960s in most Western countries. The idea of family as two biological parents with children has given way to various structures due to factors as changing living arrangements and the increase in out-of-wedlock births and family instability. Accordingly, recent research has focused on how children who grow up in SPF fare compared to children raised in two-parent families (TPFs). Previous studies consistently indicate lower SWB among children living with only one parent. However, many open questions and knowledge gaps remain, as most studies focus on countries with an earlier diffusion of new family forms. Moreover, the literature provides limited and sometimes conflicting evidence regarding how the effects of family structure on children's outcomes vary based on societal characteristics (Amato, 2000; Härkönen et al., 2017). Finally, the mechanisms underlying the association between living in a SPF and adolescents' SWB are often unexplored. The aim of this paper is to fill these gaps in the literature by analysing whether and how the SWB of adolescents aged 15-19 years is associated with the structure of their family. We compare adolescents living in a SPF with those living in a TPF, by applying multilevel models with adolescents nested in countries and 3-year periods to data concerning 14 European countries. The paper tests possible cross-country differences in the association and the moderating role played by societal factors such as the diffusion of separations and family policies. Additionally, it explores possible mechanisms related to economic and relational

dimensions. Next paragraph provides a brief literature review, we will then present the data and methods used in the study, followed by empirical findings. Finally, there will be a discussion on the implications of findings.

2. Single-parent families and adolescents' subjective well-being

2.1. The prevalence of the single-parent families

From the late '60s, western countries experienced a decline of marriage and an increase in divorce, as part of the "Second Demographic Transition" (Lesthaeghe, 2020), a process which includes delayed and sub-replacement fertility, increases in cohabitation and non-marital childbearing. As a result, an increasing number of children experiences parental separation or is raised by a single parent (SP).

In the US, the percentage of SPF increased from 10% (1965) to almost 30% (early 2000s). Most European countries have seen an increase in the prevalence of SPFs as well (Maldonado and Nieuwenhuis, 2018). However, the spread has not been homogeneous across countries in terms of timing and intensity. Late-comer countries such as Italy and Spain are now catching up with early-comer countries such as Finland and Sweden, where the trend has instead stabilized. Several factors have a significant association with the risk of divorce. For instance, research has shown that in countries with greater social, economic, and legal barriers to divorce, highly educated couples are more likely to break up. Conversely, where these barriers are reduced, the gradient is reversed (Matysiak *et al.*, 2014). Findings highlight a complex interplay between socioeconomic factors and divorce, and so on the spread of SPFs. However, with exceptions of Greece, Italy and to some extent Spain, today single motherhood is more common among low-educated (Härkönen, 2018).

2.2. Children and adolescents' subjective well-being

Well-being (WB) is a strong indicator for a well performing society. It is essential for children and adolescents to thrive in all areas of their lives, including academics, social relationships, emotional resilience and physical health. Family processes play a critical role in child and adolescent WB, as families can create family environments that support child and adolescent WB (Buehler, 2020). To measure it, the best known partition is subjective and objective measures, but we can find in the literature: self-report, used to assess all five domains of child WB (physical, psychological,

cognitive, social, and economic); objective; observational, to assess social-cognitive skills; psychophysiological, for stress levels, coping skills, and emotional regulation.

The best approach to measure child WB is to use a combination of different methods. When it is not possible, self-report measures may be most appropriate for older children and adolescents, while observational measures may be more appropriate for younger children (Pollard and Lee, 2003; Tsang *et al.*, 2012).

2.3. The relationship between single-parent families and children's subjective well-being: moderating factors at the macro level

At the macro level, we consider family policies and the diffusion of SPFs as factors that may influence SPF-SWB association for children. Studies found a positive impact of policies that enhance income and employment opportunities of SPs, leading to reduced risks of poverty and fewer familial problems (Biegert *et al.*, 2022; Aerts *et al.*, 2022). However, the effects of these policies vary across contexts. Also, while policies targeting all families can improve overall income and life satisfaction, specific policies are required to bridge the gap between SPF and TPF, as between poor and non-poor families (Gornick *et al.*, 2022).

Regarding the role played by the prevalence of SPFs, sociologists and demographers have hypothesized that a process of 'normalization' and greater social acceptance of new family forms, already seen for other Second Demographic Transition-related behaviours, might occur (Härkönen et al., 2017). This normalization process could potentially reduce stress levels for parents and children and improve post-separation parent-child relationships, also due to legal reforms regarding joint custody in post-divorce arrangements. Accordingly, it has been hypothesized that the negative association between non-intact family structures and child WB decreases with the spread of SPFs. In practice, although, studies have found that children belonging to countries and cohorts with higher rates of divorce seem to suffer an even greater divorce penalty (Kalmijn and Leopold, 2021). This apparently counterintuitive result may be explained by selection effects. In situations where societal barriers to divorce are substantial, only families characterized by exceedingly high levels of parental conflict choose to pursue divorce. Under such circumstances, the separation of parents may be advantageous for the children involved. However, as divorces become more prevalent, families with relatively lower levels of conflict also decide to divorce. In these instances, the adverse consequences of parental separation are not partially offset by the advantages of reducing parental conflict (Guetto *et al.*, 2022). Furthermore, due to the reversal from positive to negative of the educational gradient of divorce, the increased prevalence of SPF is mainly caused by separations among already socially disadvantaged

couples (Kalmijn and Leopold, 2021). Young adults face unique challenges, investing in education and employment, promoting healthy lifestyles, access to healthcare, and addressing social and economic determinants of health is important.

2.4. The micro-mechanisms underlying the relationship between single-parent families and children's subjective well-being.

On average, the SWB of children living with a SP is usually found to be significantly lower than that of children living with both parents (Härkönen et. Al, 2017). This finding is consistent across studies, although the underlying causes may vary. Influential papers have identified three distinct mechanisms. First, *emotional stress and lower satisfaction with family relations* may play a crucial role, as adults and children often struggle with troubled relationships following separation and divorce. The reduced time and support provided to children by the non-custodial parent as well as the higher risk of family conflict can lead to self-esteem and social relationship problems (Amato, 2000). Children who lived their parents' divorce at a young age are particularly vulnerable (Harkonen *et al.*, 2017), and the complexity of the family may also contribute to lower SWB (Meggiolaro and Ongaro, 2014). Second, the *economic difficulties* of SPFs. A consistently higher risk of poverty for children in SPF has been found across all Europe (Maldonado and Nieuwenhuis, 2018). Some countries show an increasing risk, others (e.g. Ireland and Netherlands, which had a notable growth in SP employment) follow different trends. Lastly, lone parents face greater job challenges, often working lower paid and less stable jobs (Maldonado and Nieuwenhuis, 2018). Finally, there are *social consequences* both on parents and children. Job difficulties impact social and personal fulfilment too. Balancing family-household needs can be particularly challenging for SPs with insufficient policies. Lone parents are also more vulnerable to stress-related issues as alcohol abuse (Avison and Davies, 2005), that lead to depression and lower living standards (Amato, 2000), affecting the quality of parenting and so children's SWB.

3. Data and Methods

3.1. Data sources and variables

This study utilizes data from the European Social Survey (ESS), the European Union Labour Force Survey (EU-LFS), and the dataset provided by the Organization for Economic Cooperation and Development (OECD). The ESS data allowed us to

analyze an important part of what we wanted to test and at the same time provided us with a large sample to estimate our multilevel models. Of course, there is a price to be paid and for some variables we had to agree to use the 'closest' variable available. For the SWB in the future we would also like to implement a measure. We utilized all waves of the ESS, gathering data from 2002 to 2022 for 14 countries. The choice was based on two criteria: the first is the availability of data at the macro level, the second is the presence of (also) SPF in (almost) all groups. Although the multilevel model still allows us to include the other nations as well, we preferred a conservative choice. Lastly, our analytical sample consists of 11,045 adolescents aged 15 to 19, nested in country-period groups (Table 1).

Table 1 – *Distribution of adolescents 15-19 by type of family, country, and 3-year periods.*

Years group	**02-'04**		**05-'07**		**08-'10**		**11-'13**		**14-'16**		**17-'19**		**20-'22**	
N. parents	**2p**	**1p**	**2p**	**1p**	**2p**	**1p**	**2p**	**1p**	**2p**	**1p**	**2p**	**1p**	**2p**	**1p**
Belgium	174	41	115	31	149	43	149	41	185	52	87	31	ND	ND
Denmark	115	29	49	9	127	30	112	26	72	20	71	20	ND	ND
Estonia	85	29	112	32	62	24	80	36	115	41	78	14	15	3
Finland	226	46	84	24	185	52	90	20	122	36	74	13	13	9
France	47	19	79	25	122	47	53	25	103	30	62	25	45	11
Hungary	87	26	107	21	118	29	71	25	51	17	101	25	60	15
Germany	229	71	129	33	194	43	166	51	228	59	106	34	ND	ND
Ireland	75	13	116	22	44	14	156	45	73	20	75	17	ND	ND
Italy	40	7	ND	ND	ND	ND	26	5	ND	ND	253	42	ND	ND
Netherlands	122	28	40	12	84	20	48	17	99	36	93	24	4	0
Poland	319	50	137	23	220	52	109	22	147	21	79	13	ND	ND
Portugal	73	12	100	25	80	25	90	43	45	20	45	14	12	3
Spain	138	29	94	16	116	17	141	23	77	12	114	30	8	4
Sweden	163	58	90	24	137	45	107	29	114	31	41	11	ND	ND

ND: Data not (or not yet) provided by European Social Survey

The ESS provided individual-level variables, including the dependent variable, assessing life satisfaction on a scale from 0 to 10; the independent variable, a dummy indicating whether the adolescent belongs to a TPF or a SPF; control variables as age, country of birth, sex, number of persons in the hh, and parental education (up to lower secondary education (LSE), completed LSE, over LSE); intervening variables to examine the possible underlying mechanisms, as satisfaction with the household income, frequency of meetings with friends and availability of confidant for private talks (we assumed a link with the emotive issues) in order to investigate the three mechanisms highlighted in Chapter 2; average religion level in the group to account for values at macro level. EU-LFS and OECD data provided respectively percentage of SPF in the country-period group and percentage of GDP spent on family transfers.

3.2. Methods

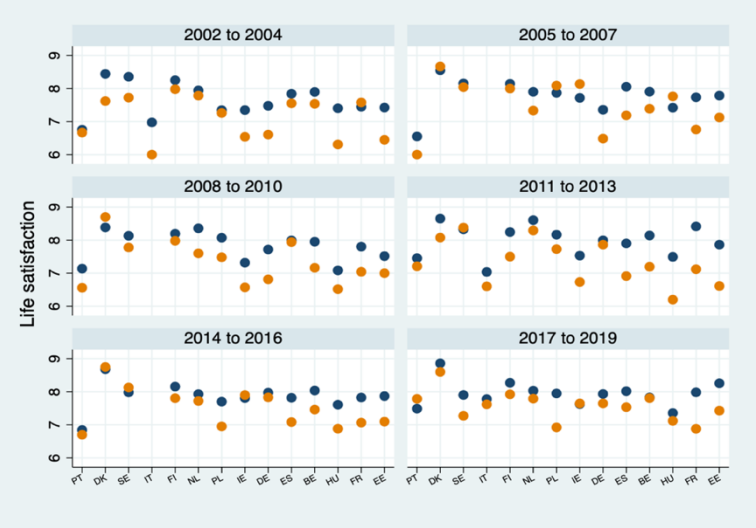
We used a multilevel modeling approach with adolescents nested within country-period groups and country fixed effects to better capture variance composition. Initially, an ANOVA was performed for the distribution of variance in dependent variable, "life satisfaction," across different levels. Then, a multilevel linear regression analysis was conducted to explore the relationship between independent variable "single-parent family" and life satisfaction, and it confirmed the necessity of utilizing a multilevel modeling. To improve the understanding of the underlying mechanisms and contextual factors, a systematic stepwise approach was employed. Control variables were introduced to account for potential confounding factors and isolate the net total effect of being in a SPF. Additionally, macro-level variables and cross-level interactions were included to examine the role of contextual factors and investigate whether the effect of living with one parent is moderated by family policies or the diffusion of SPFs. Furthermore, intervening variables were included to assess mediating mechanisms and interactions with those were lastly checked to find how the effects of SPF may vary under different conditions.

4. Results

4.1. Descriptive analysis

Descriptively, the analysis highlights a negative association between living in a single-parent family and the SWB of adolescents in Europe. This finding holds for most of the country-period groups, indicating a consistent pattern. However, the intensity of the association is highly heterogeneous (Figure 1), justifying the use of a multilevel modelling approach. The descriptive analysis also sheds light on the prevalence of SPFs in Europe. This phenomenon is increasing in almost all countries, emphasizing the need to understand the complex relationship between its prevalence and the strength of the association with adolescents' WB. Descriptive findings highlight how environments characterized by a higher prevalence of SPFs exhibit a more pronounced negative association with adolescents' SWB, contrary to the "normalization" hypothesis.

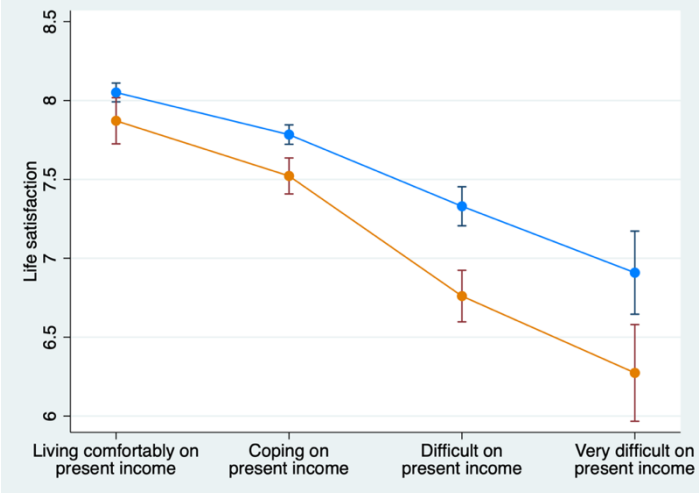
Figure 1 – *Life satisfaction of adolescents by 3-year period and country.*



Note: *Single-parent families (orange) and two-parent families (blue)*

4.2. Multivariable and multilevel results

Figure 2 – *Life satisfaction of adolescents at different level of satisfaction for hh. Income.*



Note: *Single-parent families (orange) and two-parent families (blue)*

The multilevel analysis, including control variables, provides robust evidence for the negative association between living in a SPF and the SWB of adolescents in Europe. The coefficient remains highly significant even after controlling for demographic and socio-economic factors (Table 2), as well as macro-level variables.

The observed association is primarily driven by SPFs with economic difficulties, with a gap in SWB of 0.68 for families experiencing major difficulties, compared to 0.17 for families with an income that teenagers consider satisfactory (Figure 2). The analysis thus reveals that adolescents' feeling about household income has both a mediating and a moderating role. SPFs often encounter greater economic difficulties, which can significantly impact the overall WB of their children.

Table 2 – *Variables coefficient on Life Satisfaction and SE Estimates.*

			Bivariate reg.	+ Controls	+ Macro level	+ Intervening
Single-parentfamily	No (ref.)	-	-	-	-	-
	Yes	Coef.	-0.460^{***}	-0.436^{***}	-0.438^{***}	-0.294^{***}
SPFs diffusion		Coef.	-	-	0.028^{***}	0.027^{***}
Public spending		Coef.	-	-	0.045	0.037
Average religiosity		Coef.	-	-	-0.061	-0.050
Feeling for hh income	Comfort.(ref.)	-	-	-	-	-
	Coping	Coef.	-	-	-	-0.276^{***}
	Difficult	Coef.	-	-	-	-0.842^{***}
	V. difficult	Coef.	-	-	-	-1.305^{***}
Meet usually friends	No (ref.)		-	-	-	-
	Yes	Coef.	-	-	-	0.341^{***}
Confidants	No (ref.)		-	-	-	-
	Yes	Coef.	-	-	-	0.659^{***}
Constant		Coef.	8.166^{***}	9.992^{***}	9.904^{***}	8.892^{***}
Var (Constant)			0.025	0.025	0.018	0.012
Var (SPF)			0.033	0.026	0.031	0.023
N			11,405	11,405	11,405	11,405

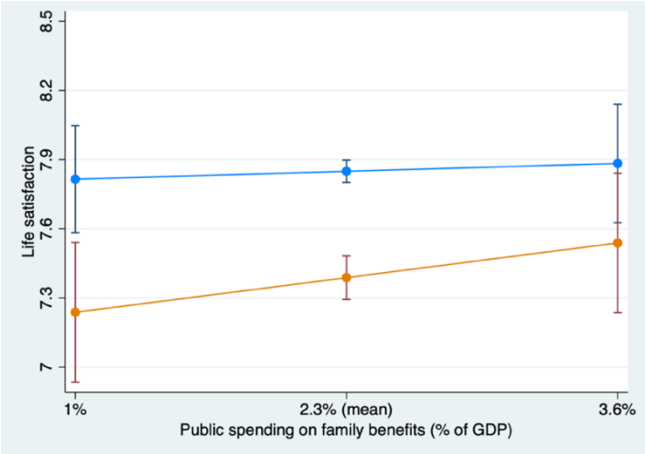
Note: ***: p<.01

4.3. How public spending on family allowances and the spread of single-parent families influence the association.

There is a slight reduction in the gap in life satisfaction between adolescents in SPF and those in two-parent ones (Figure 3). Despite the estimation uncertainty, this finding, in line with previous studies, gives important insights in favour of policies.

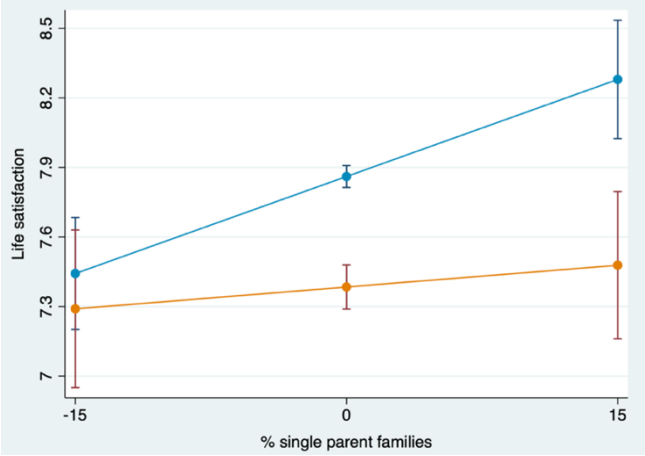
Turning to the spread of SPF, the results of the multilevel analysis align with the descriptive outcomes: countries with a higher prevalence of SPFs exhibit a significant larger disparity in life satisfaction between adolescents living in SPFs and those living in TPFs (Figure 4).

Figure 3 – *Life satisfaction of adolescents at different level of single parent diffusion.*



Note: *Single-parent families (orange) and two-parent families (blue)*

Figure 4 – *Life satisfaction of adolescents at different level of single parent diffusion.*



Note: *Single-parent families (orange) and Two-parent families (blue). % SPF centred on mean.*

5. Discussion

This study confirms the negative association between living in a single-parent family and the subjective well-being (SWB) of adolescents in Europe. This association remains robust even after controlling for various demographic and socio-economic factors. Notably, regions with a higher prevalence of single-parent families (SPFs) exhibit a stronger negative association with adolescent SWB.

Our findings make us agree with previous studies that found the primary driver of the negative association between living in a SPF and SWB in economic challenges faced by SPFs, more than the social or emotional side. The level of public spending on family benefits appears to mitigate the negative impact of economic hardship on adolescent WB. However, there is marked variation, and it is not entirely clear if this type of policy can fully bridge the gap between SPFs and TPFs. This suggests the need to incorporate complementary strategies or interventions to address the specific challenges faced by economically disadvantaged SPFs. We also attempted to incorporate spending on education to explore how investments for children and adolescents may influence this association. While our findings mirrored the strong correlation with family spending, this aspect warrants separate, in-depth analysis.

Our findings regarding the prevalence of SPFs align with arguments related to selection effects, reflecting the changing intensity of pre-separation parental conflicts and the evolving socio-economic composition of SPFs. The higher prevalence of SPF families in already disadvantaged contexts may reflect the challenges faced by individuals, including lower income levels, restricted access to resources, and limited social support networks. Consequently, adolescents growing up in these environments may encounter greater adversity and experience lower SWB compared to their counterparts in more traditional family structures. These results underscore the need for further research to unravel the underlying mechanisms and explore other potential factors that may influence the association between SPFs and adolescent SWB. The complexity of this association emphasizes the necessity of a nuanced understanding of the multiple contributing factors.

Our results align with the notion that a comprehensive approach to social policy is required to adequately support SPFs. This underscores the importance of targeted interventions that extend beyond economic support to address the specific challenges faced by these families. It calls for a re-evaluation and refinement of existing policies to ensure that they effectively cater to the specific needs of SPFs.

In conclusion, this study underscores the importance of considering family structure and economic factors in understanding the SWB of adolescents in SPFs. Addressing the challenges faced by these families can significantly contribute to enhancing the overall WB and outcomes of adolescents in Europe.

6. Implications and Future research

First, additional information is needed to differentiate between various family types, such as stepfamilies, divorced families, widowed parents, and families with a lifelong single parent. Unfortunately, due to data limitations, we could not fully explore these aspects, but recognizing the significance of these structures and their potential impact on children's outcomes would enhance future research. Second, including more country-level units is desirable. Some countries had limited units and were excluded from the analysis, but expanding the dataset to cover a wider range of countries would improve generalizability and provide a better understanding of contextual factors. It's also important to acknowledge that using frequency of meetings as a proxy for the social component and availability of confidants as a measure of emotional stress may have limitations. Unfortunately, data constraints prevented us from a full exploration of these issues. New data could allow us to investigate the influence of parents' job on children's WB too.

Future research could employ alternative measures for more accurate findings and deeper understanding of individual perceptions. Lastly, a causal framework with an expanded set of variables could offer insights for policymakers.

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