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# Parental unemployment and adolescent wellbeing – the moderating role of educational policies

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## Abstract

Crossover effects of parental unemployment on wellbeing of children attract growing attention in research on social inequalities. Recent economic crises call for identifying policies that mitigate the adverse effects of unemployment. Building on the theoretical insights from Capability Approach, we examine the relationship between parental unemployment and wellbeing of adolescents across countries with different educational policies. We use multilevel modelling and microdata on economic and subjective wellbeing of household members from the European Union Statistics on Income and Living Conditions (EU-SILC). We combine microdata on 45,992 adolescents in 32 countries with macro-level indicators of educational policies.

We find that parental unemployment is associated with lower adolescent wellbeing, but the magnitude of this association varies depending on access to financial support for participation in education. Adolescents who receive educational allowances and who live in countries with broader access to such support are less harmed by parental unemployment.

## Title

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## 1. Introduction

Intergenerational crossover effects of parental unemployment on health and wellbeing of children attract growing attention in research on social inequalities. While some empirical studies have demonstrated such effects, especially among adolescents (Brand and Simon-Thomas 2014; Moustgaard, Avendano, and Martikainen 2018), little is known about variations across countries and institutional contexts. What is known, though, is that consequences of unemployment, as well as systems to support families in adverse circumstances, vary across contexts (Lindemann and Gangl 2020). Comparative analyses may therefore be well suited for uncovering mechanisms pertaining to societal conditions and contextual characteristics that vary little or not at all within single countries.

In this study, we investigate how parental unemployment is related to the wellbeing of adolescents across European countries, and if these associations are moderated by countries' educational policies. To this end, we combine intergenerationally linked and cross-country harmonized microdata from the ad-hoc modules from European Union Statistics on Income and Living Conditions (EU-SILC) on about 45,992 adolescents aged 16-24, with institutional data on educational policies. We focus on educational policies, as this is of particular importance given the developmental stages characteristic of adolescence, and since existing research suggests that intangible resources, such as educational opportunities, may be central for explaining intergenerational crossover effects (Moustgaard, Avendano, and Martikainen 2018; Peter 2016).

We contribute to the literature on the consequences of unemployment in several ways. First, we provide novel evidence of the cross-country variability in wellbeing among adolescents with unemployed parents, thereby allowing us to determine whether the crossover effects are universally present within Europe or if they are bounded in space. Second, by linking this cross-country variability to differences in institutional contexts, we provide theoretical insights that help us understand the mechanisms generating heterogeneity in intergenerational crossover effects. Specifically, we develop a conceptual framework and provide evidence for the role of educational policies at two distinct levels of the analysis: individual- and country-level. We explain how, at the individual level, receiving educational allowances may weaken the otherwise negative relationship between parental unemployment and adolescent wellbeing. At the level of countries, we discuss arguments on how the benefits from educational policies extend to adolescents who do not receive this support at a specific time point but might have access to it *should they need and want it*. Our research speaks to broader debates emphasizing

how social policies can be viewed as a “collective resource” which supports not only the direct beneficiaries, but also generates externalities for broader societal groups (Carr and Chung 2014; Haushofer et al. 2020; Högberg 2019a; Sjöberg 2010). Third, while adverse intergenerational crossover effects have been documented previously, research on the role of institutional characteristics in shaping these effects is scarce. By investigating the role of educational policies, we provide specific policy relevant knowledge with regard to the effectiveness of support for adolescents affected by parental unemployment. Such knowledge is imperative for designing interventions to ensure an equitable start in life for all adolescents.

## **2. Background and previous research**

### *2.1 Crossover effects of parental unemployment*

Unemployment reduces wellbeing by restricting opportunities to exercise personal agency and control one’s life-course (Andersen 2008; Fryer 1986; Strandh 2000). Theoretical mechanisms explaining intergenerational crossover effects are less developed, but in this article, we propose that crossover effects on adolescent children emerge through similar processes as the direct effects on the unemployed. Previous studies on intergenerational crossover effects have found that adolescents are a particularly vulnerable group (Brand and Simon-Thomas 2014; Moustgaard, Avendano, and Martikainen 2018). This may be conceptualised from the perspective of adolescence as a distinct stage in life, in which parental unemployment can disrupt developmental processes and constrain the agency and autonomy of adolescents (Billari, Hiekel, and Liefbroer 2019; Kalil and Ziol-Guest 2005). The negative consequences of reduced autonomy may, in some respects, be amplified for adolescents, since autonomy grows increasingly salient during adolescence (Inguglia et al. 2015), while simultaneously being more fragile as adolescents control fewer resources that can be used to underpin it.

Since adolescents often lack independent sources of income, lower household income following parental unemployment affects their economic standing as well. However, income losses experienced by families are only one of the mechanisms behind the crossover effects on adolescent wellbeing. If parents move to a different neighbourhood or region in search of a new job, residential mobility caused by unemployment can disrupt children’s social networks and constrain opportunities for social participation (Brand 2015). Since adolescence is a period where non-family relationships become more salient, this may negatively affect their socio-emotional development and identity formation. Moreover, emotional distress in the unemployed parent, and associated disruption of parent–child relationships (McLeod and

Shanahan 1993; Ponnet et al. 2015), may impair adolescents' own psychological development and wellbeing (Masarik and Conger 2017; Peter 2016). Compared to younger children, who may lack the cognitive capacity to comprehend the situation, adolescents may furthermore be particularly sensitive to the stigma and status loss attached to unemployment (Brand and Thomas 2014).

Parental unemployment can also disrupt important life course transitions for adolescents, by limiting educational achievements (Layte 2021), constraining opportunities to enrol in postsecondary education (Lindemann and Gangl 2020), find a job (Haapakorva, Ristikari, and Gissler 2017), form an autonomous household (Iacovou 2010), and form an own family (Billari, Hiekel, and Liefbroer 2019). Since parents acts as role models for adolescents, the status loss and downward social mobility associated with unemployment may undermine their children's own educational ambitions, aspirations and ultimately attainment (Andersen 2011; Lehti, Erola, and Karhula 2019; Mooi-Reci et al. 2019), with negative consequences for wellbeing (Buchmann and Kriesi 2011).

## *2.2 The moderating role of educational policies*

If an essential pathway through which parental unemployment reduces children's wellbeing is the constraints it imposes on their autonomy and agency, policies that support adolescents' autonomy should remove at least a part of the reduction in wellbeing. Given the developmental stage of adolescents in the focal age category of this study, educational policies are essential in this regard. Economic independence, with stable employment and income, is strongly tied to educational attainment, especially for young workers with little work experience (Blossfeld 2005). While the economic independence and security conferred by education improves wellbeing (Reynolds and Ross 1998; Strandh 2000), parental unemployment constrains adolescents' educational opportunities in multiple ways. Studies have demonstrated negative effects on adolescents' grades (Layte 2021; Lehti, Erola, and Karhula 2019; Rege, Telle, and Votruba 2011), educational ambitions (Andersen 2011), completion of secondary education (Brand and Thomas 2014; Kalil and Ziol-Guest 2008), postsecondary enrolment (Lehti, Erola, and Karhula 2019; Lindemann and Gangl 2019), and overall attained education (Mooi-Reci et al. 2019).

Combining these insights – that education is key for autonomy and development, but that parental unemployment reduces both autonomy and educational opportunities – we can expect that educational policies that support adolescents' participation in education can foster autonomy and thereby reduce adverse crossover effects on wellbeing. To understand the role

of educational policies in this process, we take Amartya Sen's Capability Approach as the point of departure. The Capability Approach distinguishes between achieved functionings – realized outcomes, or what a person has or does – and capabilities – what people are able to do *should they want to*. Capabilities thus refer to what kinds of functionings individuals can choose, while achieved functionings refer to what they actually choose (Sen 2006). A central tenet of the Capability Approach is that more opportunities to choose different paths in life has an intrinsic value, over and above the value of the path that is chosen. In this sense, capabilities are closely related to concepts such as autonomy and agency (Steckermeier 2021), and there is substantial empirical support that capabilities thus defined are positively associated with wellbeing (Anand, Hunter, and Smith 2005; Graham and Nikolova 2015; Steckermeier 2021).

The Capability Approach allows us to conceptualize how educational policies, specifically financial support for students in the form of allowances, can moderate intergenerational crossover effects of unemployment on the individual as well as the contextual level. At the individual level, financial support can make education affordable, lessen adolescents' dependence on parental resources, and thereby counteract constraints on autonomy caused by parental unemployment. Consistent with this, financial support and lower out-of-pocket expenditure for education increase enrolment in post-secondary education for adolescents with unemployed parents (Lindemann and Gangl 2020), as well as for adolescents who are themselves unemployed (Högberg 2019b). Such support may then in extension lessen the constraints on autonomy caused by parental unemployment, not only by opening access to education, but also by enabling adolescent to form their autonomous household. This leads to our first hypothesis:

*Hypothesis 1: The negative association between parental unemployment and wellbeing is smaller for adolescents who receive educational allowances.*

The moderating role of support at the individual level is thus related to individuals' achieved functionings or realized outcomes. However, the intrinsic value of opportunities postulated by the Capability Approach implies that the above-described benefits operate also at the contextual level, as characteristic that affect all prospective students. If individuals are forward-looking, their beliefs about what they can realistically do in the future, their perceived opportunities, shape their assessment of, and wellbeing in, the present (Seligman et al. 2013). Thus, educational policies can have externalities that apply also for those who currently do not receive educational allowances (and are not enrolled in education), but for whom the mere knowledge

that education is a realistic opportunity provides comfort. Moreover, broad welfare state support for participation in education not only grant future perspectives to those who have not yet enrolled in education, but it also socially legitimates the fact that everyone has the right to do so. Such externalities have previously been found for educational policies (Högberg 2019a; Högberg et al. 2019), but also for active labour market and lifelong learning policies (Carr and Chung 2014; van Oorschot and Chung 2014), unemployment insurance (Sjöberg 2010) and health insurance (Haushofer et al. 2020). The intrinsic value of opportunities, moreover, tends to be relatively greater for vulnerable groups such as adolescents with low education or working class background (Högberg 2019a; Högberg et al. 2019; Sjöberg 2010; Steckermeier 2021). This leads to our second hypothesis:

*Hypothesis 2: The negative associations between parental unemployment and wellbeing are smaller in societies with broader access to educational allowances.*

### **3. Research design**

We use cross-sectional data from two European Survey on Income and Living Conditions (EU-SILC) ad-hoc modules carried out in 2013 and 2018, which provide information on life satisfaction among household members aged 16 or more (De Smedt 2013). The data includes 32 countries, including all EU members, as well as Norway, Serbia, Switzerland, and UK. The EU-SILC has been designed with a standard methodology to yield comparable information across European countries on several features. Nevertheless, the data collection varies somewhat across countries, for instance, Nordic countries use registers and information which cannot be derived from registers is collected only from selected respondents. One of the features which makes this dataset particularly useful for the purposes of this study is that in each household, family members are assigned personal identity numbers, and individual records include also identification numbers of family members. Hence, we are able to link data on adolescents with information about mothers and fathers who co-reside in the same household. We focus on adolescents aged 16-24 living with at least one of the parents. This broad age range corresponds to adolescent development across a variety of societal contexts (Sawyer et al. 2018). The sample is restricted to observations with non-missing information in the background and outcome variables. Our total sample includes 45,992 adolescents.

The dependent variable is life satisfaction of adolescents measured on a scale of 0 (completely dissatisfied) to 10 (completely satisfied). The key explanatory variable measures parental labour market status. We distinguish the following categories: parental employment,

unemployment, inactivity, and we include an additional category of a parent who is absent in the household. The labour market status together with the absence of a parent operationalized this way allows examining separately the role of mother's and father's unemployment, while including adolescents living with lone parents. The former is important because some studies suggest that the relationships between a mother's and a father's unemployment and wellbeing of children differ in magnitude (Moreno-Maldonado et al. 2020). The latter ensures that we do not exclude families where the absence of a parent might trigger most drastic scarcity of resources. We acknowledge that since the labour market status of parents is measured cross-sectionally, it is not possible to examine the effects of long- and short-term unemployment or lagged and anticipatory effects.

The key moderator variables measure educational policies, and in particular, the access to educational allowances. EU-SILC provides measures of individual receipts of educational allowances, and we create a dummy variable identifying adolescents who receive educational allowances versus those who did not. In addition, following the Capability Approach outlined in the previous section, we also examine the role of the opportunity for all adolescents to participate in education *should they want to do so*. Therefore, we generate an aggregate measure of the coverage of these allowances in the whole population of students (defined as individuals participating in education and aged less than 26) in a given country. Next to the measure of the country-level coverage of the allowances, we also add a recently developed indicator of the generosity of this support. This measure is the sum of all types of support, minus tuition fees divided by net average production workers wage. The types of support include: non-repayable grants or scholarships, publicly financed repayable student loans, and family benefits (e.g., tax allowances and credits related to tuition fees). All benefits and fees are calculated after taxes and social security contributions (for details of how this measure is constructed, see Czarnecki, Korpi, and Nelson 2020). This step incorporates insights from the research debates on how both the coverage and generosity of financial support targeting the unemployed may be relevant for wellbeing among the adults (Sjöberg 2010; Voßemer et al. 2018).

We include a battery of individual and family-level control variables, which are likely to determine parental labour market status and simultaneously are correlated with adolescent life satisfaction. We do not include variables that may be determined by parental labour market status or which mediate the impact of parental labour market status on adolescent wellbeing in order to avoid the over-control bias (Elwert and Winship 2014). For the same reason, we only control for labour market status of one of the parents, without adding the labour market status

of another parent as a covariate. Given the insights from research on the interdependence of labour careers within couples (Bröckel, Busch-Heizmann, and Golsch 2015; Vandecasteele and Esche 2015), including employment status of both parents would raise the risk of having collider variables in our regression models. We control for adolescents' age (in linear form), sex (with a dummy variable distinguishing between men and women) and suffering from any chronic illness (a dummy coded one in case of the presence of illness). We control for parental level of education attainment, which follows ISCED classification categories: primary education or less, lower secondary education, upper secondary education, post-secondary non-tertiary education, and tertiary education. This variable is equal to mother's or father's education attainment, whichever is higher. In case of adolescents living with single parents, the level of education is equal to the non-absent parents' education attainment. We distinguish between adolescents, whose both parents were born in the same country where they live, and distinguish them from families where at least one parent was born outside of the country of residence. In addition, we control for survey wave in order to capture the differences in wellbeing across time. The distribution of the control variables is presented in Table A1 in the Annex.

We also include a set of macro-level variables that may be correlated with both parental unemployment status and adolescent wellbeing. Specifically, we control for aggregate country-year specific unemployment rate, because when aggregate unemployment increases, it raises risk of job losses among parents and simultaneously has negative impact on adolescent wellbeing (Johansson et al. 2019). We control for country-level inequality measured with Gini inequality index. Both these measures are derived from the World Bank Databank. We control for the share of services in a country in order to capture the structural differences between countries. Growth in the service sector has been argued to create jobs that are less stable, with higher flexibility but also less employment security. Services typically offer jobs for young people which may imply opportunities for financing participation of education. We construct a measure of the services based on the proportion of employment in service sector based on NACE classification in EU-SILC. We consider additionally both coverage and generosity of out of work benefits that are available at the country level for the unemployed adults (Nelson et al. 2020) for robustness checks. All macro-level covariates were standardized, hence the regression coefficients measure the change in association after a change in a covariate equal to one standard deviation. The distribution of the unstandardized values of the macro-level variables are included in Table A2 in the Annex.

Our data have a hierarchical structure, with observations on adolescents nested within higher level units, i.e., country-years, which are seen as nested in years. This corresponds to the modelling framework shown to reduce the risk of underestimating standard error (Schmidt-Catran and Fairbrother 2016). We estimated three-level multilevel models, where we control for individual characteristics such as having an unemployed parent or receiving educational allowances, and country-year-level characteristics such as coverage of educational allowances, as well as the interactions between these variables. To test hypotheses about how maternal and paternal unemployment are associated with adolescent life satisfaction, we use models without interactions (Model 1 and 2 in Table 1). Next, in we test whether the associations between parental unemployment and adolescent life satisfaction are moderated by receiving educational allowances by including interactions (Model 3 and 4 in Table 1). Finally, in Table 2 we present the evidence on the moderating role of country-level coverage of the educational allowances and the way it reduces the effects of parental unemployment on life satisfaction among adolescents. The models in Table 2 include cross-level interactions, measuring the combined influence of individual-level and contextual-level factors. These models include random slopes for parental employment status, so that coefficients are allowed to vary across country-years. This approach also enables us to make more robust inferences regarding the interactions between the type of parental labour market status and the coverage of educational allowances (Heisig and Schaeffer, 2019). Additional analyses summarised at the end of the next section address concerns related to cross-sectional nature of our measurements, heterogeneity in the associations between policies and adolescent wellbeing or measurement error in the policy indicators as well as the selectivity of the sample.

#### **4. Empirical results**

The first step in our analysis comprises of descriptive evidence on the variation in adolescent wellbeing according to parental labour market status in a pooled sample for all European countries. Figure 1 compares means of life satisfaction scores according to maternal and paternal labour market status, respectively. Compared to adolescents with employed mothers, those with unemployed mothers have 0.77 scores lower life satisfaction. Maternal inactivity is associated with much smaller reduction in life satisfaction by 0.38 scores. Adolescents in household where a mother is absent report life satisfaction lower by 0.51 scores as compared to adolescents where a mother is present and involved in paid work. Regarding paternal status, the pattern is similar. Compared to adolescents with employed fathers, those with unemployed fathers have 1.02 scores lower life satisfaction. Father's inactivity is associated a decrease in

life satisfaction, by 0.37 scores. Being raised by a single mother is related to a reduction in life satisfaction by 0.48 scores.

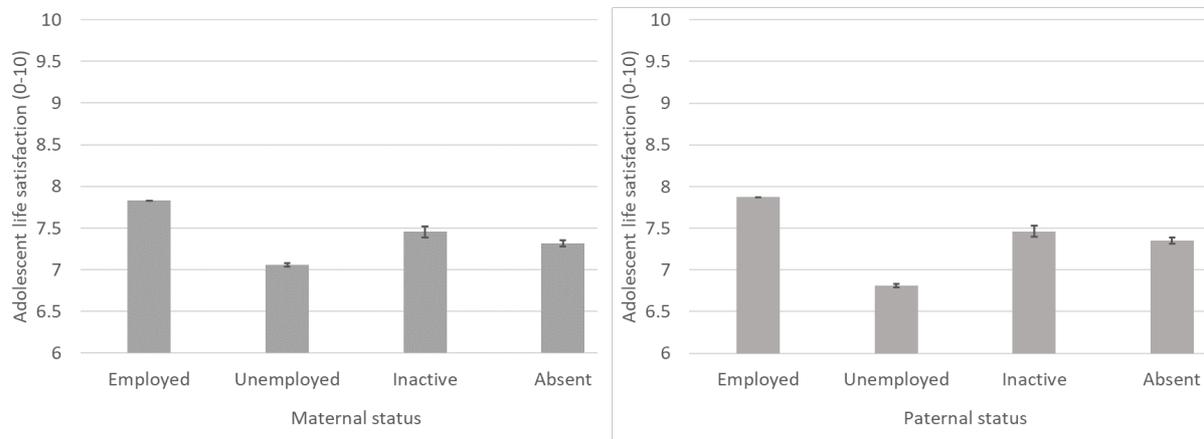


Figure 1. Adolescent life satisfaction according to maternal (left panel) and paternal (right panel) status (with 95% confidence intervals)

Source: EU-SILC Wellbeing Modules 2013 and 2018.

In the next step, we present evidence from multilevel models that control for adolescents' background characteristics, as well as macro-level variables. After controlling for confounders, the associations between parental unemployment and adolescent wellbeing become somewhat weaker. The results presented in Table 1 indicate that in the multivariate setting, maternal unemployment is related to a 0.47 score decrease in life satisfaction of adolescents (Model 1). Adolescents in households where a mother is inactive or absent report life satisfaction lower by 0.19 and 0.34 scores, respectively, compared to adolescents whose mothers are employed. Regarding the role of paternal employment status, adolescents with unemployed fathers report life satisfaction lower by 0.66 scores compared to adolescents with employed fathers (Model 2). Paternal inactivity and absence are related to reductions in life satisfaction by 0.24 and 0.43 scores, respectively. Note that the relationship between parental unemployment and adolescent life satisfaction is rather strong. For instance, it is comparable in strength to chronic illness, which reduces life satisfaction by about 0.55 scores. The results from Model 1 and Model 2 related to Hypothesis 1 are visualised on Figure A1 in the Annex (we used the `-coefplot-` Stata routine for graphing interactions based on multilevel models developed by Jann (2013)).

Further, we examine how receiving educational allowances moderates the negative association between parental unemployment and adolescent wellbeing. The results from models including interactions (Model 3 and 4) suggest that receiving these allowances does not seem to play a role for adolescents with employed parents, but only for those, whose families have

reduced resources due to parental joblessness or absence. While adolescents with unemployed mothers have life satisfaction lower by 0.49 scores when not receiving educational allowances, this negative association is mitigated by 0.24 scores if they receive educational allowances (Model 3). We also observe that receiving educational allowances reduces the otherwise negative association between maternal inactivity or absence with adolescent wellbeing. Similarly, while adolescents whose fathers are unemployed have life satisfaction lower by 0.72 scores when not receiving educational allowances, receiving educational allowances diminishes this association by 0.56 scores (Model 4). The association between father's absence and adolescent wellbeing is reduced when adolescents receive educational allowances, but we do not observe such moderating role in case of paternal inactivity.

The relationships between the control variables and adolescent wellbeing are consistent with previous research and similar across specifications. In brief, we observe negative associations between age and wellbeing among adolescents, we find that female adolescents report higher life satisfaction, whereas adolescents with chronic illness report lower life satisfaction. We also observe positive associations with parental education and negative associations with parental immigrant status. At the macro level, we find that unemployment rate and higher inequality are related to lower life satisfaction among adolescents.

Table 1. Life satisfaction among adolescents according to parental status and receiving educational allowances

	Model 1		Model 2		Model 3		Model 4	
	X = Mother's labour market status		X = Father's labour market status		X = Mother's labour market status		X = Father's labour market status	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
Parental labour market status (ref. employed)								
Unemployed	-0.47***	(0.03)	-0.66***	(0.03)	-0.49***	(0.03)	-0.72***	(0.04)
Inactive	-0.19***	(0.02)	-0.24***	(0.03)	-0.22***	(0.02)	-0.26***	(0.03)
Absent	-0.34***	(0.04)	-0.43***	(0.02)	-0.37***	(0.04)	-0.45***	(0.02)
Educational allowances					0.01	(0.03)	0.04	(0.03)
<i>Parental labour market status # Educational allowances</i>								
Unemployed # allowances					0.24**	(0.10)	0.56***	(0.11)
Inactive # allowances					0.31***	(0.06)	0.10	(0.10)
Absent # allowances					0.22*	(0.12)	0.16***	(0.06)
<i>Control variables</i>								
Age	-0.08***	(0.00)	-0.07***	(0.00)	-0.08***	(0.00)	-0.07***	(0.00)
Women	0.08***	(0.02)	0.09***	(0.02)	0.08***	(0.02)	0.08***	(0.02)
Chronic illness	-0.55***	(0.02)	-0.53***	(0.02)	-0.55***	(0.02)	-0.53***	(0.02)
Parental immigrant status	-0.11***	(0.03)	-0.10***	(0.03)	-0.11***	(0.03)	-0.11***	(0.03)
Parental education (ref. elementary)								
Lower secondary	0.18***	(0.04)	0.16***	(0.04)	0.18***	(0.04)	0.16***	(0.04)
Upper secondary	0.58***	(0.04)	0.53***	(0.04)	0.57***	(0.04)	0.52***	(0.04)
Postsecondary	0.60***	(0.05)	0.56***	(0.05)	0.59***	(0.05)	0.56***	(0.05)
Tertiary	0.77***	(0.04)	0.72***	(0.04)	0.77***	(0.04)	0.71***	(0.04)
Wave: 2018	0.18***	(0.04)	0.18***	(0.04)	0.18***	(0.04)	0.18***	(0.04)
Unemployment rate	-0.11**	(0.06)	-0.11**	(0.06)	-0.11**	(0.06)	-0.11**	(0.06)
Gini coefficient	-0.10**	(0.04)	-0.10**	(0.04)	-0.09**	(0.04)	-0.09**	(0.04)
Share of services	-0.05	(0.06)	-0.06	(0.06)	-0.05	(0.06)	-0.05	(0.06)
Constant	8.77***	(0.11)	8.83***	(0.11)	8.77***	(0.11)	8.83***	(0.11)
St. Dev. (country)	0.39***	(0.05)	0.39***	(0.05)	0.39***	(0.05)	0.39***	(0.05)
St. Dev. (country-year)	0.15***	(0.02)	0.15***	(0.02)	0.15***	(0.02)	0.15***	(0.02)

St. Dev. (residual)	1.68***	(0.01)	1.68***	(0.01)	1.68***	(0.01)	1.68***	(0.01)
N	45,992		45,992		45,992		45,992	

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Source: EU-SILC Wellbeing Modules 2013 and 2018

We have argued that educational policies matter not only for adolescents who directly benefit from these policies, i.e., who are currently receiving educational allowances, but also to other adolescents who may have potential access to such support. We have expected that the mere possibility to benefit from these policies may weaken the otherwise negative association between parental unemployment and adolescent wellbeing, and we address these hypotheses based on results from multilevel models with cross-level interactions (Table 2). Our results indicate that macro-level indicators of availability of educational allowances are not related to weaker relationship between maternal unemployment and adolescent wellbeing (Model 1). However, associations between maternal inactivity or absence and adolescent wellbeing are weaker in countries where adolescents can count on financial support for participation in education. For instance, while adolescents with inactive mothers have wellbeing lower by 0.16 scores as compared to adolescent with employed mothers when the macro-level availability of educational allowances is at the mean level, one standard deviation increase in macro-level availability of educational allowances reduces this gap by 0.14 scores. The negative relationship between maternal absence and wellbeing is almost halved when the macro-level availability of educational allowances increases by one standard deviation. Regarding paternal unemployment, we observe quite strong mitigation (Model 2). While adolescents with unemployed fathers have wellbeing lower by 0.51 scores as compared to adolescent with employed fathers when the macro-level availability of educational allowances is at the mean level, one standard deviation increase in macro-level availability of educational allowances reduces this gap by 0.27 scores. We also observe the moderating role of educational policy with respect to parental inactivity or absence, as the cross-level interactions suggest reductions in otherwise negative associations by 0.14 and 0.08, respectively. The results from Model 1 and Model 2 from Table 2 are visualised on Figure A2 in the Annex.

Table 2. Life satisfaction among adolescents according to parental status and the moderating role of the macro-level coverage of educational allowances

	Model 1 X = Mother's labour market status		Model 2 X = Father's labour market status		Model 3 X = Mother's labour market status		Model 4 X = Father's labour market status	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
<i>Parental labour market status</i>								
Unemployed	-0.46***	(0.07)	-0.51***	(0.08)	-0.49***	(0.07)	-0.48***	(0.09)
Inactive	-0.16***	(0.03)	-0.21***	(0.04)	-0.15***	(0.03)	-0.23***	(0.04)
Absent	-0.31***	(0.05)	-0.41***	(0.03)	-0.30***	(0.05)	-0.42***	(0.03)
<i>Coverage of educational allowances</i>								
	-0.01	(0.07)	-0.00	(0.07)	-0.07	(0.08)	-0.07	(0.07)
<i>Generosity of educational allowances</i>								
					0.09*	(0.05)	0.10**	(0.05)
<i>Parental employment status # Coverage of educational allowances</i>								
Unemployed # coverage	0.06	(0.08)	0.27***	(0.10)	0.03	(0.10)	0.17	(0.11)
Inactive # coverage	0.14***	(0.03)	0.14***	(0.04)	0.13***	(0.04)	0.15***	(0.05)
Absent # coverage	0.15***	(0.05)	0.08***	(0.03)	0.12**	(0.06)	0.09***	(0.03)
<i>Parental employment status # Generosity of educational allowances</i>								
Unemployed # generosity					0.11	(0.07)	0.19**	(0.09)
Inactive # generosity					0.04	(0.03)	0.02	(0.05)
Absent # generosity					0.09	(0.05)	-0.02	(0.03)
<i>Control variables</i>								
Age	-0.08***	(0.00)	-0.07***	(0.00)	-0.08***	(0.00)	-0.07***	(0.00)
Women	0.08***	(0.02)	0.08***	(0.02)	0.08***	(0.02)	0.08***	(0.02)
Chronic	-0.54***	(0.02)	-0.53***	(0.02)	-0.58***	(0.03)	-0.56***	(0.03)
Parental immigrant status	-0.12***	(0.03)	-0.11***	(0.03)	-0.14***	(0.03)	-0.13***	(0.03)
<i>Parental education (ref. elementary)</i>								
Lower secondary	0.18***	(0.04)	0.17***	(0.04)	0.18***	(0.04)	0.17***	(0.04)
Upper secondary	0.58***	(0.04)	0.53***	(0.04)	0.56***	(0.04)	0.51***	(0.04)
Postsecondary	0.60***	(0.05)	0.58***	(0.05)	0.57***	(0.05)	0.55***	(0.05)
Tertiary	0.77***	(0.04)	0.73***	(0.04)	0.74***	(0.04)	0.70***	(0.04)

Wave: 2018	0.17***	(0.04)	0.17***	(0.04)	0.17***	(0.05)	0.17***	(0.05)
Unemployment rate	-0.12**	(0.06)	-0.11*	(0.05)	-0.05	(0.06)	-0.05	(0.06)
Gini coefficient	-0.10**	(0.04)	-0.10**	(0.04)	-0.07	(0.05)	-0.08	(0.05)
Share of services	-0.05	(0.06)	-0.05	(0.06)	-0.11*	(0.06)	-0.11*	(0.06)
Unemployment benefit coverage					0.07	(0.07)	0.06	(0.07)
Unemployment benefit generosity					0.05	(0.06)	0.04	(0.06)
Constant	8.78***	(0.11)	8.83***	(0.11)	8.80***	(0.11)	8.85***	(0.11)
St. Dev. (country)	0.38***	(0.05)	0.36***	(0.05)	0.33***	(0.05)	0.32***	(0.05)
St. Dev. (unemployed)	0.37***	(0.06)	0.50***	(0.07)	0.37***	(0.06)	0.48***	(0.07)
St. Dev. (inactive)	0.16***	(0.04)	0.17***	(0.04)	0.14***	(0.04)	0.17***	(0.05)
St. Dev. (absent)	0.13***	(0.09)	0.12***	(0.03)	0.13**	(0.10)	0.11***	(0.03)
St. Dev. (country-year)	0.15***	(0.03)	0.15***	(0.03)	0.15***	(0.03)	0.16***	(0.03)
St. Dev. (residual)	1.68***	(0.01)	1.67***	(0.01)	1.68***	(0.01)	1.68***	(0.01)
N	45,992		45,992		40,608		40,608	

Source: EU-SILC Wellbeing Modules 2013 and 2018.

Models 3 and 4 in Table 2 show additionally to what degree our results reflect the generosity of educational allowances, and whether they are robust when we control for coverage and generosity of out-of-work benefits that are available to adults. We can observe three interesting patterns. First, while the degree of coverage of educational allowances is not related to wellbeing of adolescents with employed parents, the generosity measures show some positive associations, although they are not very strong (0.09-0.10 scores). Second, after controlling for generosity of educational allowances, their coverage turns out to be less strongly related to life satisfaction among adolescents, suggesting that both these policy dimensions play an important role. Finally, the interactions with maternal unemployment remain similar in this model specification, but the associations with paternal unemployment change in a way indicating that both coverage and generosity of allowances matter when it comes to mitigating father's unemployment.

We carried out a range of additional analyses to check the robustness of the results. First, given the cross-sectional nature of the key explanatory variable, we tested whether lagging parental employment status affects our results. To this end, we derived the retrospective measures of parental employment status and used them instead of contemporaneous measures. The methodological details of this step as well as the results are presented in the Online Supplement in Table S1. This analysis confirmed that our conclusions regarding the associations between parental unemployment and adolescent wellbeing remain unchanged, but the interactions between maternal unemployment and educational allowances turned out to be weak and not statistically significant. Note that this analysis excluded Nordic countries because retrospective information on parental labour market status was not available in those countries.

In further sensitivity analyses, we considered the fact that our measure of coverage of educational allowances may be measured with some error. Using errors-in-variables models (Wooldridge 2010), we showed that the measurement error might attenuate our estimates, as the interactions between parental status and policy indicators are somewhat stronger than in our main analysis (Table S2 in the Online Supplement).

Finally, our analyses exclude individuals who live without their parents, because when young adults live independently, it is not possible to observe the labour market status of their parents. This step is also relevant from the theoretical perspective. As young people establish their own households, financial mechanisms behind the intergenerational crossover effects no longer hold. The mechanisms related to deterioration of parent-child relations after parental job loss also may not apply, because when young adults move out of parental home, joint

interactions become less common. Hence, the effects of parental unemployment may be weak or non-existent for non-resident adolescents. However, the literature on leaving parental home recognizes that this process often takes many steps, and often involves the stage where adolescents live temporarily away, for instance in a student dormitory (Nilsson and Strandh 1999) but still remain members of parental household. During such stage adolescents may continue to receive financial support from parents, and the frequency of interactions between parents and children might be relatively more frequent. Hence, this in-between stage might be quite relevant for assessment of intergenerational crossover effects (Kalmijn and Liefbroer 2011). We estimated Heckman selection models in order to examine (1) whether the probability of living temporarily outside of parental home is associated with parental unemployment and (2) how correction for sample selection changes the estimates. Our results in Table S3 in the Online Supplement show that correcting for the potential selection bias renders estimates that go in the same direction as reported in our main analysis. The associations are stronger and statistically significant both for maternal and paternal unemployment as well as for the interactions between parental unemployment and educational policies.

## **5. Discussion**

Negative consequences of parental unemployment on the wellbeing of children and youth have long raised concerns (Andersen 2021; Brand and Thomas 2014; Nikolova and Nikolaev 2021; Powdthavee and Vernoit 2013). As the pandemic has simultaneously triggered increases in employment uncertainty among parents, and posed threats to wellbeing and mental health among adolescents (Cowie and Myers 2021; Patrick et al. 2020), advancing knowledge on how to buffer families against such changes has become even more urgent. The variation in the European institutional settings that play a protective function for families calls for comparative studies (Lindemann and Gangl 2020). Our study contributes to the literature by bringing comparative evidence on how policies may moderate the associations between parental unemployment and adolescent wellbeing. Building on the theoretical insights from the Capability Approach (Sen 2006), we examine the wellbeing of adolescents across countries with different educational policies.

Our results indicate that, on average, both maternal and paternal unemployment are negatively associated with adolescent wellbeing in Europe. However, we also find that there is scope for reducing such negative associations through policies that support adolescents' participation in education and foster adolescent autonomy reduce the intergenerational crossover effects. Receiving educational allowances is related to relatively weaker reductions

in wellbeing among adolescents with unemployed parents. These interactions are statistically significant in case of paternal unemployment, but less consistently so in case of maternal unemployment. Furthermore, when adolescents live in a country with a high level of coverage of educational allowances, the negative association between paternal unemployment and adolescent wellbeing is weaker.

The extent to which policies can mitigate the associations between parental unemployment and adolescent wellbeing require some further comments in relation to parental gender. On the one hand, our findings suggest that public resources thought to foster adolescents' autonomy compensate less for maternal than for paternal unemployment. On the other hand, some of our sensitivity analyses suggest that the associations with maternal and paternal unemployment are both statistically significant and somewhat stronger than it appears from our main analyses. If we consider the fact that adolescents, who receive educational allowances are less likely to live with their parents, and they also benefit more from such support in terms of wellbeing, the interactions between parental unemployment and receiving educational allowances are even stronger. The same applies to the estimates of the interactions between parental unemployment and the coverage of educational allowances. All in all, our findings call for more in-depth, longitudinal investigations on how the process of leaving parental home alters the relationship between parental resources and adolescents' wellbeing, and how policies increasing youth economic and residential autonomy might benefit the youngest generations.

In addition to examining the associations between parental unemployment and adolescent wellbeing, we also provide evidence on the wellbeing among adolescents, whose parents are economically inactive or who were absent from the household. Both situations refer to the experience of growing up in a family deprived from the benefits offered by parental income from paid work. Distinguishing between inactivity and parental absence and their consequences lead to interesting comparisons. Parental economic inactivity may be driven by permanent disability, a decision to give up work or business, or involvement in domestic tasks and care responsibilities. Thus, it reflects situations when parents have to some degree accepted the fact that they are not involved in paid work or got discouraged from searching for it. Families with absent parents may reflect more substantial and permanent scarcity of resources, although they may also mean less exposure to harmful interactions related to unemployment that may otherwise affect wellbeing of family members. Of course, we need to keep in mind that parents who are absent from the household due to prior separation, may still contribute financially to raising children and might still have regular meetings with their children (even if less frequent

as compared to parents who are present in the household). Generally, the associations between parental economic inactivity as well as parental absence and adolescent wellbeing operate in the same direction and interact similarly with policies, as in case of parental unemployment. However, these associations are not always statistically significant, which may be to some degree related to a heterogeneity of reasons why parents are economically inactive or absent in the households. Future research should follow up on the insights from our study and examine the benefits from educational policies for more specific categories of families, such as adolescents with parents who suffered from some debilitating illness or adolescents with divorced parents.

Our study has limitations. Unemployment can be short-term or long-term, for some parents it may be a recurring experience whereas for others just a single episode. There is a growing body of research suggesting that these different patterns of how unemployment fits into the whole parental labour market career trajectory may have diverging repercussions for the wellbeing of the unemployed and their family members (Blom and Perelli-Harris 2020; Cheng et al. 2020; Sleskova et al. 2006). Our study also cannot take into account all the aspects of parental economic uncertainty or insecurity that typically precedes a job loss and may be relevant for wellbeing. However, while our data give us the advantage for international comparisons, due to their cross-sectional nature, it is not possible to scrutinize simultaneously the longitudinal aspects. Our study focuses more on the international comparative dimensions than on the processual dimension. Likewise, we cannot control for all individual- or macro-level factors that may affect individual receipts of educational allowances (such as conscientiousness of an adolescent) or the coverage of allowances in a country (such as the administrative burden of claiming benefits that are available from the state). Additionally, while our analysis incorporates different forms of institutionalised support of which families benefit, we cannot consider multiple forms of informal support, such as material and non-material transfers from relatives. These transfers may intensify when parental resources get more restricted, and the degree of this compensatory responses within families may vary across cultures and contexts.

Notwithstanding these limitations, our paper makes a number of important contributions. The solid evidence on the existing relationships between parental unemployment and the wellbeing of children, calls for a better assessment of the societal costs of unemployment. The variation in these relationships across countries with diverse educational policies strongly points at the need of designing multidimensional policy measures to alleviate the negative

effects of parental unemployment. The margin of action of labour market policies can be augmented with thoughtful educational policies addressing the youth. We explore the role of the educational policies at two levels: individual- and country-level, and we show that both levels are relevant for understanding the role of the educational policies for adolescent wellbeing. Like we did for educational policies, future research shall include the interaction of policies in other life course relevant domains for youth wellbeing, such as housing policies. More generally, our empirical evidence urges the need to move from a fragmented and compartmentalized welfare action to holistic welfare policies targeting the life course as a complex process with multiple interactions across life domains and individuals (Bernardi, Huinink, and Settersten 2019).

## References

- Anand, Paul, Graham Hunter, and Ron Smith. 2005. "Capabilities and Well-Being: Evidence Based on the Sen–Nussbaum Approach to Welfare." *Social Indicators Research* 74(1):9-55.
- Andersen, Signe Hald. 2008. "The Short- and Long-Term Effects of Government Training on Subjective Well-being." *European Sociological Review* 24(4):451-62.
- Andersen, Signe Hald. 2011. "Common Genes or Exogenous Shock? Disentangling the Causal Effect of Paternal Unemployment on Children's Schooling Efforts." *European Sociological Review* 29(3):477-88.
- Andersen, Signe Hald. 2021. "Association of Youth Age at Exposure to Household Dysfunction With Outcomes in Early Adulthood." *JAMA Network Open* 4(1):e2032769-e69.
- Bernardi, Laura, Johannes Huinink, and Richard Settersten. 2019. "The Life Course Cube: A Tool for Studying Lives." *Advances in life course research* 41:100258.
- Billari, Francesco C, Nicole Hiekel, and Aart C Liefbroer. 2019. "The Social Stratification of Choice in the Transition to Adulthood." *European Sociological Review* 35(5):599-615.
- Blom, Niels, and Brienna Perelli-Harris. 2020. "Temporal Dimensions of Unemployment and Relationship Happiness in the United Kingdom." *European Sociological Review* 37(2), 253-270.
- Blossfeld, Hans-Peter. 2005. *Globalization, uncertainty and youth in society*. London: London: Routledge.
- Brand, Jennie E, and Juli Simon-Thomas. 2014. "Job Displacement among Single Mothers: Effects on Children's Outcomes in Young Adulthood." *American Journal of Sociology* 119(4):955-1001.
- Brand, Jennie E. 2015. "The Far-Reaching Impact of Job Loss and Unemployment." *Annual review of sociology* 41:359–75.
- Brand, Jennie E., and Juli Simon Thomas. 2014. "Job displacement among single mothers: effects on children's outcomes in young adulthood." *AJS; American journal of sociology* 119(4):955-1001.
- Bröckel, Miriam, Anne Busch-Heizmann, and Katrin Golsch. 2015. "Headwind or Tailwind: Do Partners' Resources Support or Restrict Promotion to a Leadership Position in Germany?" *European Sociological Review* 31(5):533-45.

- Buchmann, Marlis C., and Irene Kriesi. 2011. "Transition to Adulthood in Europe." *Annual Review of Sociology* 37(1):481-503.
- Carr, Ewan, and Heejung Chung. 2014. "Employment insecurity and life satisfaction: The moderating influence of labour market policies across Europe." *Journal of European Social Policy* 24(4):383-99.
- Cheng, Siwei, Kyriaki Kosidou, Bo Burström, Charlotte Björkenstam, Anne R Pebley, and Emma Björkenstam. 2020. "Precarious childhoods: Childhood Family Income Volatility and Mental Health in Early Adulthood." *Social Forces* 99(2):672-99.
- Cowie, Helen, and Carrie-Anne Myers. 2021. "The Impact of the COVID-19 Pandemic on the Mental Health and Well-Being of Children and Young People." *Children & Society* 35(1):62-74.
- Czarnecki, Krzysztof, Tomas Korpi, and Kenneth Nelson. 2020. "Student Support and Tuition Fee Systems in Comparative Perspective." *Studies in Higher Education*: 46(11), 2152-2166.
- De Smedt, Marleen. 2013. "Measuring Subjective Issues of Well-Being and Quality of Life in the European Statistical System." *Social Indicators Research* 114(1):153-67.
- Elwert, Felix, and Christopher Winship. 2014. "Endogenous Selection Bias: The Problem of Conditioning on a Collider Variable." *Annual Review of Sociology* 40:31-53.
- Fryer, D 1986. "Employment Deprivation and Personal Agency during Unemployment: A Critical Discussion of Jahoda's Explanation of the Psychological Effects of Unemployment." *Social Behaviour* 1:3-23.
- Graham, Carol, and Milena Nikolova. 2015. "Bentham or Aristotle in the Development Process? An Empirical Investigation of Capabilities and Subjective Well-Being." *World Development* 68:163-79.
- Haapakorva, Pasi, Tiina Ristikari, and Mika Gissler. 2017. "The Impact of Parental Employment Trajectories on the Children's Early Adulthood Education and Employment Trajectories in the Finnish Birth Cohort 1987." *Longitudinal and Life Course Studies* 8(4):342-64.
- Haushofer, Johannes, Matthieu Chemin, Channing Jang, and Justin Abraham. 2020. "Economic and Psychological Effects of Health Insurance and Cash Transfers: Evidence from a Randomized Experiment in Kenya." *Journal of Development Economics* 144:102416.
- Högberg, Björn. 2019a. "Educational Policies and Social Inequality in Well-Being among Young Adults." *British Journal of Sociology of Education* 40(5):664-81.

- Högberg, Björn. 2019b. "Transitions from Unemployment to Education in Europe: The Role of Educational Policies." *Journal of Social Policy*: 48(4), 699-720.
- Högberg, Björn, Jonas Voßemer, Michael Gebel, and Mattias Strandh. 2019. "Unemployment, Well-being, and the Moderating Role of Education Policies: A Multilevel Study." *International Journal of Comparative Sociology* 60(4):269-91.
- Iacovou, Maria. 2010. "Leaving Home: Independence, Togetherness and Income." *Advances in Life Course Research* 15(4):147-60.
- Inguglia, Cristiano, Sonia Inguglia, Francesca Liga, Alida Lo Coco, and Maria Grazia Lo Cricchio. 2015. "Autonomy and Relatedness in Adolescence and Emerging Adulthood: Relationships with Parental Support and Psychological Distress." *Journal of Adult Development* 22(1):1-13.
- Jann, Ben. 2013. "COEFPLOT: Stata module to plot regression coefficients and other results." edited by Boston College Department of Economics: Statistical Software Components.
- Johansson, Klara, Solveig Petersen, Björn Högberg, Gonneke WJM Stevens, Bart De Clercq, Diana Frasilho, Frank Elgar, and Mattias Strandh. 2019. "The Interplay between National and Parental Unemployment in Relation to Adolescent Life Satisfaction in 27 Countries: Analyses of Repeated Cross-Sectional School Surveys." *BMC Public Health* 19(1):1-14.
- Kalil, Ariel, and Kathleen M. Ziol-Guest. 2005. "Single Mothers' Employment Dynamics and Adolescent Well-Being." *Child Development* 76(1):196-211.
- Kalil, Ariel, and Kathleen M. Ziol-Guest. 2008. "Parental Employment Circumstances and Children's Academic Progress." *Social Science Research* 37(2):500–15.
- Kalmijn, Matthijs, and Aart C. Liefbroer. 2011. "Nonresponse of Secondary Respondents in Multi-Actor Surveys: Determinants, Consequences, and Possible Remedies." *Journal of family issues* 32(6):735-66.
- Layte, Richard. 2021. "Does Family Economic Strain Reduce Child Educational Achievement? A Longitudinal Assessment Using the Great Recession in Ireland." *European Sociological Review* (online advanced access: <https://doi.org/10.1093/esr/jcab049>).
- Lehti, Hannu, Jani Erola, and Alekski Karhula. 2019. "The Heterogeneous Effects of Parental Unemployment on Siblings' Educational Outcomes." *Research in Social Stratification and Mobility* 64:100439.

- Lindemann, Kristina, and Markus Gangl. 2019. "The Intergenerational Effects of Unemployment: How Parental Unemployment Affects Educational Transitions in Germany." *Research in Social Stratification and Mobility* 62:100410.
- Lindemann, Kristina, and Markus Gangl. 2020. "Parental Unemployment and the Transition into Tertiary Education: Can Institutions Moderate the Adverse Effects?" *Social Forces* 99(2):616-47.
- Masarik, April S., and Rand D. Conger. 2017. "Stress and Child Development: A Review of the Family Stress Model." *Current Opinion in Psychology* 13:85-90.
- McLeod, Jane D., and Michael J. Shanahan. 1993. "Poverty, Parenting, and Children's Mental Health." *American Sociological Review* 58(3):351-66.
- Mooi-Reci, Irma, Bart Bakker, Matthew Curry, and Mark Wooden. 2019. "Why Parental Unemployment Matters for Children's Educational Attainment: Empirical Evidence from The Netherlands." *European Sociological Review* 35(3):394-408.
- Moreno-Maldonado, C, A Jiménez-Iglesias, I Camacho, F Rivera, C Moreno, and MG Matos. 2020. "Factors Associated with Life Satisfaction of Adolescents Living with Employed and Unemployed Parents in Spain and Portugal: A Person Focused Approach." *Children and Youth Services Review* 110:104740.
- Moustgaard, Heta, Mauricio Avendano, and Pekka Martikainen. 2018. "Parental Unemployment and Offspring Psychotropic Medication Purchases: A Longitudinal Fixed-Effects Analysis of 138,644 Adolescents." *American Journal of Epidemiology* 187(9):1880-88.
- Nelson, Kenneth, Daniel Fredriksson, Tomas Korpi, Walter Korpi, Joakim Palme, and Ola Sjöberg. 2020. "The Social Policy Indicators (SPIN) Database." *International Journal of Social Welfare* 29(3):285-89.
- Nikolova, Milena, and Boris N Nikolaev. 2021. "Family Matters: The Effects of Parental Unemployment in Early Childhood and Adolescence on Subjective Well-Being Later in Life." *Journal of Economic Behavior & Organization* 181:312-31.
- Nilsson, Karina, and Mattias Strandh. 1999. "Nest Leaving in Sweden: The Importance of Early Educational and Labor Market Careers." *Journal of Marriage and the Family*: 61(4):1068-1079.
- Patrick, Stephen W, Laura E Henkhaus, Joseph S Zickafoose, Kim Lovell, Alese Halvorson, Sarah Loch, Mia Letterie, and Matthew M Davis. 2020. "Well-Being of Parents and Children during the COVID-19 Pandemic: A National Survey." *Pediatrics* 146(4).

- Peter, Frauke. 2016. "The Effect of Involuntary Maternal Job Loss on Children's Behaviour and Non-Cognitive Skills." *Labour Economics* 42:43-63.
- Ponnet, Koen, Karla Van Leeuwen, Edwin Wouters, and Dimitri Mortelmans. 2015. "A Family System Approach to Investigate Family-Based Pathways Between Financial Stress and Adolescent Problem Behavior." *Journal of Research on Adolescence* 25(4):765-80.
- Powdthavee, Nattavudh, and James Vernoit. 2013. "Parental Unemployment and Children's Happiness: A Longitudinal Study of Young People's Well-Being in Unemployed Households." *Labour Economics* 24:253-63.
- Rege, Mari, Kjetil Telle, and Mark Votruba. 2011. "Parental Job Loss and Children's School Performance." *The Review of Economic Studies* 78(4):1462-89.
- Reynolds, John R., and Catherine E. Ross. 1998. "Social Stratification and Health: Education's Benefit beyond Economic Status and Social Origins." *Social Problems* 45(2):221-47.
- Sawyer, Susan M, Peter S Azzopardi, Dakshitha Wickremarathne, and George C Patton. 2018. "The Age of Adolescence." *The Lancet Child & Adolescent Health* 2(3):223-28.
- Schmidt-Catran, Alexander W, and Malcolm Fairbrother. 2016. "The Random Effects in Multilevel Models: Getting Them Wrong and Getting Them Right." *European Sociological Review* 32(1):23-38.
- Seligman, Martin E. P., Peter Railton, Roy F. Baumeister, and Chandra Sripada. 2013. "Navigating Into the Future or Driven by the Past." *Perspectives on Psychological Science* 8(2):119-41.
- Sen, Amartya. 2006. "Poverty and Human Functioning: Capabilities as Fundamental Entitlements." in *Poverty and Inequality*, edited by David B. Grusky and Ravi Kanbur. Stanford Stanford University Press.
- Sjöberg, Ola. 2010. "Social Insurance as A Collective Resource: Unemployment Benefits, Job Insecurity and Subjective Well-Being in A Comparative Perspective." *Social Forces* 88(3):1281-304.
- Sleskova, Maria, Ferdinand Salonna, Andrea Madarasova Geckova, Iveta Nagyova, Roy E Stewart, Jitse P van Dijk, and Johan W Groothoff. 2006. "Does Parental Unemployment Affect Adolescents' Health?" *Journal of Adolescent Health* 38(5):527-35.

- Steckermeier, Leonie C. 2021. "The Value of Autonomy for the Good Life. An Empirical Investigation of Autonomy and Life Satisfaction in Europe." *Social Indicators Research* 154(2):693-723.
- Strandh, Mattias. 2000. "Different Exit Routes from Unemployment and their Impact on Mental Well-Being: The Role of the Economic Situation and the Predictability of the Life Course." *Work, Employment and Society* 14(3):459-79.
- van Oorschot, Wim, and Heejung Chung. 2014. "Feelings of Dual-Insecurity among European Workers: A Multi-Level Analysis." *European Journal of Industrial Relations* 21(1):23-37.
- Vandecasteele, Leen, and Frederike Esche. 2015. "Women's Labour Force Exit: the Role of her Partner's Socio-Economic Position." *Journal of Applied Social Science Studies* 135(1):35-45.
- Voßemer, Jonas, Michael Gebel, Kadri Täht, Marge Unt, Björn Högberg, and Mattias Strandh. 2018. "The Effects of Unemployment and Insecure Jobs on Well-Being and Health: The Moderating Role of Labor Market Policies." *Social Indicators Research* 138(3):1229-57.
- Wooldridge, Jeffrey M. 2010. *Econometric analysis of cross section and panel data*: MIT press.

**Annex***Table A1. Descriptive statistics*

Variable	Mean or %	(Std. Dev.)
Life satisfaction	7.7	(1.80)
Age	20.2	(2.26)
Women	48%	
Chronic illness	12%	
Parental immigrant background	14%	
Parental elementary education	5%	
Parental lower secondary education	13%	
Parental upper secondary education	44%	
Parental postsecondary education	5%	
Parental tertiary education	33%	
Mother employed	67%	
Mother unemployed	8%	
Mother inactive	21%	
Mother absent	4%	
Father employed	66%	
Father unemployed	6%	
Father inactive	8%	
Father absent	20%	
Educational allowances	12%	

Source: EU-SILC Wellbeing Modules 2013 and 2018.

*Table A2. Distribution of maternal and paternal labour market status within countries*

	Maternal status, %				Paternal status, %			
	Employed	Unemployed	Inactive	Absent	Employed	Unemployed	Inactive	Absent
AT	77	4	16	4	69	3	7	22
BE	64	5	23	8	57	4	9	31
BG	74	12	9	6	64	11	6	19
CH	73	1	22	3	75	1	5	19
CY	64	12	22	2	68	11	6	15
CZ	82	5	10	3	73	3	3	21
DE	77	3	15	4	71	2	8	20
DK	86	5	5	5	68	2	5	25
EE	80	5	12	2	67	4	6	22
EL	50	11	36	3	63	11	13	13
ES	55	18	23	4	61	12	7	20
FI	85	4	6	5	72	3	9	17
FR	70	6	16	8	65	3	6	26
HR	59	18	18	4	56	11	16	17
HU	70	8	18	4	58	6	10	26
IE	52	9	36	4	55	9	9	27
IS	77	1	18	3	80	1	1	18
IT	59	6	33	3	68	4	10	18
LT	78	9	10	3	63	5	7	25
LU	64	3	30	4	61	2	15	23
LV	74	10	10	6	48	4	6	42
MT	43	0	55	3	72	1	11	15
NL	76	2	18	4	80	1	5	14
NO	78	2	13	7	71	1	6	22
PL	71	8	18	2	67	5	9	19
PT	67	14	16	3	61	10	7	22
RO	67	1	29	4	77	1	9	12
RS	56	24	15	5	59	21	6	14
SE	81	4	9	6	72	3	5	21
SI	78	9	8	4	67	6	6	20
SK	79	9	10	2	70	5	6	19
UK	71	1	25	3	58	2	9	30
Total	67	8	21	4	66	6	8	20

Source: EU-SILC Wellbeing Modules 2013 and 2018

*Table A3. Distribution of country-year-level covariates, country-level means*

Country	Unemployment rate	Gini coefficient	Share of services	Coverage of educational allowances	Generosity of educational allowances	Coverage of out-of-work benefits	Generosity of out-of-work benefits	Financial aid for students
AT	5.2	30.1	5.0	10.3	0.4	63.6	115.8	15.6
BE	7.3	27.5	6.3	0.9	n.a.	90.6	111.8	16.4
BG	9.3	38.1	4.7	4.9	-0.4	77.0	33.3	17.5
CH	4.6	32.0	6.6	8.3	n.a.	72.6	59.4	9.9
CY	11.5	33.3	6.6	12.6	0.1	61.0	33.9	11.3
CZ	5.7	25.7	5.0	5.6	0.3	77.0	36.7	12.1
DE	4.5	14.9	5.8	12.3	0.6	59.0	222.1	27.6
DK	6.9	28.2	6.7	49.8	0.7	85.4	60.9	95.2
EE	8.1	31.8	5.0	16.8	0.5	54.6	40.5	19.1
EL	22.4	35.0	5.5	0.6	0.1	38.1	27.0	1.0
ES	20.9	35.0	6.1	17.2	0.4	78.0	49.5	27.5
FI	8.1	27.2	5.8	38.7	0.5	67.6	154.7	87.3
FR	9.4	32.4	6.0	17.0	0.4	68.5	99.6	31.2
HR	13.6	31.4	5.6	9.2	n.a.	75.5	21.0	4.7
HU	8.7	30.7	5.1	15.3	0.7	68.7	20.5	39.3
IE	10.7	32.2	6.0	13.2	0.4	55.5	126.9	43.0
IS	6.0	26.8	6.8	9.0	0.6	81.0	193.0	n.a.
IT	11.0	35.6	5.8	5.6	0.1	72.9	42.6	10.9
LT	11.6	35.7	5.2	10.2	0.5	84.5	24.4	16.6
LU	5.4	34.4	7.3	29.8	1.0	83.6	46.1	67.2
LV	12.9	35.3	5.9	22.0	0.0	67.4	27.1	6.3
MT	4.6	29.3	7.1	87.4	0.5	44.8	42.9	94.8
NL	5.4	28.0	6.5	43.7	0.7	73.6	66.8	39.8
NO	3.6	26.3	6.0	78.1	0.5	69.5	60.6	52.3

PL	8.6	32.0	4.4	6.6	0.4	71.0	19.7	23.1
PT	11.8	34.8	5.8	11.3	0.7	75.0	42.9	19.9
RO	6.1	36.3	3.1	2.3	0.0	44.3	41.2	32.7
RS	18.1	37.8	4.9	4.5	n.a.	n.a.	9.0	n.a.
SE	7.4	28.2	6.8	86.8	0.7	68.2	62.8	75.2
SI	7.8	14.1	5.7	49.2	0.3	84.5	36.8	24.4
SK	11.6	25.0	4.9	2.7	0.3	62.4	12.2	12.4
UK	5.6	34.1	6.7	10.6	0.6	50.7	57.7	20.6

Source: Unemployment rate and Gini coefficient World Bank; Share of services in the economy and Coverage of educational allowances: own estimates based on EUSILC microdata 2013 and 2018; Generosity of educational allowances: The Student Support and Fees Dataset (SSFD), SPIN database. Coverage of out-of-work benefits and Generosity of out-of-work benefits: OECD. Financial aid for students: Eurydice “National Student Fee and Support Systems in European Higher Education” report series, own compilation.

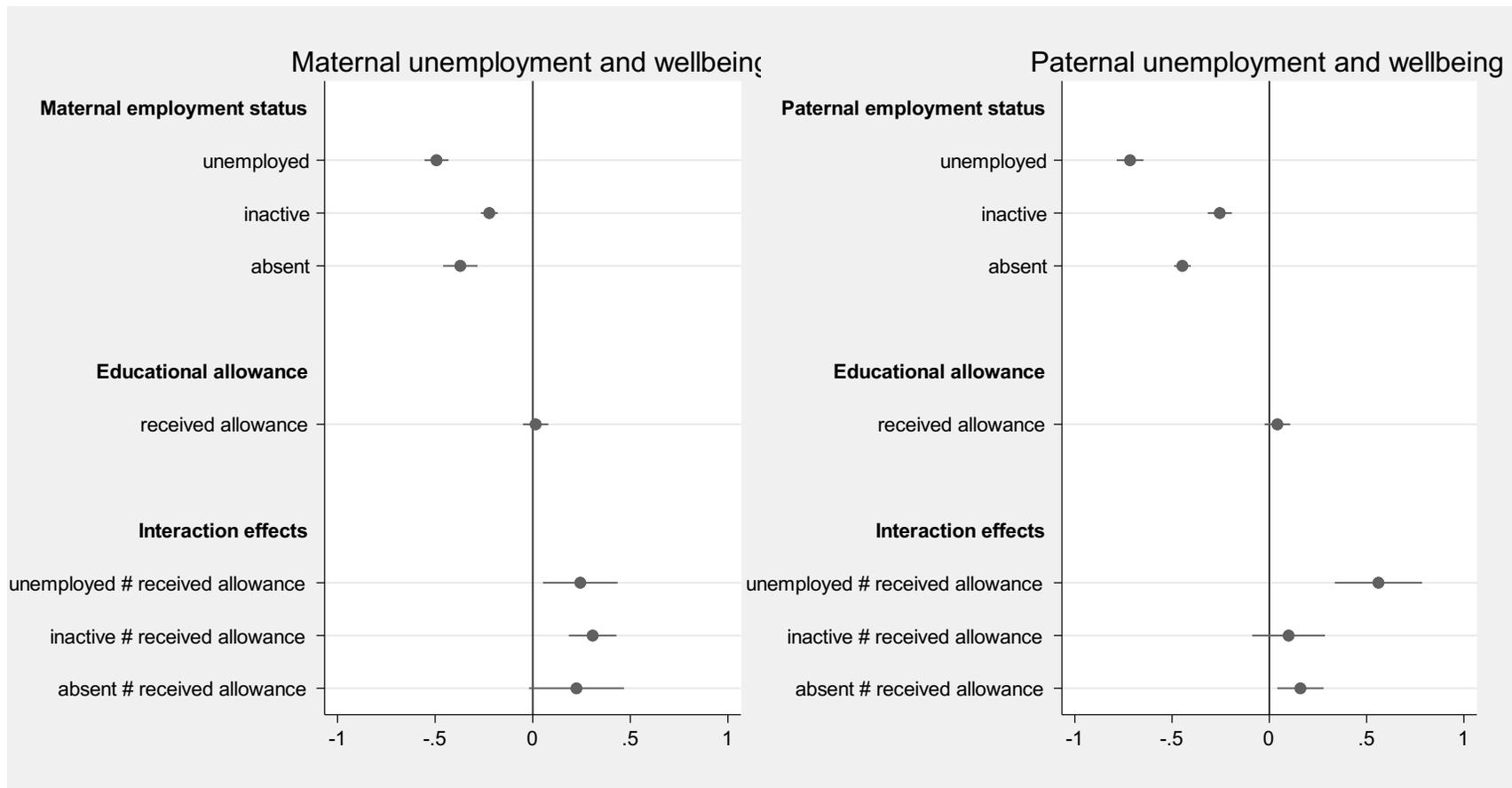


Figure A1. Parental labour market status, receipts of educational allowances and adolescent wellbeing

Source: EU-SILC Wellbeing Modules 2013 and 2018. Control variables as in Model 1 and 2 in Table 1.

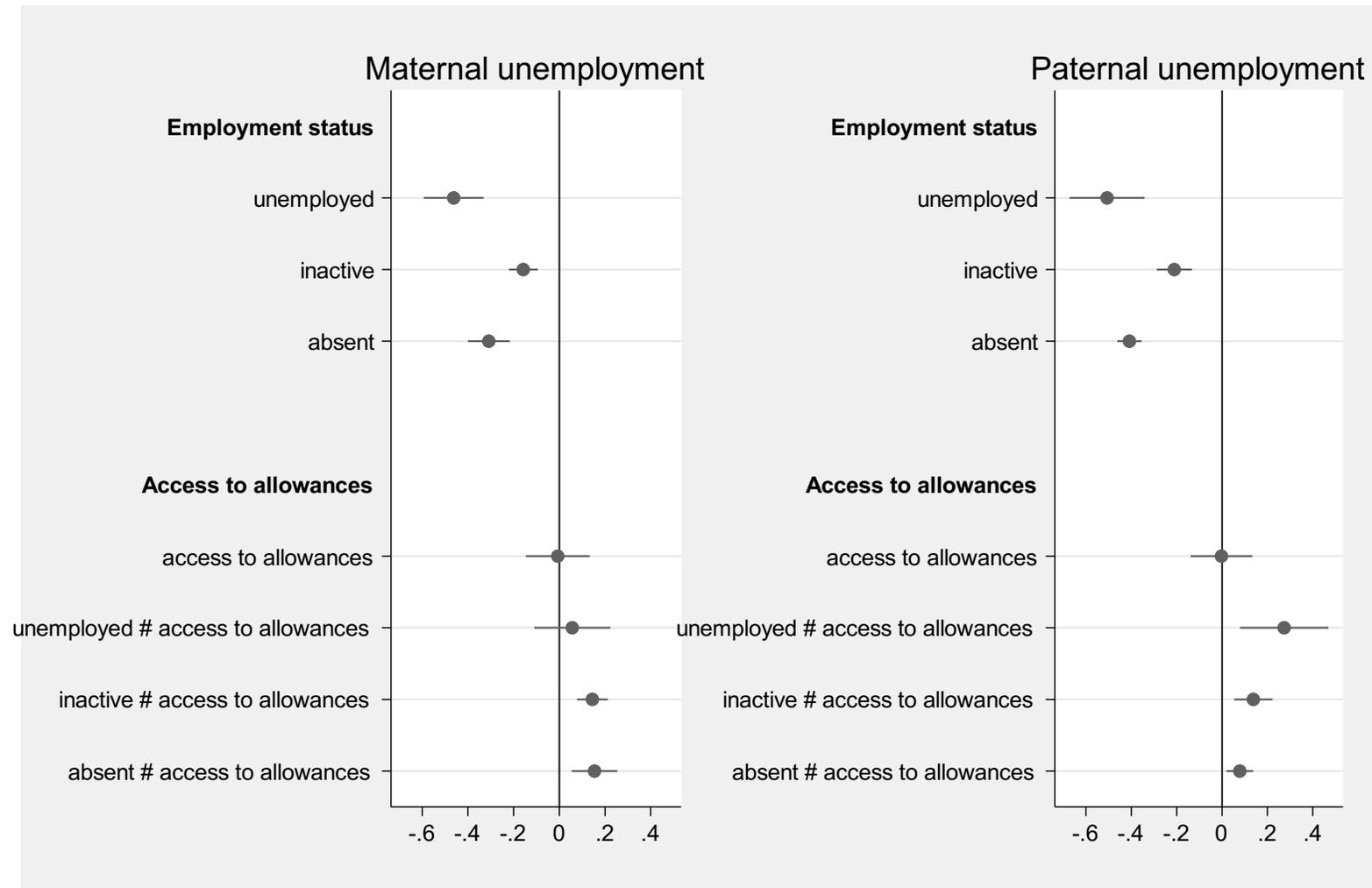


Figure A2. Parental labour market status, access to educational allowances and adolescent wellbeing

Source: Source: EU-SILC Wellbeing Modules 2013 and 2018. Control variables as in Model 1 and 2 in Table 2.

## Online Supplementary Material

### Sensitivity analyses

Additional analyses presented in this online supplement address concerns related to cross-sectional nature of our measurements, heterogeneity in the effects of policies or error in their measurement as well as the selectivity of the sample.

Our main analyses presented in the manuscript draw on cross-sectional data. As a robustness check, we lag parental status by one year, so that parental unemployment is measured one year before the measurement of well-being among adolescents. In order to obtain retrospective measures of parental status, we use EU-SILC retrospective calendar data on labour market status. The results presented in Table S1 confirm that our conclusions regarding the associations between parental unemployment and adolescent wellbeing remain correct, but the interactions between maternal unemployment and educational allowances turned out to be weak and not statistically significant. Note that these analyses largely exclude the Nordic countries, where data on labour market status of respondents are collected partly with use of national registers, and hence detailed retrospective monthly information of labour market activity of all family members are not available for this group of countries. This is also why the overall sample size is smaller in the analysis presented in Table S1 as compared to the main analysis in the paper.

A high degree of heterogeneity in the measured country-specific variable (here, the coverage of educational allowances) can lead to measurement errors. Fitting the models with error-prone measures of the latent phenomena may yield inconsistent estimators of all model parameters. Unfortunately, it is not possible to come up with indicators that measure the availability of educational allowances without any error. However, it is possible to test how problematic is this measurement error. The so called errors-in-variables models are one solution to this problem (Wooldridge 2010). Such models can be estimated if there are at least two alternative measures of the same underlying latent variable. In that case, one imperfect indicator is used as an instrumental variable for another. In order to account for the measurement error, we adopt this approach when assessing the moderating role of the coverage of educational allowances by using an indicator of the financial aid for students derived from Eurydice database (see Table A3 in the Annex). Note that because the data in the alternative indicator from Eurydice were missing for Serbia, the sample used in this analysis is slightly reduced compared to the main analysis. The results from the errors-in-variables models presented in Table S2 confirm our key

conclusions that the negative relationship between parental unemployment and adolescent wellbeing is weaker when the coverage of educational allowances is higher.

Finally, our analyses exclude individuals who live without parents. Previous research on leaving parental home recognizes that this process often takes many steps, and often involves an in-between stage where adolescents live temporarily away, for instance in a student dormitory, but still remain members of parental household and continue to receive financial support from parents (Nilsson and Strandh 1999). During such stage, the frequency of interactions between parents and children might be also relatively more frequent. Hence, this in-between stage might be quite relevant for assessment of intergenerational crossover effects and excluding adolescents living temporarily out of parental home may lead to sample selection bias (Kalmijn and Liefbroer 2011). The household roster in the EU-SILC data include household-level information on family members who are temporarily away. We estimate Heckman selection models in order to examine (1) whether the probability of living temporarily outside of parental home is associated with unemployment and receiving educational allowances (as well as interactions between the two) and (2) how correction for sample selection changes the estimates. Since it was not possible to find a variable which affects the probability of living temporarily away from home but is uncorrelated with adolescent wellbeing, these models do not include an exclusion restriction and hence estimation results rely on the assumptions that the errors in the selection and outcome equations are jointly normally distributed. The results in Table S4 imply that when we correct for the problem of sample selectivity using this approach, the effects go in the same direction and they are somewhat stronger than our main estimates from Table 1 and Table 2.

Table S1. Life satisfaction among adolescents according to lagged parental status and the moderating role of macro-level access to education-related allowances

	Model 1		Model 2		Model 3		Model 4	
	X = Mother's		X = Father's		X = Mother's		X = Father's	
	labour market status		labour market status		labour market status		labour market status	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
<i>Parental status (ref. Employed)</i>								
Unemployed	-0.46***	(0.03)	-0.67***	(0.04)	-0.44***	(0.09)	-0.47***	(0.09)
Inactive	-0.21***	(0.02)	-0.27***	(0.03)	-0.15***	(0.04)	-0.23***	(0.05)
Absent	-0.36***	(0.05)	-0.45***	(0.02)	-0.29***	(0.05)	-0.41***	(0.03)
<i>Receiving educational allowances</i>	0.06	(0.04)	0.05	(0.04)				
<i>Coverage of educational allowances</i>					0.01	(0.07)	0.02	(0.07)
<i>Parental status # Receiving educational allowances</i>								
Unemployed # Receiving allowances	0.03	(0.11)	0.62***	(0.13)				
Inactive # Receiving allowances	0.28***	(0.07)	0.05	(0.12)				
Absent # Receiving allowances	0.18	(0.14)	0.13**	(0.07)				
<i>Parental status # Coverage of educational allowances</i>								
Unemployed # Coverage					0.12	(0.14)	0.30**	(0.12)
Inactive # Coverage					0.15***	(0.05)	0.14**	(0.06)

Absent # Coverage					0.19***	(0.06)	0.07**	(0.04)
<i>Control variables</i>								
Age	-0.08***	(0.00)	-0.07***	(0.00)	-0.08***	(0.00)	-0.08***	(0.00)
Women	0.09***	(0.02)	0.10***	(0.02)	0.09***	(0.02)	0.10***	(0.02)
Chronic illness	-0.54***	(0.03)	-0.53***	(0.03)	-0.54***	(0.03)	-0.53***	(0.03)
Parental immigrant status	-0.13***	(0.03)	-0.11***	(0.03)	-0.13***	(0.03)	-0.11***	(0.03)
Parental education (ref. Elementary)								
Lower secondary	0.16***	(0.04)	0.14***	(0.04)	0.17***	(0.04)	0.16***	(0.04)
Upper secondary	0.53***	(0.04)	0.50***	(0.04)	0.54***	(0.04)	0.51***	(0.04)
Postsecondary	0.55***	(0.06)	0.54***	(0.06)	0.56***	(0.06)	0.56***	(0.06)
Tertiary	0.74***	(0.04)	0.71***	(0.04)	0.75***	(0.04)	0.72***	(0.04)
Wave: 2018	0.21***	(0.04)	0.19***	(0.04)	0.21***	(0.04)	0.19***	(0.04)
Unemployment rate	-0.11**	(0.05)	-0.10*	(0.05)	-0.10**	(0.05)	-0.10*	(0.05)
Gini coefficient	-0.08**	(0.04)	-0.09**	(0.04)	-0.06*	(0.04)	-0.09**	(0.04)
Share of services	0.02	(0.06)	-0.04	(0.06)	0.04	(0.06)	-0.02	(0.06)
Constant	8.76***	(0.12)	8.85***	(0.11)	8.76***	(0.12)	8.85***	(0.11)
St. dev.(Country)	0.40***	(0.06)	0.39***	(0.05)	0.39***	(0.06)	0.37***	(0.05)
St. dev.(Unemployed)					0.40***	(0.07)	0.47***	(0.07)
St. dev.(Inactive)					1.70***	(0.01)	1.69***	(0.01)
St. dev.(Absent)					0.19***	(0.04)	0.19***	(0.06)
St. dev.(Country-year)	0.12***	(0.02)	0.13***	(0.03)	0.16***	(0.09)	0.13***	(0.03)

St. dev.(Residual)	1.70***	(0.01)	1.70***	(0.01)	0.11***	(0.03)	0.13***	(0.03)
N	40565		41276		40565		41276	

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Source: EU-SILC Wellbeing Modules 2013 and 2018.

*Table S2. Life satisfaction among adolescents according to parental status and coverage of financial aid for students, results from error-in-variables models*

	Model 11		Model 12	
	X = Mother's		X = Father's	
	labour market status		labour market status	
	Coef.	SE	Coef.	SE
<i>Parental labour market status</i>				
Unemployed	-0.32***	(0.05)	-0.48***	(0.06)
Inactive	-0.17***	(0.02)	-0.24***	(0.04)
Absent	-0.35***	(0.05)	-0.41***	(0.02)
<i>Coverage of educational allowances</i>	0.06***	(0.02)	0.05***	(0.01)
<i>Parental status # Coverage of educational allowances</i>				
Unemployed # coverage	0.50***	(0.09)	0.66***	(0.10)
Inactive # coverage	0.09***	(0.03)	0.13***	(0.04)
Absent # coverage	0.12**	(0.06)	0.08**	(0.04)
<i>Control variables</i>				
Age	-0.07***	(0.00)	-0.07***	(0.00)
Women	0.09***	(0.02)	0.09***	(0.02)
Chronic illness	-0.47***	(0.03)	-0.46***	(0.03)
Parental immigrant status	-0.03	(0.02)	-0.02	(0.03)
<i>Parental education (ref. elementary)</i>				
Lower secondary	0.04	(0.05)	0.02	(0.05)
Upper secondary	0.47***	(0.04)	0.42***	(0.05)
Postsecondary	0.45***	(0.06)	0.42***	(0.06)
Tertiary	0.67***	(0.04)	0.62***	(0.05)
Wave: 2018	0.02***	(0.00)	0.02***	(0.00)
Unemployment rate	-0.06***	(0.01)	-0.07***	(0.01)
Gini coefficient	-0.05***	(0.01)	-0.05***	(0.01)
Share of services	-0.05***	(0.01)	-0.05***	(0.01)
Constant	-33.26***	(7.17)	-33.22***	(6.75)
N	45146		45146	

Source: EU-SILC. Note: Standard errors bootstrapped using 200 iterations.

Table S3. Life satisfaction among adolescents according to parental status and the moderating role of receipts of as well as access to education-related allowances. Results from models with sample selection correction

	Model 1		Model 2		Model 3		Model 4	
	X = Mother's		X = Father's		X = Mother's		X = Father's	
	labour market status		labour market status		labour market status		labour market status	
	Coef.	SE	Coef.	SE	Coef.	SE	Coef.	SE
<b>Outcome: Life satisfaction</b>								
<i>Parental status (ref. employed)</i>								
Unemployed	-0.57***	(0.04)	-0.86***	(0.04)	-0.36***	(0.08)	-0.45***	(0.08)
Inactive	-0.29***	(0.04)	-0.31***	(0.04)	-0.32***	(0.07)	-0.28***	(0.06)
Absent	-0.43***	(0.06)	-0.45***	(0.03)	-0.38***	(0.10)	-0.41***	(0.04)
<i>Receiving educational allowances</i>	0.25***	(0.08)	0.19***	(0.07)				
<i>Coverage of educational allowances</i>					0.09*	(0.05)	0.03	(0.03)
<i>Parental status # Receiving educational allowances</i>								
Unemployed # Receiving allowances	0.42***	(0.13)	0.94***	(0.14)				
Inactive # Receiving allowances	0.21**	(0.09)	0.24**	(0.11)				
Absent # Receiving allowances	0.28*	(0.17)	0.13*	(0.08)				
<i>Parental status # Coverage of educational allowances</i>								
Unemployed # Coverage					0.39***	(0.13)	0.70***	(0.11)
Inactive # Coverage					-0.06	(0.07)	0.13**	(0.06)
Absent # Coverage					0.12	(0.11)	0.06	(0.05)

*Control variables*

Age	-0.04**	(0.01)	-0.05***	(0.01)	-0.01	(0.03)	-0.02	(0.02)
Women	0.12***	(0.02)	0.11***	(0.02)	0.14***	(0.04)	0.14***	(0.03)
Chronic illness	-0.54***	(0.04)	-0.50***	(0.03)	-0.58***	(0.07)	-0.54***	(0.06)
Parental immigrant status	-0.07*	(0.04)	-0.08***	(0.03)	-0.03	(0.06)	-0.04	(0.05)
Parental education (ref. elementary)								
Lower secondary	0.06	(0.06)	0.03	(0.05)	0.08	(0.09)	0.05	(0.07)
Upper secondary	0.47***	(0.06)	0.41***	(0.05)	0.52***	(0.09)	0.47***	(0.08)
Postsecondary	0.43***	(0.07)	0.39***	(0.06)	0.48***	(0.12)	0.45***	(0.10)
Tertiary	0.78***	(0.07)	0.70***	(0.07)	0.89***	(0.12)	0.81***	(0.11)
Wave: 2018	0.13***	(0.03)	0.13***	(0.02)	0.11***	(0.04)	0.12***	(0.03)
Unemployment rate	-0.12***	(0.02)	-0.11***	(0.01)	-0.14***	(0.03)	-0.13***	(0.02)
Gini coefficient	-0.01	(0.03)	-0.03	(0.03)	0.05	(0.05)	0.01	(0.04)
Share of services	0.04	(0.03)	0.01	(0.03)	0.09	(0.06)	0.05	(0.05)
Constant	8.36***	(0.22)	8.56***	(0.20)	8.00***	(0.37)	8.19***	(0.34)

**Outcome: Probability of living with  
parents**

*Parental status (employed=ref.)*

Unemployed	-0.01	(0.03)	-0.02	(0.04)	-0.03	(0.04)	-0.09**	(0.04)
Inactive	0.11***	(0.02)	0.10***	(0.03)	0.18***	(0.02)	0.09**	(0.03)
Absent	0.03	(0.05)	-0.05**	(0.02)	0.05	(0.05)	-0.01	(0.02)

<i>Receiving educational allowances</i>	-0.34***	(0.03)	-0.32***	(0.03)				
<i>Coverage of educational allowances</i>					-0.11***	(0.01)	-0.06***	(0.01)
<i>Parental status # Receiving educational allowances</i>								
Unemployed # Receiving allowances	0.09	(0.09)	-0.18*	(0.10)				
Inactive # Receiving allowances	0.13**	(0.06)	-0.16*	(0.09)				
Absent # Receiving allowances	0.03	(0.12)	0.19***	(0.06)				
<i>Parental status # Coverage</i>								
Unemployed # Coverage					-0.03	(0.06)	-0.11*	(0.06)
Inactive # Coverage					0.18***	(0.03)	0.01	(0.04)
Absent # Coverage					0.09	(0.06)	0.04	(0.03)
<i>Control variables</i>								
Age	-0.07***	(0.00)	-0.07***	(0.00)	-0.08***	(0.00)	-0.08***	(0.00)
Women	-0.04**	(0.02)	-0.04**	(0.02)	-0.05***	(0.02)	-0.05***	(0.02)
Chronic illness	0.12***	(0.03)	0.13***	(0.03)	0.12***	(0.03)	0.12***	(0.03)
Parental immigrant status	-0.11***	(0.02)	-0.10***	(0.02)	-0.11***	(0.02)	-0.11***	(0.02)
<i>Parental education (ref. elementary)</i>								
Lower secondary	-0.06	(0.04)	-0.07	(0.04)	-0.07	(0.04)	-0.06	(0.04)
Upper secondary	-0.13***	(0.04)	-0.15***	(0.04)	-0.13***	(0.04)	-0.15***	(0.04)
Postsecondary	-0.11*	(0.06)	-0.14**	(0.06)	-0.12**	(0.06)	-0.15***	(0.06)
Tertiary	-0.27***	(0.04)	-0.30***	(0.04)	-0.27***	(0.04)	-0.31***	(0.04)
Wave: 2018	0.07***	(0.02)	0.07***	(0.02)	0.06***	(0.02)	0.06***	(0.02)

Unemployment rate	0.06***	(0.01)	0.06***	(0.01)	0.06***	(0.01)	0.06***	(0.01)
Gini coefficient	-0.15***	(0.01)	-0.14***	(0.01)	-0.15***	(0.01)	-0.14***	(0.01)
Share of services	-0.16***	(0.01)	-0.15***	(0.01)	-0.17***	(0.01)	-0.15***	(0.01)
Constant	3.04***	(0.09)	3.10***	(0.09)	3.04***	(0.09)	3.09***	(0.09)
lambda/mills ratio	-2.34***	(0.73)	-1.66***	(0.64)	-3.76***	(1.24)	-2.99***	(1.11)
N	48540		48535		48540		48535	

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Source: EU-SILC Wellbeing Modules 2013 and 2018.