# Péter Róbert,\* Nikolett Geszler\*\* & Beáta Nagy\*\*\* Parental influence on subjective child well-being in Hungary

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#### **Abstract**

The paper extends the scope of social mobility research to family processes and family cohesion. The analysis aims to detect how various objective and subjective parental features influence subjective well-being (SWB) of adolescents in a dataset of 852 Hungarian families with 12–16-year-old children. SWB was operationalized by 14 comparable items on satisfaction with different domains of life, for both generations. The dependent variable is an aggregate SWB index, based on adolescents' evaluations and OLS regression method is applied to uncover the association between parental well-being and children's satisfaction. For a better understanding of this intergenerational process, we also control for parental education and material situation. The statistical model reflects gender, age and regional variation, as well.

Results reveal a strong relationship between children's and parents' subjective well-being. Parental satisfaction with life and family- and work relations particularly affect offspring's aggregate well-being. Material situation in the family matters more than parental education in the whole process. There is more variation in the results by the age of the adolescents than by gender. Findings reflect the importance of familial aspects and call attention to the relevance of soft, less intentional forms of status transmission.

**Keywords**: social mobility; subjective well-being; satisfaction; intergenerational inheritance; family relations

# 1 Introduction

Research on intergenerational mobility has conceptual and empirical traditions that have lasted for a long time. The classic approach of mobility studies focuses on the comparison of parental occupation and offspring's occupation and define immobility vs. mobility on the grounds of whether occupation in the two generations is the same or differs (Sorokin, 1927). However, the topic of occupational mobility has extended rapidly, taking various components of offspring's social status into account and investigating the influence of parental background on further status attributes. Two aspects of inequalities are particularly relevant for intergenerational mobility research: education and income.

Education is a major driving force of social (im)mobility in terms of both human capital investment (Becker, 1964) and the reproduction of inequalities (Bourdieu, 1973; Bourdieu & Passeron, 1977). Growing up in a family with higher educated parents is an advantage; higher level of parental schooling improves parental care of children in terms of quantity (time, money) and quality (efficiency, effectiveness). Studies on income mobility (Corak, 2004; Bowles et al., 2005) or on transmission of wealth (Charles & Hurst, 2003; Pfeffer & Killewald, 2015) made a major step towards softer components of intergenerational transmission of inequalities, when taking into account cognitive and non-cognitive abilities, personal traits like aspiration or motivation, habits, norms or values (Sewell & Shah, 1967; Bowles et al., 2001; Heckman & Vytlacil, 2001).

Robert Mare (2011) makes a proposal that multidimensionality of inequalities should be more strongly emphasised, also in a multigenerational sense, otherwise the degree of social mobility will be overestimated in the society. While multigenerational analysis of inheritance is not easy, among others from the perspective of data collection, going beyond the traditional (occupational and educational) dimensions of intergenerational mobility seems to be crucial. Children frequently have higher levels of schooling and work in higher occupational positions compared to their parents. This is due to structural developments that generate social mobility in the society. At the same time, children walk in the footsteps of their ancestors in several respects like habitus, tastes, attitudes, temperament, handling of problems, and intergenerational continuity becomes more visible if a larger variety of status attributes and behavioural features is investigated.

Consequently, research on intergenerational transmission of (dis)advantages tends to be a broader topic in social sciences than ever before and covers an increasingly large variety of domains (D'Addio, 2007). Our paper intends to contribute to this literature by analysing the intergenerational association for satisfaction with various aspects of life in Hungary. More precisely, current knowledge on adolescents' well-being in Hungary lacks the intergenerational perspective; the association between parents' and their children's satisfaction has hardly been investigated using Hungarian data. A particular added value of our paper is that we can use comparable satisfaction questions directly from children and their parents, whereas the data on parents is regularly retrospective, coming from the (then grown-up) child, in most cases of traditional mobility analysis. This rich set of comparable satisfaction items will allow us to examine how various domains of parental subjective well-being are associated with adolescents' well-being. The originality of our approach lies in the comparison how relational and material aspects contribute to the intergenerational correlation of subjective well-being. In addition to parental subjective well-being, all other information, such as educational attainment and financial situation, comes directly from parents, too. We also intend to investigate the role of educational and material background in the intergenerational association of subjective well-being.

The next section of the paper reviews previous studies on the topic, internationally and in Hungary. Then we introduce our data and the methods applied. Findings include how parental aggregate well-being as well as different domains of parental well-being influence adolescents' aggregate well-being. The paper ends with the discussion of the results in policy context and further research directions are also recommended.

# 2 Overview of previous research

The aim of this section is twofold. On the one hand, we put the topic of the analysis into a broader perspective regarding both conceptual framework and previous empirical studies. On the other hand, we place the analysis into context for the Hungarian mobility studies.

## 2.1 Intergenerational transmission of well-being

Pfeffer and Schoeni (2014) make an explicit suggestion to investigate the intergenerational correlations of well-being. They distinguish the economic and non-economic dimensions of well-being and the latter one is relevant for our study, namely transmission of personality traits, values, norms, attitudes, subjective evaluations and satisfaction from the parents to the offspring. These – partly psychological – structures and processes seem to be relevant issues in the literature on intergenerational inheritance of (dis)advantages (Loehlin, 2005; Lucas, 2008). Along these lines, Headey et al. (2012) develop a conceptual model on intergenerational transmission of subjective well-being. The model assumes a causal link from transmission of personality traits to that of values, to behavioural choices and, finally, to satisfaction with life. This model is tested on German socio-economic panel data (SOEP) and the paper finds a convincing correlation between parents' and offspring's life satisfaction.

#### 2.2 Child well-being and parental well-being

In principle, it is worth distinguishing two forms of intergenerational transmission: the intended and the unintended. The intended parental effect on children, can be described by the well-known phrase 'investment into children' (Haveman & Wolfe, 1994). The notion involves various forms of resources (time, money, culture, social contacts) parents use to ensure either the inheritance of their advantage to their offspring or to foster (further) upward mobility for them. Parents are aware of applying these means and children are mostly aware of the advantages they enjoy, as well. At the same time, childhood investment is a much broader phenomenon as it contains a large variety of parental activities, behaviour and practices of non-material, non-cognitive but psychological kind. These procedures are frequently unintended and unnoticed though they have a long-lasting effect on children's future behaviour, customs, norms and practices in their everyday – working and social – life and contribute to the intergenerational transmission of advantages or to upward mobility in the society. Exploring cross-cultural specificities in addition to the mere fact of value transmission is also crucial. Results by Albert et al. (2009) showed that the cultural context does not facilitate or hinder the transmission of values, but rather influences the content.

There are various examinations targeting school-aged children and adolescents and investigating their well-being from different perspectives, in line with the literature on the multidimensional character of child well-being with mental, psychological, physical and social dimensions (Pollard & Lee, 2003; Amerijckx & Humblet, 2014). Questions on subjective well-being, happiness or life satisfaction are part of the Health Behaviour in School-aged

Children (HBSC) or Programme for International Student Assessment (PISA) surveys (OECD, 2019; Inchley et al., 2020). There is even a particular project, the Children's Worlds, focusing on 8-, 10- and 12-year-old children's subjective well-being on various fields like satisfaction with family relations, home environment, school, teachers, schoolmates, friendship connections, material conditions, local environment and neighbourhood (Rees et al., 2020).

Previous research on intergenerational inheritance of subjective well-being reveals higher levels for children than for parents but still a high degree of correlation between parents' and children's feelings in the same family (Winkelmann, 2005). It makes a difference whether subjective well-being is approached as an aggregate measure, or the various concrete components of well-being are studied. In an analysis on Spanish families by Casas et al. (2012), adolescents reported higher levels of well-being for most of the life domains compared to their parents and inheritance was the strongest for the summated index of subjective well-being. Clair (2012) found a persistent influence of parental life satisfaction on children's life satisfaction but one particular domain, relationship quality played a crucial role in explaining children's well-being. In another study, satisfaction with financial situation turned out to interrelate strongly for adolescents aged 16+ and their parents in the same household (Molina et al., 2011). On the Children's Worlds survey data, Rees (2017) investigated how family structure and family types affect children's subjective well-being. Results showed that not family type, rather family deprivation and family time explained children's subjective well-being, i.e. the quality of family relationships is more important than family structure.

## 2.3 The Hungarian context

Analysis of intergenerational mobility has long traditions in Hungary, in particular for occupational and educational mobility (Simkus & Andorka, 1982; Andorka, 1990). These studies described Hungary as a relatively 'open' society in the socialist era. According to more recent comparative analyses, however, social fluidity seems to be low in European comparison (Bukodi et al., 2019; Bukodi & Goldthorpe, 2021). The same holds for Hungary in terms of educational mobility (Róbert, 2019). High level of intergenerational immobility regarding 'hard' social status markers makes the analysis of association for softer social attributes between parents and children an even more relevant research issue as intergenerational persistence of attitudes, values may be even stronger within the family.

Information on child well-being in Hungary is available from international comparative studies, mentioned above. For example, satisfaction with life measured on a 0–10 point scale scores 7.6 for boys and 7.3 for girls and older pupils are less satisfied than younger ones, according to the HBSC survey data from 2018 (Németh & Várnai, 2019, p. 179). The Hungarian country report of the 3rd wave of the Children's World project (Róbert & Szabó, 2020) provides more details about child well-being in Hungary in several domains, like family life, school environment, home environment and neighbourhood, friendship relations, material circumstances. The two extremes of satisfaction are family relations (the most positive opinions) and the school environment (the most negative opinions). High satisfaction with family situation is reflected in issues such as safety at home or feeling cared about. Dissatisfaction with school and learning is an interesting result given that the data collection occurs in

schools for the Children's World project. Hungarian pupils seemed to be honest when they expressed criticism and dissatisfaction with their life as a student or with things they learn at school. At the same time, pupils were satisfied with their schoolmates and friends.

In a broader perspective on the Hungarian situation, the subjective well-being of the society is very low by international standards (Helliwell et al., 2020). Various international data sources (Eurobarometer, European Social Survey) also display the same difference. Local studies like Ivony (2017) find that old age, low levels of schooling, unemployment and bad health reduce subjective well-being the most. The significant role of bad health status is also confirmed by Molnár and Kapitány (2014).

In the context of and based on the literature review, the research questions of this paper are focusing on (1) the main features of how subjective well-being is transmitted from parents to their children in Hungary and (2) which components (cultural, relational, material) of subjective well-being are the most influential in this process. We assume, that intergenerational inheritance of subjective well-being is consistent with the general observations derived from the previous studies in three main aspects (hypothesis 1): (1a) adolescents' well-being is higher compared to their parents; (1b) boys are more satisfied than girls; (1c) older children are less satisfied than their younger counterparts. Furthermore, we are interested in the role of cultural vs. material aspects of parental background as well as in the role of those domains of parental well-being, which reflect to personal relations and to the material situation, in affecting adolescents' well-being. Along these lines, hypothesis 2 refers to an important role of satisfaction with relationships as a mechanism determining offspring's subjective well-being. Finally, hypothesis 3, on the other hand, says that the financial situation of parents as well as parental satisfaction with material conditions also contribute to establishing higher levels of subjective well-being for children in Hungary, where financial circumstances usually matter a lot. Thus, hypotheses 2 and 3 represent basically two distinct competing mechanisms for parental determinants of child well-being.

#### 3 Data and measures

We employ data from a nationwide survey, applying F2F CAPI method in Hungary in 2017. The survey targeted families with 12-16-year-old adolescents and their parents, aiming to collect data about their experiences and perceptions of the time they spent together. The total sample consists of 1000 families with a combined database that includes responses from both adolescents and their parents. In families where more than one child belonged to the required age group, the interviewee was randomly selected according to the first letter of his/her name. During the data collection in the respondents' own home the interviewer addressed first the parent then the parental interview was followed by the interview with the child without the parent being present in the same room. Quota method was applied for sampling: at the household level the sample represents families with 12–16-year-old children by the seven main regions of Hungary and by type of settlement (Budapest, county centres, towns, villages). At the individual level the sample represents the target group by the age and gender of the child. A parental quota was also settled for interviewing at least 40 per cent of fathers. The current analysis contains only families with two parents (N=852). The reason for excluding single parent households, multigenerational households and families

where children were raised by their grandparents was primarily due to their low presence in the sample that does not represent the real frequency of these households within the target group. In order to avoid reaching biased conclusions in relation to the effect of family type, we decided to choose a more accurate sampling and limit our analysis on two-parent households. Biological parents and stepparents are not distinguished.

There are somewhat more girls (59 per cent) than boys (41 per cent) in the sample. More than one third (37 per cent) of the adolescents belong to the 12–13 age group, while 63 per cent of them are 14–16 years old. There is only one child in half of the families (50 per cent), there is a second child in about one-third of the families (37 per cent) and more siblings live with the parents in the rest of the families (13 per cent). About 16–17 per cent of mothers and fathers have a tertiary degree; the relative majority of the mothers have secondary level of schooling (42 per cent), while the relative majority of the fathers have vocational education (43 per cent). The families are typically dual-earner ones, both fathers and the majority of mothers are in the labour force.

The dependent variable and the main explanatory variables are based on 14 comparable items on satisfaction with different aspects of life, for adolescents and their parents; the battery has been developed by the research group. Respondents were asked to express their satisfaction on a 0-to-10-point rating scale (0 = fully unsatisfied, 10 = fully satisfied). Exactly similar wording was used for the items related to satisfaction with home, friends, family relations, neighbourhood, health conditions, amount of leisure time, life in general, future prospects; functionally equivalent wording was used for questions on relations with colleagues / classmates, relations with bosses / teachers, satisfaction with work / school stuff, satisfaction with income / pocket money, with material situation / things owned by the child.

In the light of the literature of similar studies cited above (Molina et al., 2011; Casas et al., 2012; Clair, 2012), we examine how an aggregate well-being index and the various domains of satisfaction interrelate for the two generations. Therefore, we constructed a total SWB index both for the parents and the adolescents, applying principal component analysis. These aggregate measures explain 56 per cent of the variation of the 14 items for the parents and 49 per cent for the children. The reliability tests resulted in Cronbach's alpha values of 0.939 and 0.918. We are aware that the elements of this aggregate index vary, some being more specific (home, family, friends, health, neighbourhood, leisure time), others more general (life in general, life so far, future prospects). Still, we believe that the aggregate index as dependent variable reflects the complex and multidimensional nature of adolescents' subjective well-being better than any possible more general item. Basically, we follow the approach that if we want to measure a quasi-latent phenomenon (subjective well-being), using multiple indicators reduces the measurement error that may be more likely to exist for a single item. This holds for the parental generation as well, but then the analysis goes beyond the aggregate index and examines the role of the various items in the intergenerational association of subjective well-being.

Regarding the control variables, gender is coded as 0 for girls and 1 for boys; age runs from 12 to 16; number of siblings is measured by dummies: lone child, one siblings, more siblings; parental education is also measured by dummies: primary level of schooling, low secondary (vocational training), high secondary level and tertiary level; material circumstances in the family reflect the opinion of the parent on the subject and the scale is transformed

into dummies: poor, medium or good subjective material circumstances; and place of residence describes type of settlement as well as the main regional units in Hungary. In order to avoid high multicollinearity with parental education, parental labour force status is omitted. We do not control for gender at the parental level as gender differences for parents are reflected in the data at the measurement level, when parental quota have been applied in the data collection.

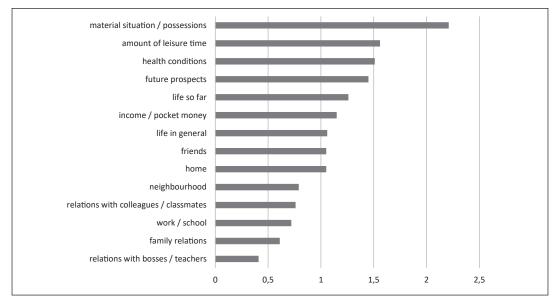
#### 4 Results

# 4.1 Bivariate intergenerational associations at the level of the various domains of subjective well-being

In this section, we reflect to two previous research findings from the literature. Figure 1 demonstrates that children report higher level of well-being than their parents in Hungary, as well. Satisfaction with the various domains was recorded on a 0-to-10-point scale and the difference of the means were calculated (mean score for child – mean score for parent) and displayed on Figure 1. Variation is substantial and seems to be – at least to some extent – reasonable but interesting results are also obtained in terms of the attitudes towards material vs. personal relations.

The highest absolute difference (above two points) appears for material situation / possessions, i.e. children tend to be satisfied with the things they possess even in those families where parents are less satisfied with their own material conditions. There is a difference about one and half points for the amount of leisure time, health conditions and future prospects. This outcome may reflect to the reality, namely that parents have more duties and – due to their age – a worse health situation or a worse outlook for the future. It is also important that satisfaction with some items is more similar, and these items relate to relations with other people. Parents are likewise as satisfied with colleagues, bosses and also with work as their children are satisfied with schoolmates, teachers and with school. Parental satisfaction scores only a bit lower than that of the offspring and this holds for the evaluation of family relations, too. It looks as if respondents in both generations have similar attitudes towards their personal connections.

Figure 2 displays the bivariate association between the dependent variable of the analysis, adolescents' SWB index and the main predictor variables, namely parental SWB index as well as the parental satisfaction for the 14 domains of subjective well-being. The two aggregate measures of subjective well-being show the strongest correlation: this is 0.48 in Hungary. The separate satisfaction domains correlate lower with adolescents' well-being but coefficients are close to .40 for many of them like neighbourhood, life in general, family relations, life so far, future prospects and home. Lower levels of correlation with child well-being, around 0.30, appear for satisfaction with work, health conditions, bosses, and leisure time. This picture is more mixed: some satisfaction items on relations (e.g. with family) correlate higher, while other satisfaction items on relations (with work or bosses) correlate lower with offspring's aggregate SWB index.



 $\label{lem:figure 1} \textbf{Figure 1} \ \ \textbf{Absolute difference between adolescents' and their parents' well-being} \ \textit{Source:} \ \text{own calculations}$ 

Note: Satisfaction items for the various domains are measured on a 0-to-10 point scale; absolute difference is calculated as mean score for adolescent - mean score for parent.

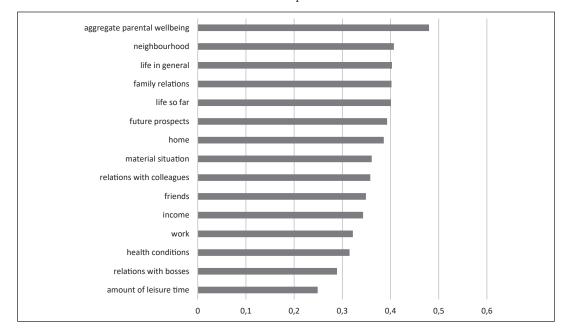


Figure 2 Pearson correlations between adolescents' aggregate well-being and parental well-being indicators

Source: own calculations

*Note*: Aggregate SWB indices for adolescents and their parents are derived from PCA (see text for details). Parental satisfaction items for the various domains are measured on a 0-to-10 scale.

#### 4.2 Multivariate analysis of intergenerational transmission of subjective well-being

We separate two kinds of the process in generating higher aggregate SWB for children when analysing how adolescents' subjective well-being is associated with parental characteristics. First, we focus on the influence of the aggregate parental SWB index; second, we examine the role of the various domains of parental satisfaction. Since the aggregate SWB index for the offspring is a factor score, an interval measure, OLS regression technique is applied. In the statistical model, we control for the impact of some socio-demographic characteristics, in the way described above.

#### 4.2.1 The effect of parental aggregate SWB index

In this model, the primary explanatory variable is the aggregate SWB index for parents. Although the OLS regression model detects linear effect of parental subjective well-being on children's subjective well-being, we also intend to test whether this effect is, indeed, linear or not. For this purpose, the quadratic term of the aggregate parental well-being measure is also included in the model.

We apply a reverse model building strategy for this analysis, namely Model 1 contains the demographic features of the offspring; Model 2 adds parental level of education, Model 3 adds parental evaluation of the financial situation of the family, and finally the inheritance of subjective well-being, the aggregate parental SWB index and its quadratic term are added to the equation. All four regression models are estimated by the enter method. The results are displayed in Table 1.

Model 1 reveals no significant gender differences; thus boys' higher subjective well-being is not confirmed by these data. The negative estimates for age, however, confirm that older adolescents are more critical with their subjective well-being than younger ones, in line with the literature. This result persists in the subsequent models, as well. Having a sibling improves subjective well-being in contrast to being a lone child. In a subsequent step, when material conditions are also included, having more siblings seems to be even slightly better but number of siblings does not matter anymore in the final model. Model 2 displays a significant difference for parental education: children's subjective well-being is higher if they live in families where the parent has tertiary level of schooling. Although, when the model takes into account the influence of the subjective material situation, the impact of parental tertiary education is eliminated and finally disappears in the last model. In fact, correlation between parental education and perceived material conditions is 0.427. In Model 3, the financial circumstances seem to take a lead and adolescents' well-being is markedly connected with the material conditions in the family: it has a strong negative influence if the circumstances are perceived bad and a strong positive influence if the situation is considered good by the parents. Finally, Model 4 introduces parental well-being and the transmission seems to be marked in Hungary: the explained variance increases from 15 to nearly 30 per cent. Moreover, the impact of the aggregate parental SWB index is not linear as the quadratic measure is also significant and the positive estimate suggests that a higher level of parental satisfaction contributes even further to adolescents' subjective well-being. Given the fact that parental education and perceived material situation correlate with the aggregate parental SWB index, (correlation is 0.224 and 0.369, respectively), it is not surprising that none of these parental background indicators play a substantial role in Model 4. All of the estimates from models 1-4 are controlled for regional variation as displayed in the bottom lines of Table 1.

 
 Table 1 Predicting adolescents' subjective well-being (unstandardised OLS regression estimates)

	Model 1	Model 2	Model 3	Model 4
Intercept	1.789***	1.812***	1.520***	1.217***
Gender of the child (Boy=1)	-0.095	-0.079	-0.091	-0.068
Age of the child (12-16)	-0.132***	-0.132***	-0.124***	-0.102***
Has one sibling	0.168*	0.167*	0.118	0.087
Has more siblings	0.167	0.192	0.227+	0.133
Parental education: primary level		-0.230	-0.033	0.032
Parental education: low secondary level		-0.105	-0.019	0.027
Parental education: tertiary level		0.238*	0.190+	0.077
Good subjective material circumstances			0.287***	0.036
Poor subjective material circumstances			-0.412***	-0.128+
Parental SWB index				0.463***
Parental SWB index – quadratic				0.064**
Lives in Budapest	0.130	0.041	0.030	0.238+
Lives in big city	0.036	-0.045	-0.127	0.020
Lives in village	-0.036	-0.065	-0.119	-0.025
Region: Northern Hungary	0.137	0.167	0.197	0.265*
Region: Northern Great Plain	0.173	0.180	0.295*	0.132
Region: Southern Great Plain	-0.498***	-0.448***	-0.357*	-0.286*
Region: Central Transdanubia	0.215	0.235+	0.245+	0.276*
Region: Western Transdanubia	-0.089	-0.120	0.018	0.007
Region: Southern Transdanubia	0.211	0.234	0.292+	0.170
Explained variance (adj. R²)	0.088	0.100	0.148	0.295

Significance: \*\*\*p<.0.001, \*\*p<0.01, \*p<0.05, +p<0.1.

Source: own calculations

*Note:* Dependent variable: Adolescents' aggregate SWB index. Regression estimates in Model 1–4 are based on the enter method. Reference categories for the predictor variables: Gender: girl; Siblings: lone child; Parental education: high secondary level; Subjective material situation: average subjective material circumstances; Region: family lives in small town and in Central Hungary.

# 4.2.2 The role of the satisfaction domains in the intergenerational transmission of subjective well-being

The aim of this part of the analysis is to provide a deeper insight into the process of intergenerational transmission of subjective well-being. Therefore, we re-estimated the statistical model predicting adolescents' aggregate SWB and replaced the aggregate parental SWB index by the 14 satisfaction items. The model building strategy is also modified; first the different satisfaction measures are included in the model by applying the stepwise method in order to handle the multicollinearity between the predictor variables. Parental satisfaction items related to the different domains of life correlate with each other, on the one hand and parental satisfaction also correlates with their demographic characteristics, on the other hand. The stepwise method aims to detect those parental satisfaction domains with the strongest significant impact on children's aggregate SWB. This model building design brings in the demographic variables in the last but one step by using the enter method. The results appear in Table 2.

 Table 2 The role of the satisfaction domains in the intergeneration transmission of subjective well-being (unstandardised OLS regression estimates)

	Model 1a	Model 1b	Model 1c	Model 1d	Model 1e	Model 2
Intercept	-1.600***	-2.139***	-2.508***	-2.556***	-2.541***	-0.999**
Life in general	0.213***	0.165***	0.120***	0.091***	0.067**	0.060*
Relations with colleagues		0.115***	0.101***	0.082***	0.073***	0.067**
Family relations			0.099***	0.083***	0.079**	0.073**
Neighbourhood				0.072**	0.062**	0.055**
Future prospects					0.049*	0.036+
Gender of the child (Boy=1)						-0.080
Age of the child (12-16)						-0.100***
Has one sibling						0.104
Has more siblings						0.137
Parental education: primary level						-0.029
Parental education: low secondary level						0.020
Parental education: tertiary level						0.083
Good subjective material circumstances						0.065
Poor subjective material circumstances						-0.144*

Table 2 (Continued)

	Model 1a	Model 1b	Model 1c	Model 1d	Model 1e	Model 2
Lives in Budapest						0.209+
Lives in big city						0.015
Lives in village						-0.019
Region: Northern Hungary						0.241+
Region: Northern Great Plain						0.091
Region: Southern Great Plain						-0.297*
Region: Central Transdanubia						0.272*
Region: Western Transdanubia						0.001
Region: Southern Transdanubia						0.106
Explained variance (adj. R²)	0.177	0.212	0.230	0.241	0.246	0.304

Significance: \*\*\*p<.0.001, \*\*p<0.01, \*p<0.05, +p<0.1.

Source: own calculations

Note: Dependent variable: Adolescents' aggregate SWB index. Estimates in Model 1a – 1e come from stepwise regression procedure where all 14 satisfaction items were included. The procedure selects the variables one by one based on their level of significance. In this case 5 domains were selected, while the other 10 domains do not have a significant effect on the dependent variable. Model 2 adds all of the demographic variables in one step with the enter method. Reference categories for the predictor variables: Gender: girl; Siblings: lone child; Parental education: high secondary level; Subjective material situation: average subjective material circumstances; Region: family lives in small town and in Central Hungary.

The analysis reveals that five domains play particularly important roles in intergenerational inheritance of subjective well-being, namely life in general, future prospects, family relations, relations with colleagues and neighbourhood. Given that these domains interrelate, the effect sizes are getting weaker in Models 1a–1e as the next predictor is included in the equation, but the coefficients remain statistically significant. This result persists in Model 2 as well, when the estimation procedure is completed by all of the demographic variables. The analysis shows that none of the other satisfaction items plays an important role in influencing adolescents' subjective well-being – when their effects are controlled by the five more important satisfaction questions and the demographic variables. There is no new information to add to the demographic characteristics, apart from those outlined in the section above.

Based on the five satisfaction domains, adolescents' subjective well-being is explained by 24 per cent (Model 1e). Both analytical approaches to intergenerational transmission of well-being have yielded similar results: the explained variance is roughly 30 per cent in both models. Still, the second approach offers some additional details on the process of inheritance, with respect to the role of personal vs. material aspects. In order to shed more light on transmission of well-being, we investigated the correlations between those parental satisfaction items which seem to play key role in the process. These correlations are presented in Table 3.

 Table 3 Correlation between selected parental satisfaction items

 (Pearson's correlation coefficients)

	Future prospects	Life in general	Material situation	Income	Home	Neigh- bourhood	Family relations	Relation with boss	Relation with colleagues
Life so far	0.678	0.767	0.680	0.615	0.631	0.572	0.540	0.433	0.450
Future prospects		0.653	0.699	0.683	0,588	0.546	0.474	0.487	0.482
Life in general			0.635	0.605	909.0	0.564	0.569	0.446	0.457
Material situation				0.827	0.619	0.550	0.398	0.432	0.429
Income					0.580	0.533	0.353	0.428	0.447
Home						0.623	0.513	0.439	0.478
Neighbourhood							0.473	0.428	0.468
Family relations								0.358	0.400
Relations with bosses									0.588

Source: own calculations

Note: Parental satisfaction items for the various domains are measured on a 0-to-10 scale. The full correlation matrix including all 14 satisfaction items is available from the authors upon request. All correlations are significant at p<.0.001. Correlation coefficients range widely, the extremes are 0.827 and 0.767, on the one hand and 0.398 and 0.353, on the other hand. It is perhaps not a surprise that the correlation between satisfaction with 'income' and 'material situation' is 0.827, while the correlation between satisfaction with 'life in general' and 'life so far' is 0.767. It is more surprising that the lowest correlations appear between family relations and material situation and income (coefficients are 0.398 and 0.353, respectively). Parents in Hungary seem to be satisfied with their family relations, even if they are less satisfied with their material circumstances.

Correlations in Table 3, however, display an interesting cleavage for satisfaction with the material vs. personal relational aspects of life from another viewpoint, too. The satisfaction battery included three items at more general level (life in general, life so far, future prospects) and the domains related to material circumstances (material situation, income, home) have stronger correlations with these generalised items as compared to domains related to personal connections (family relations, relations with colleagues, relations with bosses). As highlighted in grey in Table 3, correlations between satisfaction items, related material issues and generalised items are mostly above 0.6. The closest values for personal relations show lower correlations: 0.569 (life in general and family relations) and 0.540 (life so far and family relations). This structure of parental well-being may have an impact on intergenerational transmission of subjective well-being.

#### 5 Discussion and conclusion

The sociological approach of intergenerational inheritance focuses on occupational mobility, while economists examine transmission of material inequalities between generations. Another distinction in analysing intergenerational mobility lies between the focus on 'hard' fields like schooling, job, earnings and the study of 'soft' individual features like personal and behavioural characteristics. In contrast with earlier approaches, research on subjective or soft factors has gained ground over the last decades (D'Addio, 2007). Thus, this paper intended to contribute to the growing international literature of intergenerational transmission of subjective well-being.

Previous research revealed that young people's subjective well-being was in line with the international patterns for differences regarding gender and age (Németh & Várnai, 2019), while Hungarian adults are less satisfied with their lives in international comparison (Ivony, 2017; Helliwell et al., 2020). These results underline the importance of analysing intergenerational inheritance for subjective well-being in Hungary.

Based on the representative investigation carried out with parents and their teenage children in 2017, our results largely confirm the comprehensive hypothesis 1 that intergenerational transmission of subjective well-being takes place in Hungary in a similar way as earlier international research explored (Casas et al., 2012; Winkelmann, 2005). We found that satisfaction scored higher among Hungarian adolescents compared to their parents; subjective well-being drops as children get older; adolescents' overall well-being is more strongly related to the overall well-being of their parents than to any specific domain of parental satisfaction. The only exception is that the significant gender difference, i.e. higher subjective well-being for boys, was not confirmed by our multivariate model. In general, the results prove that intergenerational transmission of subjective well-being is an existing and highly relevant phenomenon in Hungary, too, mainly in line with the previous international literature on the topic.

A further research question referred to the influence of parental background in terms of its cultural versus material aspects. We found that tertiary level of parental education improves adolescents' subjective well-being. This is likely to occur due to a more attentive and a more efficiently caring home environment in these families. The importance of good family relationships was also underlined by earlier research scrutinizing the role of family structure in child well-being (Rees, 2017). Looking at the other component of the research issue, i.e. the financial aspects, the perceived parental material situation proved to influence child well-being more strongly than parental education. This finding is worth underlining, even if only a small negative effect of living under poor material circumstances persists in our final models (Table 1, Model 4 or Table 2, Model 2). In fact, Molina et al. (2011) also found that satisfaction with the financial situation contributes to the transmission of subjective well-being between parents and their children.

More details on the transmission of child well-being were uncovered by the analysis separating the domains of parental well-being, in line with hypotheses 2 and 3, which addressed the two mechanisms of how relational and material aspects could influence off-spring's subjective well-being. The multivariate analysis in Table 2 reveals that parents' satisfaction with their personal relations (particularly with the family and their colleagues) plays an important role in influencing children's subjective well-being. Furthermore, the descriptive results also show that adolescents' and their parents' satisfaction with personal relations are closer to each other. We consider these results as a confirmation of hypothesis 2, derived from the previous work by Clair (2012), namely that personal relations represent a particular mechanism in the process of intergenerational transmission of subjective well-being.

We found no similar direct confirmation of hypothesis 3 on the importance of satisfaction with material situation, based partly on the work by Molina et al. (2011), partly on the fact that material conditions generally play an important role in Hungary. None of the parental satisfaction items related to material circumstances (income, material situation, home) turned out to improve adolescents' aggregate subjective well-being significantly. Instead, two out of the three generalised satisfaction items play an important role in affecting child well-being in Hungary. However, as the correlations between the parental satisfaction items in our last table reveal, generalised satisfaction and material aspects of satisfaction are closely related, which can be interpreted as an indirect influence of the material satisfaction on adolescents' subjective well-being. At first sight satisfaction with neighbourhood is more difficult to interpret. This satisfaction item, however, is strongly linked to satisfaction with home, and the latter domain can be regarded a material indicator in Hungary.

The relatively strong relationship between material and satisfaction with life and with future is probably not surprising in Hungary, where dissatisfaction with the material situation is strong. We consider it more important that the analysis explored a separate channel of social relationships (family relations, work relations) with a fairly remarkable influence on adolescents' subjective well-being. These personal relations typically belong to those 'soft' characteristics, we are looking for, and represent some unintended and unconscious forms of generating higher levels of subjective well-being for children. This result highlights the importance of investigating 'soft' factors and mechanisms in the process of intergenerational transmission of (dis)advantages.

We are aware that our article suffers from a number of shortcomings. For example, we assume that inheritance of personal traits from parent to child, like transmission of values,

norms, behavioural patterns, emotional reactions, contribute to the success of inheritance of other kind of advantages in more traditional mobility fields, like school choice, occupational decisions, or transmission of wealth. Another assumption is that the degree of intergenerational openness and mobility may be higher in the case of educational, occupational or financial inequalities, while inheritance from parent to child is stronger for 'soft' features, i.e. in terms of personal characteristics, decision making, problem solving, value choices or following various norms. None of these issues has been investigated in the current paper in a direct manner. Nevertheless, Hungary as a country case can be particularly interesting from the viewpoint of these assumptions outlined above because the low level of educational and class mobility may be related to deeper family rooted aspects, like those we tried to uncover in our analysis.

Traditional intergenerational mobility research on education and occupation is more straightforward in terms of causality and direction of the effect: parental education and occupation influence the schooling and the job of the offspring. When examining the intergenerational link between soft behavioural characteristics, the offspring's decisions and opinions may also reflect those of the parent. Therefore, causality is an issue that needs to be treated with caution.

Another undeniable limitation of the analysis lies in the data. Our results stem from cross-sectional data, while the international literature is mostly based on panel data, where parental information is collected at an earlier step, children are measured at a later step. In addition, our data did not allow us to take the variation in family composition into account. Furthermore, there is a discrepancy between the theoretical background and the empirical information we could employ. The conceptual scope of personality traits, values, norms and attitudes is much broader than the battery of 14 satisfaction items asked in the present survey. This empirical information is just a subset of the whole conceptual mechanism of 'soft' characteristics, being an effect of intergenerational mobility. Nevertheless, based on the data, we uncovered an important part of this mechanism, and this is a solid first step of research on Hungary.

We think that adolescents' well-being cannot be merely simplified to attaining a better social position in terms of occupation, class or income, but it also refers to the importance of achieving better psychological and emotional personal conditions. The success of this intention, i.e. the identification of factors that mediate a higher level of subjective well-being for the next generation, has important policy implications, too. For example, our findings might be relevant for policy decisions on family support, which is a distinguished topic on the policy agenda in Hungary, in terms of family cohesion, stability and other components of well-being.

We are aware that a large amount of empirical work is still required to understand the process in detail, how parental objective and subjective, intentional and unintended characteristics influence the outcomes of the offspring generation. Both qualitative and quantitative fieldwork could contribute to a better description of the course of investment into children with its diversified elements. Moreover, the ideal unit of further studies could be not selected persons but complete families with members representing both generations as data providers, potentially available for longitudinal research.

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