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Children's subjective well-being: International Comparative perspectives

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Abstract

We are enjoined by the United Nations Convention on the Rights of the Child to take account of the views of children. One way this can be done is by asking children about their lives in sample surveys. This paper is a comparison of the results obtained to sample survey questions on subjective well-being of children at two contrasting levels of analysis - international macro (European Union 29) and national level micro (England). At both levels, children's well-being is accessed in terms of three subjective domains: (1) personal well-being, (2) relational well-being, and (3) well-being at school. At the micro level we also explore neighbourhood well-being.

The results show that at the macro level personal well-being is associated with the material and housing circumstances but not family relationships or family structure. Well-being at school is not associated with any variable. Subjective health is only associated with family structure. At the micro level, although many of the demographic and socio-economic characteristics of children are found to be associated with their well-being in the four domains, these factors explain only a small amount of the variation in these well-being domains.

Key words: subjective well-being, personal well-being, child well-being

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Background

The United Nations Convention on the Rights of the Child states that "the primary consideration in all actions concerning children must be in their best interest and their views must be taken into account". Influenced by that injunction attempts have been made to collect data through multi-national surveys on what children say about themselves - what they think and feel. The results of these surveys have been fed into multidimensional indices which attempt to compare the well-being of children between countries and between children in different circumstances within countries.

We have produced comparative studies of child well-being for the European Union's 25 member states (EU25), the Organisation for Economic Co-operation and Development (OECD), and the Central and Eastern European and the Commonwealth of Independent states (CEE/CIS) countries (Bradshaw, Hoelscher & Richardson 2007, UNICEF 2007, Richardson, Hoelscher & Bradshaw 2008) and each has contained data on what children think and feel derived from answers they provide in surveys. We have been struck in this work by how little association there is between these subjective indicators of well-being and how little association there is between them and other indicators of well-being. In the first part of this article we explore this using the results of the most recent index of child well-being in the EU29 countries (Bradshaw & Richardson 2009).

We have also explored subjective well-being in Britain using the youth survey of the British Household Panel Survey which contains measures of happiness, troubled feeling and self esteem of young people aged 11-15 (Bergman & Scott 2001, Clarke et al. 2000, Quilgars et al. 2005, Keung 2006a, Keung 2006b). We were also struck in this work with how little variation in these measures of subjective well-being could be explained by the social and economic circumstances of the young people and their families. We found that subjective well-being tended to be worse for girls than boys and be lower as children got older, but apart from that there seemed to be very few other significant correlates other than the relationship with their parents, which may not be independent of their well-being. In the second part of this article we explore this issue using data derived from a new school based survey of 11,000 young people aged 14-16. In the final part, we discuss the findings of these two very different sources of data and some methodological issues. First we start with a brief review of subjective well-being.

Subjective well-being

According to Diener (2000) and Ben-Zur (2003) subjective well-being is a multidimensional construct that includes both affective and cognitive components. These include the experiences of pleasant emotions (positive affect), the experiences of negative emotions such as distress and dissatisfaction (negative affect) and judgement of individuals' life qualities (overall life satisfaction or satisfaction with a specific domain). Ben-Zur (2003) found that positive and negative affect were distinct and though weakly associated were not bipolar opposites. Bradhurn (1969) found 'happiness' was the result of a balance between positive and negative affect. Satisfaction is a judgement made by individuals based on a long term assessment of their lives, while happiness is influenced by one's immediate pleasant and unpleasant experiences (Andrew & Withey 1976, Keyes et al 2002). According to Diener and Lucas (1998) personality traits have a large influence on subjective well-being and this helps to explain its stability.

According to Diner et al (1999) there have been two approaches to the exploration of correlates of subjective well-being. First the bottom-up approach is built on the view that subjective well-being is influenced by individuals demographic and other objective circumstances. It includes the work referred to earlier using the British Household Panel Survey. The bottom-up approach has been challenged by these and other findings that objective life conditions and circumstances only explain a small proportion of the variance in subjective well-being (see also Campbell, Converse & Rodgers 1976).

The shortcomings of the bottom-up approach and the emergence of behavioural genetic data, as well as studies on the long-term stability of subjective well-being, have shifted the research interest toward a top-down approach (Heller et al 2004). Research evidence consistently shows that personality is one of the strongest and most consistent predictors of subjective well-being (Diener et al 1999). Perhaps most striking is the finding of twin studies that concluded that genetics accounted for approximately 40% of the variation in positive affect, 55% of the variation in negative affects and 48% of the variation in life satisfaction (Tellegen et al 1988).

For policy makers, parents, teachers and others who are concerned with child well-being these are rather depressing conclusions. What can they do to influence child well-being if it is mainly or almost entirely determined by genes and personality traits? However several studies also show

that broad environmental circumstances can sometimes produce substantial and lasting differences in subjective well-being. For instance, there are huge differences in SWB between different nations (Inglehart & Klingemann 2000, Diener, Diener & Diener 1995). This suggests that different life circumstances can dramatically influence subjective well-being. From this example, Diener et al (1995) conclude that traits may be a better predictor of subjective well-being for people with similar backgrounds but not for people who are from different nations, or different cultures. In the latter cases, environmental effects are likely to explain more of the differences in individuals' subjective well-being. In the same vein, White (2008) also identified 'culture' as a key influence on the way one's perception of well-being is constructed and suggested that well-being should be understood as a 'process' and which should be grounded in a specific 'time' and 'place'.

Thus, it appears that well-being could be a result of the dynamic interactions between the top-down (e.g. personality traits) and bottom-up (objective circumstances) factors, and these interactions (or processes) vary according to a specific time and place. The concept of 'time' in particular is deemed relevant for our understanding of well-being as White (2008) points out that people's understanding of their own well-being changes through their life-cycle and that their reflections on the past and expectations of the future all could affect how people see their present well-being. Thus, the concept of 'time' provides a reference point to individuals regarding how they perceive themselves in the present. The concept of 'place' is also important for our understanding of well-being as it provides a scope for comparisons. For example, according to Layard[2], it is not the actual income level that matters to individuals but how they stand relative to others. Thus, what it suggests is that well-being would be better understood within a particular 'place' (or context) where such comparisons take place.

White's (2008) research looked into factors that are important to well-being from the perspective of a developing country. According to White (2008) well-being is formulated by three interdependent dimensions, namely the 'subjective', 'material' and 'relational'. The subjective dimension refers to 'values, perceptions and experience' of individuals; the material dimension refers to the 'practical welfare and standards of living' and finally, the 'relational' dimension refers to 'personal and social

[2] With reference to the transcript of the keynote seminar of the all-party parliamentary group on scientific research in learning and education: 'well-being in the classroom'. Portcullis House, 23 Oct 2007.

relations'. White (2008) argues that the relative importance of these dimensions that define individuals' well-being is likely to change in different 'time' and 'place'. These perceptions of well-being, perhaps, represent the most basic elements of human well-being, in which case they might help us to understand what truly matter to our well-being.

Macro analysis: Child well-being in the EU29

The child well-being index (Bradshaw & Richardson 2009) covers the 27 member countries of the European Union plus Norway and Iceland. 43 indicators were derived from surveys and international statistical series and combined to form seven domains of well-being: health; subjective well-being; children's relationships; material well-being; risk and safety; education; and housing and the environment. Detailed discussion on how these indicators were constructed can be referred to Bradshaw and Richardson (2009). In this article we focus on

1. Three indicators of subjective well-being
    - Personal well-being: % 11, 13 and 15 year olds who report high life satisfaction - scoring 7 or more on Cantrill's ladder (2005/06)
    - Well-being at school: % 11, 13 and 15 year olds liking school a lot (2005/06)
    - Self-defined (subjective) health: % 11, 13 and 15 year olds who rate their health as fair or poor (2005/06)
2. Two indicators of children's relational well-being, defined by
    - % 11, 13 and 15 year olds who find it easy to talk to their mother (2005/06)
    - % 11, 13 and 15 year olds who agree that their classmates are kind and helpful (2005/06)

All the above indicators are derived from the Health Behaviour in School-aged Children (HBSC) survey (Currie et al, 2008)[3] .

3. Three contextual indicators

[3] The HBSC data is aggregated using published results for 11, 13 and 15 year olds and girls and boys separately. In order to produce a single national aggregate figure, the results are weighted by sample numbers for age and gender. Data for the UK is GB only. Samples for England, Scotland and Wales are weighted by the child population figures. Belgian data is an aggregate of Flemish and French results weighted for child population figures.

- Level of deprivation in a country: % Households with children with an enforced lack of consumer durables[4]
- Poor housing: % Households with children reporting more than one housing problems[5]
- Family structure: % 11, 13 and 15 year olds living in a lone parent household

The first two of these indicators were derived from our own analysis of the EU Statistics on Income and Living Conditions (SILC) in 2006 and the third from the HBSC (Currie et al 2008).

Table 1 presents a matrix of the rank order correlations of the indicators. Life satisfaction is not associated with either of the other two subjective indicators – liking school or poor health. However liking school and poor health are weakly associated. Similarly there is no association between the two relationships indicators – finding it easy to talk to mother and finding classmates kind and helpful. Finding it easy to talk to mother is also not associated with any other variable in the matrix (The same is also true for finding it easy to talk to fathers – not shown). However finding classmates kind and helpful is positively associated with life satisfaction.

Table 1: Correlation matrix of well-being domains and contextual indicators

	Life satisfaction	Liking school	Poor health	Easy to talk to mother	Class mates kind	Deprived	Poor housing	Lone parents
Life satisfaction	1.00	0.00	-0.34	0.46	0.47*	-0.60**	-0.59**	-0.24
Liking school		1.00	0.44*	0.26	0.34	-0.31	-0.15	0.25
Poor health			1.00	-0.24	0.26	0.41	0.38	0.63**
Easy to talk to mother				1.00	-0.15	0.01	0.02	-0.11
Classmate kind					1.00	-0.75***	-0.40*	-0.03
Deprived						1.00	0.63**	-0.27
Poor housing							1.00	0.09
Lone parents								1.00

* p < .05; ** p <.01; *** p < .001

[4] An enforced lack of consumer durables refers to people who cannot afford to have a washing machine, Colour TV, Telephone a personal computer or a personal car (a similar indicator is used by European Commission (2008 : 51) - we include a personal computer). The indicator is one or more of these items missing. Households with children are households with any number of residents aged 0-17.

[5] One or more of leaking roof, damp walls / floors / foundations, or rot in the window frames. Accommodation too dark, no bath or shower, no indoor flushing toilet for sole use of the household (European Commission, 2008: 51). Households with children are households with any number of residents aged 0-17.

In this macro, country level analysis we have not considered the impact of gender and age. However Currie et al (2008) report that

- Life satisfaction declines with age and boys have higher rates than girls.
- Liking school declines with age and at 11 girls like school more than boys but this difference declines with age.
- Poor health is more common among older children and girls.
- Easy to talk to mother declines with age and slightly favours boys.
- Finding class mates kind and helpful declines with age but there are no consistent gender differences.

At the macro level we find a strong negative association between life satisfaction and the deprivation level and the proportion of poor housing in a country. Moreover, we also find a strong negative association between the deprivation level and finding classmates kind and helpful. However the percentage of children in lone parent families is only associated with poor health.

Figure 1 shows the association between deprivation and finding classmates kind and helpful. Deprivation explains 53% of the variation. The relationship would be stronger if Portugal was not an outlier with a high proportion finding friends kind and helpful despite high deprivation levels. France is an outlier in the opposite direction with low proportions agreeing that their friends are kind and helpful and lowish deprivation. Figure 2 shows the association between deprivation and life satisfaction. Deprivation explains 43% of the variation in life satisfaction. In the countries of former Eastern Europe children tend to have lower life satisfaction and there is more deprivation. In the Nordic countries children have higher life satisfaction and there is less deprivation. There are some outliers: Germany and Luxembourg have low deprivation and low satisfaction and in Greece, Spain and Slovakia children have higher life satisfaction than one might expect given the level of deprivation.

Figure 1: Deprivation by finding classmates kind and helpful

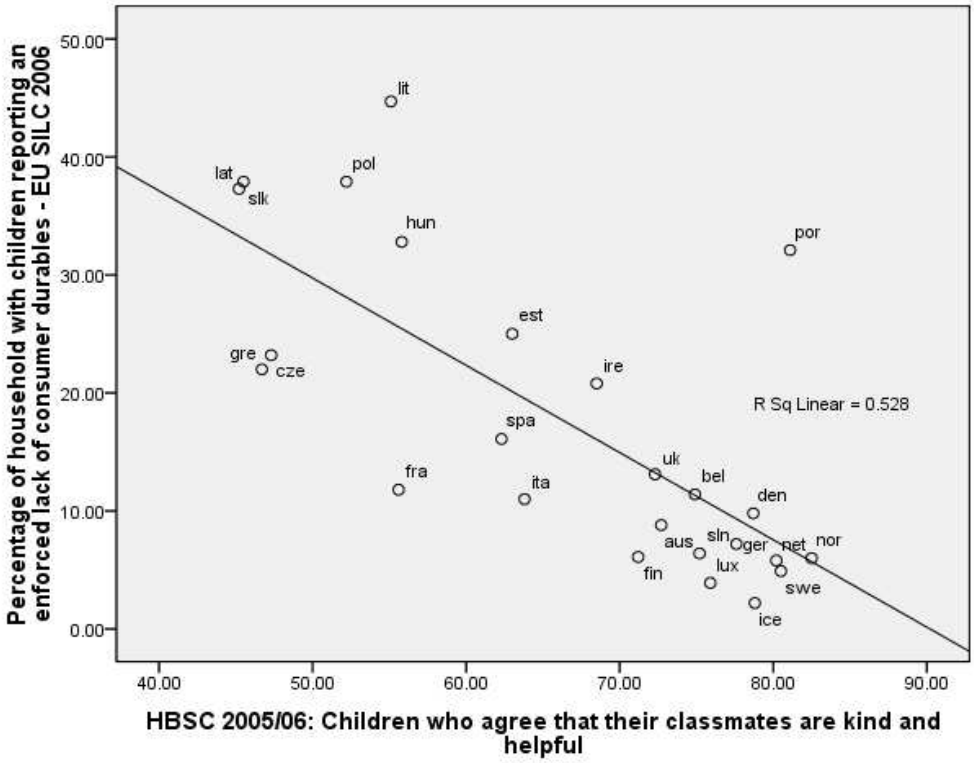
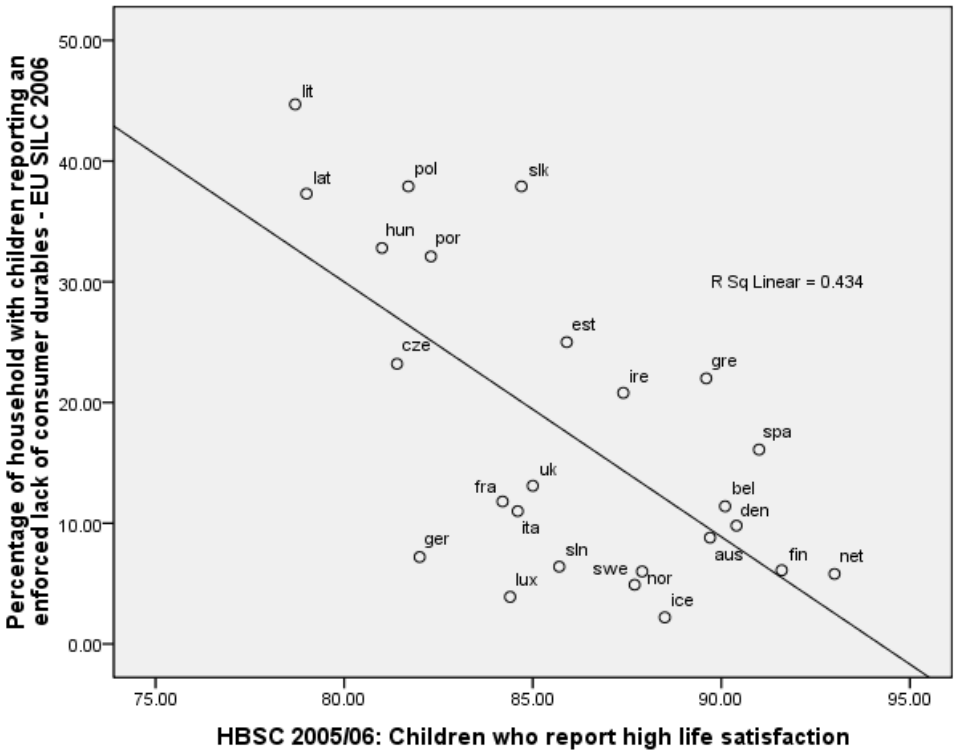


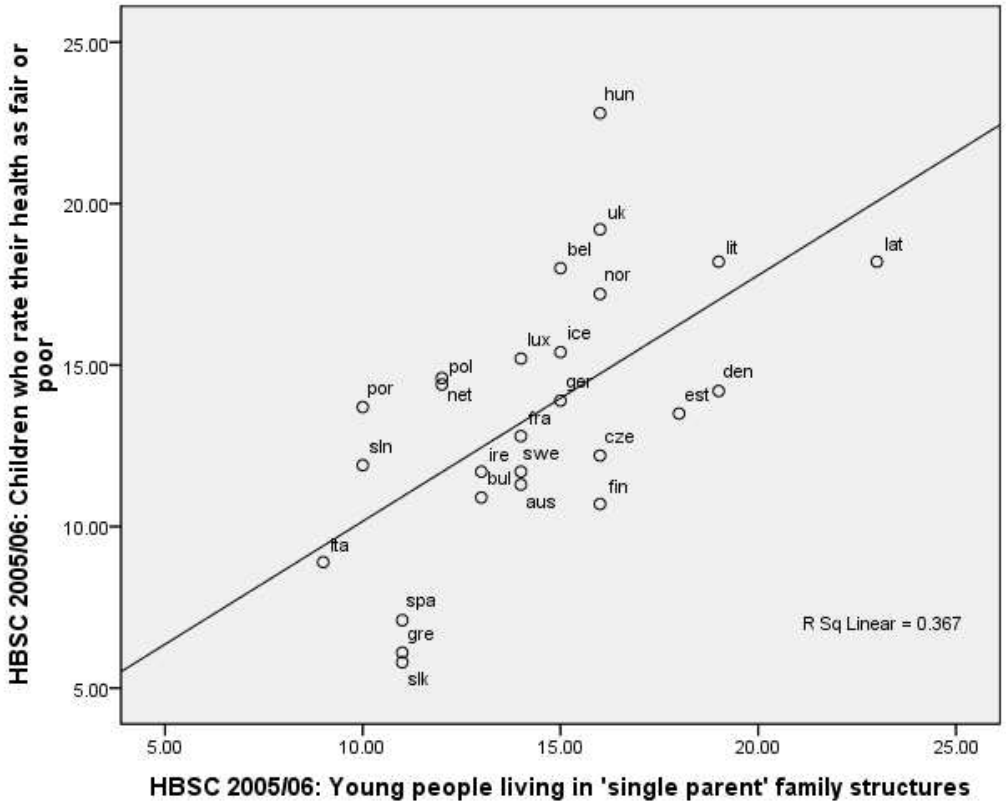
Figure 2: Deprivation by life satisfaction



What can we conclude about child subjective well-being at the macro or national level from this analysis? The overall life satisfaction of children in a population does not seem to be associated

with their satisfaction in the particular domains of school or health, and neither is it associated with child-parental relationships or the family structure of a country. It is associated with peer relationships and the material well-being indicators (deprivation and poor housing). Material well-being is also associated with peer relationships. The only subjective well-being indicator associated with family structure is subjective health of young people. That association is shown in Figure 3 (with Romania excluded on the grounds that it has a very high proportion of lone parent families which we suspect is associated with high levels of migration).

Figure 3: Subjective health by lone parent families



Micro analysis- Children's well-being in England

The micro analysis is based on a school based sample survey of nearly 11,000 young people in England aged 14-16 carried out in 2005 by the Children's Society. The main purpose of the survey was to study running away (Rees & Lee 2005). The sample was weighted to over represent ethnic minority groups and included a sub sample of children not in mainstream schools. The questionnaire included a series of Likert type questions that enabled ordinal scale to be developed covering three domains of subjective well-being:

- Personal well-being (Cronbach's alpha= 0.68 scale 0-16)
- Family well-being (Cronbach's alpha=0.83 scale 0-20)
- Neighbourhood well-being in the local area (Cronbach's alpha= 0.82 scale 0-16)

We also attempted to combine a set of questions on school to represent school well-being but they did not form a coherent dimension and so instead we took one question. Also, we do not have data on subjective health and housing problem in the micro level but included neighbourhood well-being which was not available in the macro level analysis.

Table 2 provides details of the components of the indices and shows that young people in England generally feel positively about their personal well-being, family well-being, their neighbourhoods and their school.

Table 2: Components of the well-being indicators and distribution of responses

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Personal well-being					
I find life really worth living	36.3	41.9	15.2	4.7	1.9
I feel my life has a sense of purpose	27.3	39.3	25.8	5.0	2.5
I often feel depressed (reversed coding for analysis)	7.5	19.9	21.3	31.0	20.4
I often long for someone to turn to for advice (reversed coding for analysis)	7.6	21.2	26.2	31.7	13.3
Family well-being					
I feel that my parents/carers treat me fairly	44.0	43.1	7.7	4.1	1.1
I get on well with my parents/carer	47.1	39.1	8.5	3.7	1.6
I feel that my parents/carers care about me	62.8	30.4	4.8	1.1	0.9
I feel that my parents/carers are too strict (reversed coding for analysis)	5.0	11.3	19.4	44.5	19.7
I feel that my parents/carers understand me	25.4	37.4	21.8	10.6	4.9
Neighbourhood well-being					
Crime is a growing problem in my area (reversed coding for analysis)	8.9	23.1	32.5	24.7	10.8
Violence is a growing problem in my area (reversed coding for analysis)	8.2	20.6	31.9	26.0	13.2
Gangs are a growing problem in my area (reversed coding for analysis)	11.3	24.2	28.3	23.6	12.5
Unemployment is a growing problem in my area (reversed coding for analysis)	4.8	7.6	53.9	21.5	12.3
Well-being at school					
I am happy in my school	12.8	58.2	15.8	8.7	4.4

Tables 3 and 4 show how the mean score of each well-being indicator varies by the demographic and socio-economic characteristics of the respondents. The results of the significance test were based on the analysis of the mean rank using Kruskal-Wallis and/or Mann-Whitney tests whichever is appropriate. A brief summary of the findings is provided below:

- Gender: Boys have higher personal and family well-being than girls. There is no difference in neighbourhood well-being. Girls have higher school well-being.
- Age: There is a slight tendency for personal well-being to improve with age but it is not consistent and there is no association between age and the other domains of well-being.
- Family type: Generally young people in couple families have higher well-being scores but the differences are really only consistent for personal well-being.
- Ethnicity: Indian young people tend to have the highest personal and family well-being. Pakistanis and Bangladeshis have the lowest personal well-being.

- Religious affiliation: Christians have the highest personal well-being and Muslims have the highest family well-being.
- Gay/lesbian/bisexual: Young people who said they belong to any of these groups have lower well-being across the domains.
- Disabled: This is associated with lower well-being except for the family domain.
- Learning difficulties: This is associated with lower well-being in all domains.
- Traveller/Roma/Gypsy: This is associated with lower well-being in all domains.
- Country of origin: Young people born outside the UK have lower personal and family well-being.
- Economic status: Young people living in poor households (defined as living in a workless household or receiving free school meals) have lower well-being, except in the family domain.

Table 3: Bivariate analysis of mean scores on personal and family wellbeing

		Personal well-being			Family well-being		
	n	Mean	95% CI +/-	Sig.[6]	Mean	95% CI +/-	Sig.
Gender				***			***
Female	4724	10.0	0.1		14.9	0.1	
Male	4867	11.0	0.1		15.8	0.1	
Age				***			ns
14 (ref.)	2345	10.4	0.1		15.3	0.1	
15	5985	10.5	0.1	ns	15.4	0.1	
16	1249	10.9	0.2	***	15.5	0.2	
Family structure				***			***
Couple (ref.)	6103	10.8	0.1		15.7	0.1	
Step parent	1517	9.9	0.2	***	14.5	0.2	***
Lone parent	1823	10.3	0.2	**	15.2	0.2	ns
Other	103	9.4	0.6	**	14.3	0.7	*
Ethnic group				***			***
White (ref.)	8013	10.5	0.1		15.4	0.1	
Black	300	10.9	0.3	ns	15.0	0.4	ns
Indian	411	11.0	0.3	**	16.4	0.3	***
Pakistani/Bangladeshi	287	10.1	0.4	**	15.4	0.5	ns
Mixed	368	10.4	0.3	ns	14.9	0.4	ns
Other	185	10.3	0.4	ns	14.8	0.5	ns
Religious affiliation				***			***
None (ref.)	4022	10.3	0.1		15.2	0.1	
Christian	4026	10.8	0.1	***	15.5	0.1	***
Muslim	632	10.6	0.3	ns	15.9	0.3	***
Other	450	9.8	0.3	ns	14.6	0.4	ns
Gay/lesbian/bisexual				***			***
No	7717	10.6	0.1		15.5	0.1	
Yes	211	8.8	0.5		13.9	0.6	
Disabled				***			ns
No	7835	10.6	0.1		15.4	0.1	
Yes	90	9.3	0.7		14.7	0.9	
Difficulties with learning				***			***
No	7482	10.7	0.1		15.5	0.1	
Yes	444	8.9	0.3		14.6	0.4	
Traveller/Roma/Gypsy				**			***
No	7820	10.6	0.1		15.5	0.1	
Yes	104	9.7	0.6		13.7	0.8	
Country of origin				***			***
UK	9080	10.5	0.1		15.4	0.1	
Non UK	495	10.0	0.3		14.8	0.4	
Economic status				***			*
Not poor (ref.)	7507	10.6	0.1		15.4	0.1	
Poor	1241	10.0	0.2	***	15.2	0.2	ns
Insufficient data	891	10.2	0.2	***	15.0	0.2	**

[6] This is the significance level of the mean rank *p<0.05;**p<0.01; ***p<0.001

Table 4: Bivariate analysis of mean scores on neighbourhood and school well-being

		Neighbourhood well-being			Happy with school		
	N	Mean	95% CI +/-	Sig.[7]	Mean	95% CI +/-	Sig.
Gender				ns			***
Female	4777	8.5	0.1		2.7	0.03	
Male	4924	8.5	0.1		2.6	0.03	
Age				ns			ns
14 (ref.)	2383	8.6	0.1		2.7	0.04	
15	6043	8.5	0.1		2.7	0.03	
16	1264	8.7	0.2		2.7	0.1	
Family structure				***			***
Couple (ref.)	6172	8.7	0.1		2.7	0.02	
Step parent	1533	8.4	0.2	ns	2.5	0.1	***
Lone parent	1843	8.0	0.2	***	2.6	0.1	***
Other	104	8.9	0.8	ns	2.5	0.2	ns
Ethnic group				*			***
White (ref.)	8079	8.6	0.1		2.7	0.02	
Black	305	8.1	0.4	ns	2.6	0.1	ns
Indian	425	8.7	0.4	ns	3.0	0.1	***
Pakistani/Bangladeshi	293	8.4	0.5	ns	2.7	0.1	**
Mixed	377	8.1	0.4	ns	2.5	0.1	***
Other	187	8.3	0.5	ns	2.8	0.1	**
Religious affiliation				***			***
None (ref.)	4061	8.4	0.1		2.6	0.03	
Christian	4057	8.7	0.1	**	2.8	0.03	***
Muslim	660	8.7	0.3	ns	2.9	0.1	***
Other	458	7.6	0.3	***	2.6	0.1	ns
Gay/lesbian/bisexual				***			***
No	7827	8.6	0.1		2.7	0.02	
Yes	211	7.6	0.5		2.2	0.2	
Disabled				*			*
No	7944	8.6	0.1		2.7	0.02	
Yes	91	7.3	0.8		2.4	0.2	
Difficulties with learning				**			***
No	7586	8.6	0.1		2.7	0.02	
Yes	450	8.0	0.3		2.3	0.1	
Traveller/Roma/Gypsy				**			***
No	7928	8.6	0.1		2.7	0.02	
Yes	107	7.3	0.7		2.1	0.2	
Country of origin				NS			NS
UK	9171	8.5	0.1		2.7	0.02	
Non UK	505	8.4	0.3		2.7	0.1	
Economic status				***			**
Not poor (ref.)	7581	8.6	0.1		2.7	0.02	
Poor	1256	7.7	0.2	***	2.6	0.1	*
Insufficient data	911	8.6	0.2	ns	2.6	0.1	*

[7] This is the significance level of the mean rank *p<0.05;**p<0.01; ***p<0.001.

While these associations are statistically significant, the differences noted were not very large and the characteristics also interact. So to explore the associations further we under took multiple regression of personal, family and neighbourhood well-being and logistic regression of the odds of not liking school. Tables 5 and 6 summarise the results. In each dimension of well-being two models are presented. First a model with just the socio-demographic variables and then one with the other well-being domains entered. The results show that:

- Personal well-being is lower for those who are: girls, not living in couples, Pakistanis/Bangladeshi, non-religious, gay/lesbian/bisexual, disabled, having difficulties in learning, non UK born and from a poor family. However these variables only explain (R squared) 7% of the variation in personal well-being. This goes up to 36% of the variation explained if family, neighbourhood and school well-being are added to the model. We explored (but have not shown) the contribution of all the other dimensions of well-being and they all contribute but 20 of the 29% of extra variation explained is due to family well-being.
- Family well-being is lower for those who are: girls, not living in couples, Black, mixed and other ethnic groups, non-religious, gay/lesbian/bisexual, having difficulties in learning, Traveller/Roma/Gypsy. All other variables are not associated with family well-being. However the first model only explains 5% of the variation in family well-being. In the second model when personal well-being, neighbourhood and school well-being are added, the proportion explained increases to 29% and almost all the increase can be attributed to personal well-being. Some of the other explanatory factors no longer contribute to family well-being when the other well-being domains are included.
- Neighbourhood well-being is worse for those who are: living with lone parents or step parents, mixed race, gay/lesbian/bisexual, disabled, having difficulties in learning, Traveller/Roma/Gypsy, and from a poor family. The other variables are not significant. However this model only explains 2% of the variation. Adding the other well-being domains only increases the proportion explained to 6%, and some of the explanatory variables that were previously significant are no longer significant.

- The logistic odds of a child being **not** happy with school are lower for those who are: girls, living with couples, White and Indian, with religion, not gay/lesbian/bisexual, not disabled, not having difficulties with learning. Other indicators are not significant. However the model only explains 5% of the variation. This increases to 21% when the other well-being domains are added to the model and most of that increase was due to personal well-being.

Table 5: Multiple regression of personal and family well-being

	Personal well-being				Family well-being			
	Model 1		Model 2		Model 1		Model 2	
	B (SE)	beta	B (SE)	beta	B (SE)	beta	B (SE)	beta
Constant	11.7 (0.1)		3.0 (0.2)		16.5 (0.1)		8.9 (0.2)	
Gender (ref: Male)								
Female	-1.0 (0.1)	-0.16***	-0.7 (0.1)	-0.11***	-1.0 (0.1)	-0.14***	-0.5 (0.1)	-0.08***
Age (ref: 14)								
15								
16	0.2 (0.1)	0.03*	0.2 (0.1)	0.02*				
Family structure (ref: Couple)								
Step parent	-0.8 (0.1)	-0.10***	-0.3 (0.1)	-0.04***	-1.1 (0.1)	-0.11***	-0.6 (0.1)	-0.06***
Lone parent	-0.5 (0.1)	-0.06***	-0.2 (0.1)	-0.03**	-0.3 (0.1)	-0.03**		
Other	-1.0 (0.3)	-0.03**	-0.7 (0.3)	-0.02*	-0.9 (0.4)	-0.03*		
Ethnic group (ref: White)								
Black								
Indian	0.5 (0.2)	0.02*	0.9 (0.2)	0.05***	-0.7 (0.2)	-0.03**	-1.0 (0.2)	-0.04***
Pakistani/Bangladeshi			-0.5 (0.2)	-0.03**	0.7 (0.2)	0.04**	0.7 (0.2)	0.03**
Mixed	-0.6 (0.2)	-0.03**	-0.6 (0.2)	-0.03**				
Other					-0.8 (0.2)	-0.04***	-0.6 (0.2)	-0.03**
					-0.7 (0.3)	-0.02*	-0.5 (0.3)	-0.02*
Religious affiliation (ref: Yes)								
No	-0.3 (0.1)	-0.06***	-0.1 (0.1)	-0.02*	-0.2 (0.1)	-0.03**		
Gay/lesbian/bisexual (ref: No)								
Yes	-1.4 (0.2)	-0.07***	-0.6 (0.2)	-0.03**	-1.1 (0.3)	-0.1***		
Disabled (ref: No)								
Yes	-0.7 (0.3)	-0.03*						
Difficulties with learning (ref: No)								
Yes	-1.6 (0.2)	-0.11***	-0.9 (0.1)	-0.07***	-0.1 (0.2)	-0.1***		
Traveller/Roma/ Gypsy (ref: No)								
Yes			0.5 (0.3)	0.02*	-1.6 (0.4)	-0.1***	-1.2 (0.3)	-0.04***
Country of origin (ref: UK)								
Non UK	-0.5 (0.2)	-0.04**	-0.3 (0.1)	-0.02*				
Economic status (ref: not poor)								
Poor	-0.3 (0.1)	-0.03*	-0.2 (0.1)	-0.03*				
Insufficient data							0.3 (0.1)	0.02*
Family well-being (as a score)			0.3 (0.0)	0.41***				
Personal well-being (as a score)							0.5 (0.0)	0.50***
Neighbourhood well-being (as a score)			0.1 (0.0)	0.10***			0.05 (0.0)	0.05***
School well-being (as a score)			0.8 (0.0)	0.24***			0.3 (0.0)	0.09***
R^2	0.07		0.36		0.05		0.29	

Table 6: Multiple regression of neighbourhood well-being and logistics regression of the odds of not being happy at school.

	Neighbourhood well-being				Odds of not being happy at school			
	Model 1		Model 2		Model 1		Model 2	
	B (SE)	beta	B (SE)	beta	B (SE)	Odds	B (SE)	Odds
Constant	8.9 (0.1)		5.0 (0.2)		-1.3 (0.1)	0.26***	2.4 (0.2)	11.05***
Gender (ref: Male)								
Female			0.3 (0.1)	0.04**	-0.2 (0.1)	0.84***	-0.5 (0.1)	0.60***
Family structure (ref: Couple)								
Step parent	-0.3 (0.1)	-0.03**			0.4 (0.1)	1.48***	0.2 (0.1)	1.17*
Lone parent	-0.5 (0.1)	-0.06***	-0.4 (0.1)	-0.04***	0.3 (0.1)	1.36***	0.2 (0.1)	1.20*
Other	0.9 (0.4)	0.03*	1.0 (0.4)	0.03**	0.5 (0.2)	1.60*		
Ethnic group (ref: White)								
Black					0.3 (0.2)	1.38*	0.4 (0.2)	1.54*
Indian					-0.6 (0.2)	0.55**	-0.7 (0.2)	0.51**
Pakistani/Bangladeshi								
Mixed	-0.4 (0.2)	-0.02*			0.6 (0.1)	1.75***	0.5 (0.1)	1.69***
other								
Religious affiliation (ref: Yes)								
No					0.4 (0.1)	1.48 ***	0.4 (0.1)	1.42***
Gay/lesbian/bisexual (ref: No)								
Yes	-0.7 (0.3)	-0.03**			0.7 (0.1)	2.00***	0.4 (0.2)	1.48*
Disabled (ref: No)								
Yes	-0.9 (0.4)	-0.03*	-0.8 (0.4)	-0.02*	0.9 (0.1)	2.35***	0.6 (0.1)	1.80***
Difficulties with learning (ref: No)								
Yes	-0.5 (0.2)	-0.03*			0.6 (0.2)	1.88**	0.5 (0.2)	1.62*
Traveller/Roma/ Gypsy (ref: No)								
Yes	-1.2 (0.4)	-0.04**	-0.8 (0.4)	-0.03*				
Economic status (ref: not poor)								
Poor	-0.8 (0.1)	-0.07***	-0.8 (0.1)	-0.07***				
Insufficient data								
Family well-being (as a score)			0.1 (0.0)	0.06***			-0.1 (0.0)	0.95***
Personal well-being (as a score)			0.2 (0.0)	0.14***			-0.2 (0.0)	0.79***
Neighbourhood well-being (as a score)							-0.0 (0.0)	0.96***
School well-being (as a score)			0.6(0.0)	0.15***				
R^2	0.02		0.06					
Nagelkerke R^2					0.05		0.21	

Discussion

The objective of this paper was to explore variations in subjective well-being at two levels of analysis – the macro and the micro. At the macro level we have found some quite strong negative associations between the level of deprivation and the level of life satisfaction of young people between countries. Moreover, we found that deprivation is also negatively associated with young people's relationships with their classmates. Subjective health is associated only with family structure. Relationships with parents and well-being at school are not associated with either the other subjective well-being indicators or the contextual indicators. At the micro level there are very weak associations between the subjective well-being measures and many socio-economic characteristics of the young people, including family structure and poverty. There are rather stronger associations between the different domains of subjective well-being especially personal well-being, family well-being and school well-being.

Of course at the micro level the measures of different domains of subjective well-being are associated, literally at the individual level, they are not really independent – what a young person might feel about themselves will influence what they say they feel about their family relationships. This association is much less likely to be as strong at the macro level.

So between the micro and the macro analysis of subjective well-being we have some consistent and some inconsistent results. At the macro level personal well-being (i.e. life-satisfaction) is associated with levels of deprivation/housing conditions and relationships with classmates (and age and gender) but not with relationships with parents, family structure or subjective health or well-being at school. At the micro level in England personal well-being is also but very weakly associated with age, gender, poverty, but unlike the macro level also with family structure, school and neighbourhood well-being and more strongly with family well-being.

At the macro level relational well-being in terms of the relationships with parents is associated with nothing else (except we know from the HBSC that age matters and to some extent gender). At the micro level relational well-being within the family (i.e. family well-being) is very weakly associated with gender, poverty, school and neighbourhood well-being and more strongly with personal well-being.

Finally, turning to the well-being at school at the macro level it is associated only with family structure (and with age and gender). At the micro level it is weakly associated with gender, family structure and poverty and more strongly with personal, family and neighbourhood well-being.

There are, however, a number of methodological problems that need to be acknowledged. First the indicators used cover similar but not identical domains of subjective well-being. Life satisfaction at the macro level is compared with personal well-being at the micro level. They may not be the same thing. Second the actual measures are not the same. The macro measures are based on national proportions answering single questions while the micro measures are (mostly) scales, checked for scalability, but derived for this comparison. So the differences observed between the micro and macro results may be a function of the different measures used. Third, macro analysis is constrained by the fact that we only have data on 25 or so countries (depending on the source of the data – with that number we are restricted to simple bivariate analysis). Further because we do not have access to the HBSC data we cannot explore variation in subjective well-being within countries. So for example the fact that there is no association between life satisfaction and family structure at the macro level does not imply that there is no association at the micro level. A country may have high levels of life satisfaction among its young people and high rates of lone parent families. But within the country children in lone parent families may have lower (or higher) life satisfaction than other types of family. It is therefore, possible that the variations within countries at the micro level could be hidden by the 'aggregation' of data at the macro level.

There remains a conundrum at the heart of this paper which cannot be resolved with the data we have available (and the level of access we have in the case of the HBSC). Comparative analysis shows distinct variation between some domains of subjective well-being – children in some countries are happier than children in some other and these differences are associated with some explanatory variables that seem to make sense theoretically. If genetics are the main determinant of subjective well-being they surely cannot be operating at the country level? The comparatively low proportion of young people in France who report their friends are kind and helpful surely cannot be explained by genes, though it may be a function of culture or even language? Then when we turn to national level data, at least for England, as other studies have found before us

very little of the variation in subjective well-being is explained by the large variety of independent characteristics available. Why?

We are continuing to explore this at a national level with a new large survey of subjective well-being of 10, 12 and 14 year olds in England and using a wider variety and better set of indicators. Meanwhile, perhaps curiously, the international data on subjective well-being makes more sense than micro level data. Our findings from the macro data also appear to converge with White's (2008) definition of well-being in relation to the subjective, material and relational domains, which in this case perhaps suggest that what matters to the well-being of children at the age groups that we were looking at are their life satisfaction, subjective health and their relationship with peers.

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