

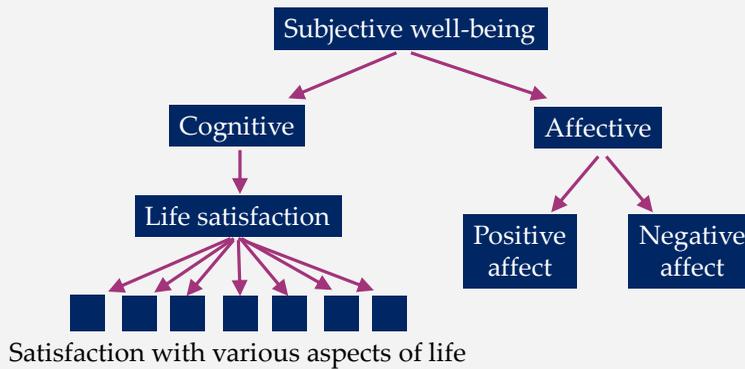
Explaining variation in children's subjective well-being using Wave 5 of the Millennium Cohort Study

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Subjective well-being

How a person evaluates / feels about their own life



Previous research on variation in children's subjective well-being

- A number of within-country studies including the UK, US, Germany, Spain
- Almost exclusively using child-reported data
- Demographic and household economic variables tend only to explain 5% to 10% of the variation in SWB
- Personality appears to explain more than 20% of variation, (although more research needed on conceptual overlap)
- Other important factors identified include bullying, family relationships, choice and autonomy
- However, limitations in relying primarily on self-reported data
- MCS provides a valuable source of information from different perspectives

Millennium Cohort Study

Major longitudinal panel study in the UK

- Following children born at the start of the new millennium
- Five waves of data available (nine months, 3 years, 5 years, 7 years and 11 years)
- Data gathered from parents, teachers and children (Waves 4 and 5)
- Over 18,000 children started the study. Over 13,000 still in the study at 11 years old
- Sample reflects diversity of UK with over-sampling of minority and disadvantaged groups
- Weighting variables available to correct for over-sampling and attrition

Child SWB measures in Wave 5 of MCS

Cognitive SWB

On a scale from 1 to 7 where '1' means completely happy and '7' means not at all happy, how do you feel about the following parts of your life?

How do you feel about
... your school work
... the school that you go to
... your family
... your friends
... the way that you look
... your life as a whole

Affective SWB

In the last four weeks, how often did you

... feel happy
... laugh

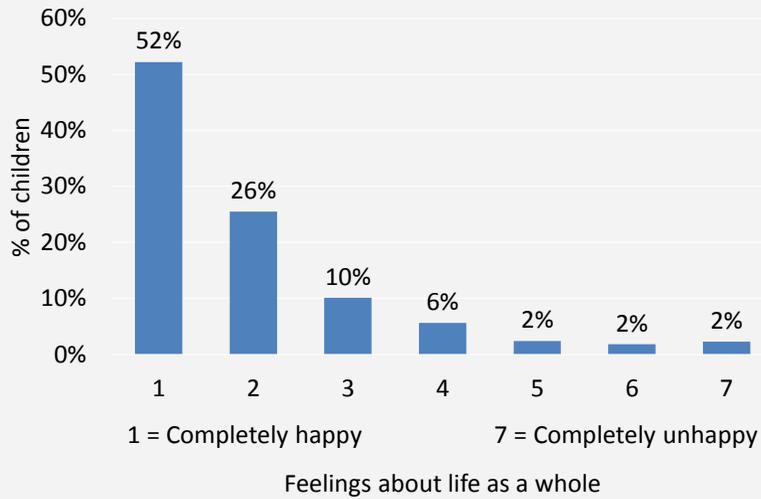
... feel sad
... feel afraid or scared
... get angry
... get worried about what would happen to you

Answers on a five-point scale – 'Never', 'Almost never', 'Sometimes', 'Often', 'Always'

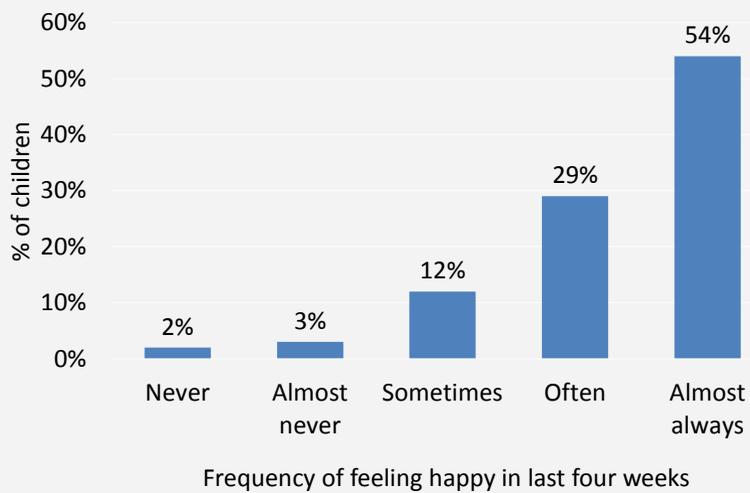
Approach to dependent variables

- Exploratory factor analysis supports the idea of a three-component model – cognitive SWB, positive affect, negative affect
- Five cognitive domains form a reliable scale ($\alpha = .776$). However, questions about make-up of this scale – heavy weighting of school-related issues and absence of key aspects of life
- Affective domains – only two positive items and item sets not clearly conceptualised
- So, decided to make use of three single-item dependent variables:
 - Happiness with life as whole (cognitive SWB)
 - Recent feelings of happiness (positive affect)
 - Recent feelings of sadness (negative affect)

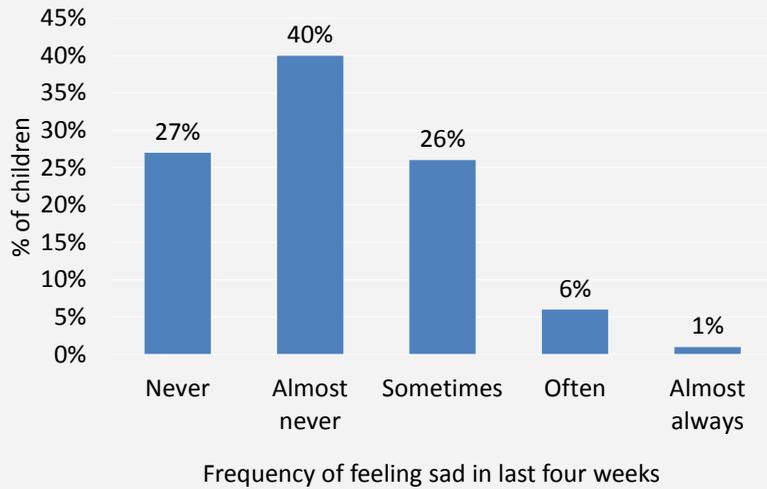
Happiness with life as a whole



Feelings of recent happiness



Feelings of recent sadness



Dependent variables: Summary statistics

All three variables transformed onto a zero to ten scale where higher scores mean higher SWB in order to aid comparisons

Variable	Mean	SD	% below mid-point
Life satisfaction (LS) 'Happiness with life as a whole'	8.42	2.32	6.5%
Positive affect (PA) Recent feelings of happiness	8.25	2.34	5.3%
Negative affect (NA) Recent feelings of sadness	7.15	2.32	7.2%

Independent variables

Characteristics	
Gender, Ethnicity, Country within UK	
Parent-reported	Child-reported
Child health ✓✓	
Children's activities and time use ✓✓✓	Activities and time use ✓✓✓
Children's access to technology ✓✓	
Parent characteristics and well-being ✓✓	
Parent-child relationships ✓✓	
Household structure ✓✓	
	Friendships and bullying ✓✓
Household economic factors ✓✓	Money and things ✓✓
Housing ✓	
Children's school experience ✓✓✓	School ✓✓✓
Local area ✓	Local area ✓

✓✓✓ Very good coverage ✓✓ Good coverage ✓ Some coverage

Analytical approach

- Bivariate analysis of associations between child characteristics and each dependent variable
- Parent-reported variables: bivariate analysis followed by linear regressions of key* independent parent-reported variables and each dependent variable
- Child-reported variables: bivariate analysis followed by linear regressions of key* independent parent-reported variables and each dependent variable
- Final linear regression models including characteristics, parent-reported variables and child-reported variables
- Check above analysis using binary dependent variables and logistic regression

* Due to large sample size, there were many significant associations of very small effect size, so will only discuss variables that had bivariate effect size of at least 0.5%

Bivariate analysis: Child characteristics

Gender

- LS: No significant difference
- PA and NA: Girls significantly lower than boys but very small effect size (<0.5%)

Ethnicity

- Similar patterns for all three variables. Significant differences of very small magnitude. Children of Indian, Pakistani and Bangladeshi origin tended to have higher SWB than children of white origin

Country within UK

- Again similar patterns for all three variables with significant differences of very small magnitude. Children in Northern Ireland tended to have the highest SWB, followed by Wales and Scotland (roughly equal) and then England having the lowest SWB

Overall explanatory power of three variables very small (<1%)

Regression models: Parent-reported variables and child characteristics

Variable	LS	PA	NA
Female (child)			-
Country of UK (LS = NI; NA = NI, W & S)	+		+
Child has autism/Aspergers		-	
Family structure (LS= Lone/Step; PA = Lone)	-	-	
Frequency child plays sport/exercises	+	+	
Parental closeness to child	+	+	
Conflict with child	-	-	-
Child has positive view of school		+	
Parent wants child to continue education	+		
Parental life satisfaction	+		
Parental depression		-	-
Adjusted R²	4.5%	3.5%	3.9%

Note: No significant contribution of economic, housing or local area factors

Regression models: Child-reported variables and child characteristics

Variable	LS	PA	NA
Female (child)	-		-
Country of UK (Wales)			+
Ethnicity (LS = P/B; PA = Black)	+	-	
Play sports / exercise	+	+	+
Read for enjoyment			+
Use internet	+		
Get on with and spent time with friends	+	+	+
Self-reported poverty / lack of items	-	-	-
Positive attitude to school	+	+	+
Positive experience of school	+	+	+
Being bullied by other children/siblings	-	-	-
Adjusted R²	13.9%	10.7%	21.3%

Note: Strong effect of bullying particularly for sadness (explains 16% of variation)

Combined regression: Life satisfaction

Explained 14% of variation, of which seven variables explained 12%, in order of decreasing influence:

- Frequency of being bullied by other children (not siblings)
- Feeling that school is a waste of time
- Caring about 'how well I do at school'.
- Looking forward to going to secondary school
- Feeling that family is poorer than average
- Being 'bothered if friends have things I don't'
- Frequency of playing sports or active games

Very few characteristics or parent-reported variables made a significant contribution. Small contribution for: family structure, wanting child to stay on at school and parent-reported closeness to child

Combined regression: Recent happiness

Explained 11% of variation, of which eight variables explained 10%, in order of decreasing influence:

- Frequency of being bullied by other children (not siblings)
- Caring about 'how well I do at school'.
- Liking class teacher
- Being 'bothered if friends have things I don't'
- Frequency of spending time with friends
- Parental-reported child positive attitudes to school
- Looking forward to going to secondary school
- Frequency of falling out with friends

Combined regression: Recent sadness

Explained 21% of variation, of which six variables explained 19%, in order of decreasing influence:

- Frequency of being bullied by other children
- Frequency of falling out with friends
- Frequency of being bullied by siblings
- Feeling school is a waste of time
- Being 'bothered if friends have things I don't'
- Frequency of spending time with friends

Conclusions

- Importance of conceptual clarity in measuring SWB – some differences in factors associated with life satisfaction, positive affect and negative affect
- Demographic and economic variables explain relatively little of variation in child SWB
- Parent-reported variables explain some variation
- Child-reported variables explain much more (although measurement issues to resolve)
- Bullying emerges as a key issue in the analysis
- School engagement, quality of friendships and experiences of poverty also seem important
- Significant gaps in available data – e.g. shortage of data on quality of family relationships, particularly from children's perspective

Comments please!

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