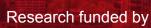


# The wellbeing of secondary school children with Special **Educational Needs (SEN)**

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# **Background**



- Despite much research on the personal wellbeing of children, we know little about children with SEN
- Children with SEN can have a range of needs (learning difficulties; social & emotional; communication etc.)
- ...and hence may experience school and other aspects of life differently from children without SEN
  - Greater risk of bullying (Chatzitheochari et al, 2014)
  - More likely to be excluded or absent from school (DfE, 2016)
  - Needs that may make it harder to learn than most children
- These factors may contribute to lower levels of wellbeing

## Lack of data

- We have lots of data on child wellbeing
  - e.g. from surveys BHPS, USoc, MCS, GCS, OECD, ONS
- We have data on SEN status
  - e.g. from School Census (and some 'subjective' measures from surveys)
- But lack of data on child wellbeing <u>AND</u> SEN status
  - Rarely collected in the same dataset
    - FACS, MCS5

## **Research Questions**

- What is the personal wellbeing of children with SEN?
- Do levels of personal wellbeing of children with SEN differ from levels of personal wellbeing of children without SEN?
- Is having SEN independently associated with levels of personal wellbeing (and which other factors are)?

[We also explored children's psychological wellbeing]

• Where is the data that lets us explore these issues?



## Data source: Linked USoc-NPD dataset Secure access dataset, SN: 764

### National Pupil Database

- Contains detailed information on every child at school in England
- Information collected via School Census (three times a year)
- Exam results
- Attendance
- Socio and economic background, including **SEN**
- Does not collect wellbeing information

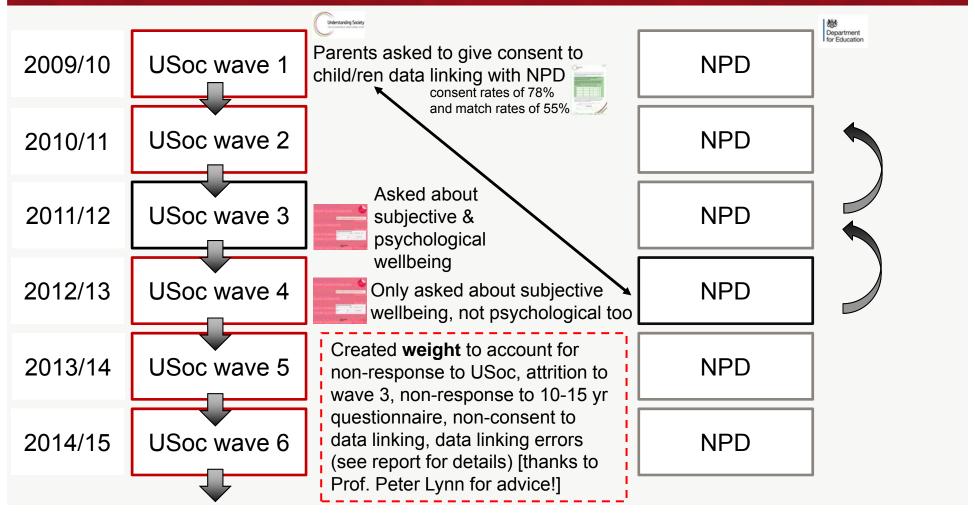


### **Understanding Society**



- Annual panel survey from 2009/10
- 40,000 households
- Adults and children 10-15 years
- Socio-demographic & economic background
- Family relationships
- Health & wellbeing of parents
- Child behaviours & attitudes
- Family relationships
- Subjective & psychological wellbeing of children (10-15 years)
- Does not collect SEN information

## The linked USoc-NPD dataset



# Measuring Special Educational Needs



1,600 children aged 10-15 used in analysis

Table 2.1 Number of children (aged 10-15) in the linked data according to SEN support category

Sp	Number of children in linked dataset	
	No Special Educational Needs	1,301
Children with Special Educational Needs	School Action or Early Years Action	176
	School Action Plus or Early Years Action Plus	77
	Statement	46
	All with Special Educational Needs	299
	All children	1,600

Source: Understanding Society – National Pupil Database (linked dataset)

- Data predates recent SEN(D) reforms
- Analysis does not differentiate support type
  - School Action / School Action Plus / Statement
- ...nor area of need
  - Learning difficulty; social emotional & mental health; speech, language & communication; hearing, visual, autism etc.

- USoc-NPD data broadly mirrors NPD
- One in five children aged 10-15 have SEN
- Boys and FSM children at higher risk of having SEN (know this from NPD data)

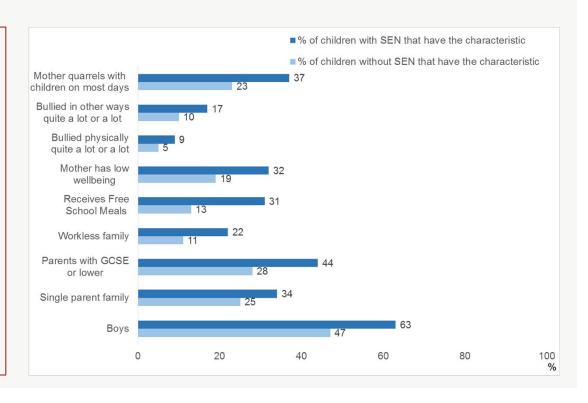
Table 2. Percentage of children (aged 10-15) that have SEN by child characteristics

	% of children with SEN			
		USoc-NPD	Full NPD	
Child characteristic	Weighted %	Base of % (n)	%	
All children		19%	1600	19%
Gender	Boys	24%	803	27%
	Girls	14%	797	16%
Ethnic group	White	18%	1188	19%
	Ethnic minority	20%	406	19%
Language	English	18%	1367	19%
	Not English	20%	229	19%
Eligible for Free School	No	15%	1322	16%
Meals	Yes	35%	278	34%

Source: Understanding Society – National Pupil Database (linked dataset)
Full NPD % taken from Department for Education's published SEN statistics (DfE, 2013)

# Which children have Special Educational Needs?

- Most of the characteristics data comes from USoc
- Children with SEN may have other characteristics that impact on their levels of wellbeing
- Characteristics are likely to vary according to area of need

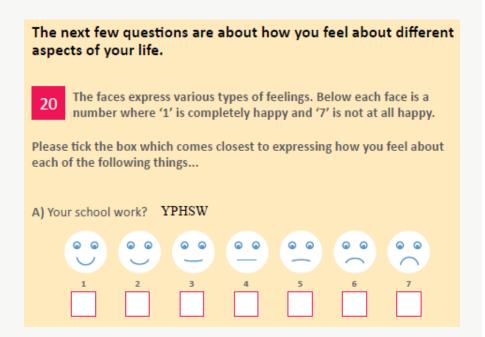


# Measuring child wellbeing

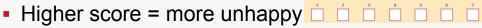


### **Subjective wellbeing ('unhappiness')**

- Questions in self-completion questionnaire, asked to 10-15 year olds
- Children asked about different aspects of their lives:
  - School you go to
  - School work
  - Appearance
  - Family
  - Friends
  - Life as a whole

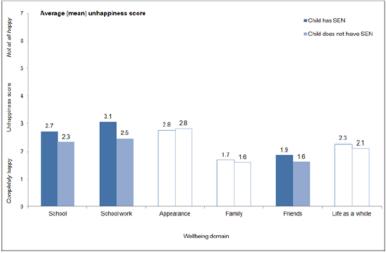


## Subjective wellbeing - average levels of 'unhappiness'



- Overall, children happiest with family & friends, unhappiest with school work & appearance
- Children with SEN have higher levels of unhappiness, than children without SEN, with:
  - school work (mean score 3.1 compared to 2.5)
  - school (mean score 2.7 compared to 2.3)
  - friends (mean score 1.9 compared to 1.6)
- No difference for appearance, family, life as a whole

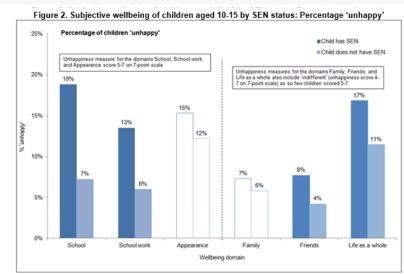




Source: Understanding Society – National Pupil Database (linked dataset)
The left (dark) bars in each pair of bars represent children with SEN
The right (light) bars in each pair of bars represent children without SEN
White bars indicate no statistically significant difference between children with and without SEN

# Subjective wellbeing – percentage 'unhappy'

- - 5+ for school, school work & appearance
  - 4+ for family, friends, and life as a whole (indifferent/unhappy)
- Children with SEN are more likely than children without SEN to be 'unhappy' with:
  - school (19 per cent compared to 7 per cent)
  - school work (13 per cent compared to 6 per cent),
  - **friends** (8 per cent compared to 4 per cent)
  - life as a whole (17 per cent compared to 11 per cent)
- No difference for appearance and family



Source: Understanding Society – National Pupil Database (linked dataset)
The left (dark) bars in each pair of bars represent children with SEN
The right (light) bars in each pair of bars represent children without SEN
White bars indicate no statistically significant difference between children with and without SEN

# Is having SEN independently associated with child wellbeing?



- 1. Linear regression model
- Dependent variable: Unhappiness score (1-7)
- 2. Logistic regression model
- Dependent variable: 'Unhappy' / not 'unhappy'
- Model for each wellbeing domain
  - School you go to
  - School work
  - Appearance
  - Family
  - Friends
  - Life as a whole

#### **Independent variables:**

Special Educational Needs

#### Personal characteristics of child

Gender Ethnic group

Language

#### **Family characteristics**

Family type Age of mother

Number of dependent children

Age of youngest child

#### Family economic background

Highest parental qualification Work status

Household income

Free School Meal eligibility

#### Child behaviours

Risky behaviours (alcohol etc.) Amount of screen time

Being bullied at school

#### Child relationship with parents

Family meals together Talk about important matters

#### Mental health

Strengths & difficulties

#### Health and wellbeing of mother

Long-standing illness / disability Subjective wellbeing

Life satisfaction

# Is having SEN independently associated with child wellbeing?

Evidence of a link between SEN and unhappiness with schooling

#### 'Unhappiness' score

 After taking the other factors into account having SEN is only associated with school work (it is no longer associated with school or friends)

#### Being 'unhappy'

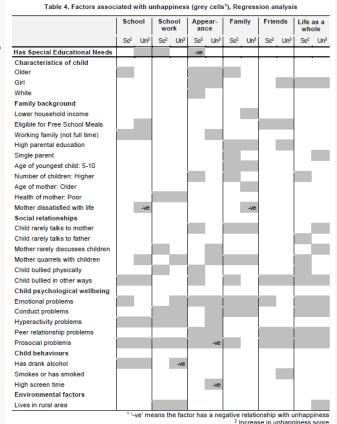
 After taking the other factors into account, children with SEN were more likely than children without SEN to say they were unhappy with their **school** (it is no longer associated with school work, friends, or life as a whole) Table 3. Subjective wellbeing: Regression analysis to isolate impact of having SEN

Increase in unhappiness score for children with SEN compared to children without SEN							
Wellbeing domain (and model: Linear regression analysis)	Coef.1	Std. Err.	Sig.				
School							
Children with SEN compared to children without SEN (No control variables)	0.39	0.13	0.00				
Children with SEN compared to children without SEN (All control variables3)	0.05	0.11	0.65				
School work							
Children with SEN compared to children without SEN (No control variables)	0.60	0.10	0.00				
Children with SEN compared to children without SEN (All control variables3)	0.28	0.09	0.00				
Appearance							
Children with SEN compared to children without SEN (No control variables)	-0.06	0.12	0.64				
Children with SEN compared to children without SEN (All control variables3)	-0.21	0.10	0.04				
Family							
Children with SEN compared to children without SEN (No control variables)	0.09	0.08	0.26				
Children with SEN compared to children without SEN (All control variables3)	-0.03	0.07	0.72				
Friends							
Children with SEN compared to children without SEN (No control variables)	0.25	0.09	0.00				
Children with SEN compared to children without SEN (All control variables3)	0.04	0.07	0.56				
Life as a whole							
Children with SEN compared to children without SEN (No control variables)	0.17	0.09	0.06				
Children with CEN compared to children without CEN (All control variables)	-0.11	0.07	0.12				
Children with SEN compared to children without SEN (All control variables)							
Children with SEN compared to children without SEN (All control variables <sup>3</sup> ).  Odds of being unhappy for children with SEN compared to children with	out SEN Odds	Std.					
odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)	out SEN	Std. Err.					
Odds of being unhappy for children with SEN compared to children with  Wellbeing domain (and model: Logistic regression analysis)  Not happy with school	Out SEN Odds Ratio <sup>2</sup>	Err.	Sig				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis) Not happy with school Children with SEN compared to children without SEN (No control variables)	Odds Ratio <sup>2</sup>	0.69	Sig 0.00				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis) Not happy with school Children with SEN compared to children without SEN (No control variables)	Out SEN Odds Ratio <sup>2</sup>	Err.	Sig 0.00				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>3</sup> )  Not happy with school work	Odds Ratio <sup>2</sup> 2.96 1.84	0.69 0.53	Sig. 0.00 0.04				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>2</sup> )  Not happy with school work  Children with SEN compared to children without SEN (No control variables)	Out SEN Odds Ratio <sup>2</sup> 2.96 1.84	0.69 0.53	0.00 0.04				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>2</sup> )  Not happy with school work  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables)	Odds Ratio <sup>2</sup> 2.96 1.84	0.69 0.53	0.00 0.04				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>3</sup> )  Not happy with school work  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>3</sup> )  Not happy with appearance	2.96 1.84 2.46	0.69 0.53 0.56 0.37	0.00 0.04 0.00 0.47				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>3</sup> )  Not happy with school work  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>3</sup> )  Not happy with appearance	Out SEN Odds Ratio <sup>2</sup> 2.96 1.84	0.69 0.53	0.00 0.04 0.00 0.47				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables <sup>3</sup> ) Not happy with school work  Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables <sup>3</sup> ) Not happy with appearance Children with SEN compared to children without SEN (No control variables)	2.96 1.84 2.46	0.69 0.53 0.56 0.37	0.00 0.04 0.00 0.47				
Odds of being unhappy for children with SEN compared to children with  Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables <sup>2</sup> )  Not happy with school work  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables)  Not happy with appearance  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables)  Indifferent / Not happy with family	Odds Ratio <sup>2</sup> 2.96 1.84 2.46 1.24 1.30 1.09	0.69 0.53 0.56 0.37 0.27 0.28	0.00 0.04 0.00 0.47				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables <sup>3</sup> ) Not happy with school work Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables <sup>3</sup> ) Not happy with appearance Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (No control variables)	2.96 1.84 2.46 1.24	0.69 0.53 0.56 0.37	0.00 0.04 0.00 0.47				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Not happy with school work Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Not happy with appearance Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Children with SEN compared to children without SEN (All control variables) Indifferent / Not happy with family Children with SEN compared to children without SEN (No control variables)	Odds Ratio <sup>2</sup> 2.96 1.84 2.46 1.24 1.30 1.09	0.69 0.53 0.56 0.37 0.27 0.28	0.00 0.04 0.00 0.47 0.20 0.74				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Not happy with school work Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Not happy with appearance Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Children with SEN compared to children without SEN (All control variables) Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (No control variables)	Odds Ratio <sup>2</sup> 2.96 1.84  2.46 1.24  1.30 1.09	0.69 0.53 0.56 0.37 0.27 0.28	0.00 0.04 0.00 0.47 0.20 0.74				
Odds of being unhappy for children with SEN compared to children with  Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables)  Not happy with school work  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables)  Not happy with appearance  Children with SEN compared to children without SEN (No control variables)  Children with SEN compared to children without SEN (All control variables)  Children with SEN compared to children without SEN (All control variables)  Children with SEN compared to children without SEN (No control variables)	Odds Ratio <sup>2</sup> 2.96 1.84  2.46 1.24  1.30 1.09	0.69 0.53 0.56 0.37 0.27 0.28	0.00 0.04 0.00 0.47 0.20 0.74				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Not happy with school work Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Not happy with appearance Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Indifferent / Not happy with family Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables) Children with SEN compared to children without SEN (All control variables) Children with SEN compared to children without SEN (No control variables)	Out SEN Odds Ratio <sup>2</sup> 2.96 1.84 2.46 1.24 1.30 1.09 1.14 0.95	0.69 0.53 0.56 0.37 0.27 0.28 0.30 0.33	0.000 0.047 0.20 0.74 0.63				
Odds of being unhappy for children with SEN compared to children with Wellbeing domain (and model: Logistic regression analysis)  Not happy with school  Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (All control variables <sup>3</sup> ) Not happy with school work  Children with SEN compared to children without SEN (No control variables <sup>3</sup> ) Not happy with appearance Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (No control variables) Indifferent / Not happy with amily Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (No control variables) Children with SEN compared to children without SEN (No control variables)	0ut SEN Odds Ratio <sup>2</sup> 2.96 1.84 2.46 1.24 1.30 1.09 1.14 0.95	0.69 0.53 0.56 0.37 0.27 0.28 0.30 0.33	0.000 0.047 0.20 0.74 0.63				
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<sup>1</sup> The increase in unhappiness score for children with SEN compared to children without SEN.
<sup>2</sup> An odds ratio greater (less) than one means higher (lower) odds of children with SEN being unhappy.
<sup>3</sup> See Figure 9 for full list of control variables and Annex D for more detailed regression results.

# What other factors were associated with child wellbeing?

- Factors other than having SEN are also independently associated with low subjective wellbeing
- These can vary according to the domain of subjective wellbeing
- Some factors are **prominent** across a number of wellbeing domains:
  - being a girl
  - being bullied (whether physical or non-physical)
  - having higher levels of psychological difficulties



<sup>3</sup> Higher odds of being unhappy (school, school work, appearance) or indifferent/unhappy (Friends, Family,

Life as a whole)

# Aside: We also looked at the association between SEN and psychological wellbeing

## Psychological wellbeing ('difficulties')

Strengths and Difficulties Questionnaire:

- Emotional symptoms
   Hyperactivity
- Conduct problems
   Peer relationships
  - Prosocial behaviour
- Our research shows that children with SEN have higher average **psychological difficulties** score across all domains
- Children with SEN are also more likely than children without SEN to have high / very high psychological difficulties across all domains

Now for some questions about how you see yourself as a person. For each item, please tick the box for Not True, Somewhat True or Certainly True. It would help us if you answered all items as best you can even if you aren't absolutely certain. Please give your answers on the basis of how things have been for you over the last six months.					
	Not true	Somewhat true	Certainly true		
I try to be nice to other people.  YPSDQA  I care about their feelings					
I am restless, I cannot stay still for long					
I get a lot of headaches, YPSDQC stomach-aches or sickness					
Lusually share with others					

## **Conclusions**

- New quantitative evidence on link between SEN and wellbeing
- Children with SEN tend to have lower levels of subjective wellbeing than children without SEN when talking about their school and their school work – and also with their friends (an important element of school life)
- The link between SEN and wellbeing in relation to school exists when controlling for other factors
  - Perhaps unsurprising given children with SEN often require additional support with educational needs
- Some of the other factors linked to wellbeing are disproportionately associated with children with SEN
- Obviously complex interaction between SEN and a number of other factors that can impact on children's wellbeing

## Limitations and further research

- Only secondary school children
- Likely to be differences by SEN support level and area of need
- How much less happy?
  - Difference for happiness with school work = 0.6 points (SEN 3.1 v Not SEN 2.5)



- Data linking (e.g. sample sizes, timing of information)
- New USoc-NPD data linking from USoc wave 4 consents?
- Longitudinal analysis e.g. changes in SEN, wellbeing, other factors etc.

