Niamh at 9 months

Niamh at 3 years

Niamh at 5 years

Educational Experiences and Outcomes for Children with Special Educational Needs

an NCSE study

Progress Report

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An Roinn Leanaí agus Gnóthaí Óige
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Introduction

- In February 2013, the National Council for Special Education (NCSE) commissioned a study to examine the educational experiences and outcomes of children with SEN

- This came about as a result of an NCSE report (Douglas et al., 2012), which identified a need for further empirical research on pupil outcomes in the Irish context.

Study Aims

- **Provide new evidence to help us understand more clearly how children with special educational needs, and specific identifiable subgroups within this cohort if possible, are faring at school in terms of:**
  - outcomes which relate to academic attainment/achievement and expectations in relation to same
  - participation in and engagement with school and learning, and their learning progress and expectations in relation to same
  - independence skills, self-esteem, well being at school and relationships with teachers and peers.
- **Identify and analyse the factors influencing these experiences and both formal and less formal educational outcomes.**
- **Identify potential implications for educational policy and/or practice arising from the analysis.**

Study Implementation

- **The study is being implemented by the ERC and the Special Ed Department in St Patrick's College**
- **It covers four broad phases**
  - Phase 1 – classification of children with SEN and establishing the analysis framework
  - Phase 2 – descriptive analyses comparing the children in the different SEN groups in terms of outcomes, individual characteristics, and school/class/community characteristics
  - Phase 3 – multiple regression analyses comparing some of the key outcomes before and after taking account of background characteristics
  - Phase 4 – establishing conclusions and recommendations
- **A report will be submitted to the NCSE by the end of 2013**
  - Current progress: Phases 1-3 completed

Today's Presentation

Considers progress to date, focusing on three areas:

1. **Classification of children with SEN**
   - Prevalence estimates
   - Some issues with and limitations of the identification and classification of SEN
   - How survey weights and response rates may affect estimates
   - Comparisons with other classifications and prevalence derived from GUI
2. **Identification and selection of outcome measures**
   - How this fits with Douglas et al.'s (2012) framework
3. **Identification of background measures**
   - Focus on the measurement of SES
   - How our treatment of socioeconomic data attempts to maximise what is available in GUI

Classification of SEN

Aim: establish a scheme that makes maximum use of the available data, is sufficiently detailed to reflect the complexity of special educational needs, and which maps in a meaningful way onto the existing scheme used to identify children and allocate resources to them.

We sought initially to identify 8 major groups, i.e. children with:

- a physical or sensory disability
- an emotional or behavioural disability or difficulty (EBD), medium risk
- an emotional or behavioural disability or difficulty (EBD), high risk
- a general learning disability
- autistic spectrum disorders and Asperger's Syndrome
- speech and language disorders
- dyslexia
- other special educational needs not already covered in the above groups.

Physical/Sensory Disabilities

- **N = 250 (2.9%)**
- **Based on teachers' reports of the child having a physical disability or visual or hearing impairment *that affects their learning* (not asked for separately).**
- **Also included children identified as having dyspraxia on the basis of parents' reports.**
- **Among these 250 children:**
  - 37% (92 children) have a visual impairment
  - 17% (43 children) have a hearing impairment
  - 12% (29 children) have difficulties with mobility
  - 32% (79 children) have a chronic illness or disease
  - 38% (95 children) have dyspraxia
  - 11.5% (29 children) remain unspecified.
- **48% of the 250 children were classified as having one of the five conditions, 34.5% were with two, and 5.5% with three or four.**

Note: Sub-groups are based on parent reports

Medium and High Risk EBD

- **The GUI study does not include any questions that asked specifically about the presence of EBD in children**
- **There is no instrument in use in Ireland for identifying or diagnosing EBD**
- We based the classification on teachers' (primary source) and parents' (secondary source) responses on the SDQ
- The SDQ is primarily used as an initial clinical screening instrument for subsequent diagnosis of a variety of psychological and psychiatric disorders
- There is no normative data available for Ireland; we used the UK clinical cut points
- Two EBD groups rather than one have been identified since DES guidelines draw the distinction between moderate and severe EBD.
  - Moderate and severe EBD (DES) do not map directly onto medium/high-risk EBD (GUI)

Medium and High Risk EBD

- We also included children who have ADHD formally diagnosed (parent reports), placing them in the medium-risk group if they were not already in the medium- or high-risk groups.

Teacher Report	Parent Report	Final Classification
Normal	Normal	Normal (low or no risk)
Borderline	Borderline	Borderline (medium risk)
Abnormal	Abnormal	Abnormal (high risk)
Normal	Borderline	Normal (low or no risk)
Borderline	Normal	Borderline (medium risk)
Abnormal	Normal	Abnormal (high risk)
Normal	Abnormal	Borderline (medium risk)
Borderline	Abnormal	Borderline (medium risk)
Abnormal	Borderline	Abnormal (high risk)

- **Based on this:**
  - 940 children (**11.0%**) are in the **medium risk EBD** group
  - 635 children (**7.4%**) are in the **high risk EBD** group

General Learning Disabilities

- **No questions in GUI asked specifically about GLDs, so this needed to be inferred**
- Initially based on teachers' responses to a question on whether or not the child has a learning disability that affects the amount of activity he or she can do at school
- … and/or whether parents indicated that the child had been diagnosed with a difficulty or disability that caused them to have difficulty in making progress in school

- 971 children (just over 11%) were identified as having a learning difficulty
- Many of these children were also identified as having a specific learning difficulty (dyslexia, speech and language disorder, and/or other specific learning disability), so those children were omitted

- **Therefore we estimate that 407 children (4.8%) have a GLD**

ASD/Asperger's Syndrome

- **Based on parents' reports of specific diagnoses of these conditions**
- **No teachers' reports available**

- **69 (0.8%) were identified with ASD or Asperger's Syndrome**
- Note that all but three of these children were identified as having one or more other SENs, most commonly
  - EBD (N=60) and/or
  - SLD (N=26)

Specific Learning Disabilities

- **Based on parents' reports of specific diagnoses of these conditions**
- **No teachers' reports available**

- **4.2% (361) with dyslexia**
- **3.7% (317) with a speech and language disorder**
- **3.9% (339) with another specific learning disability**

Prevalence Estimates: Single and Co-occurrence

Category	Children with this special educational need only		Children with this special educational need plus other(s)	
	N	%	N	%
Physical or sensory disability including dyspraxia	68	0.8	182	2.1
Emotional or behavioural difficulty/ADHD – medium risk	619	7.2	321	3.7
Emotional or behavioural difficulty/ADHD – high risk	371	4.3	264	3.1
General learning disability	246	2.9	161	1.9
Autistic spectrum disorder or Asperger's Syndrome	3	0.0	66	0.8
Speech and language disorder	77	0.9	237	2.8
Dyslexia	171	2.0	190	2.2
Other specific learning disability	119	1.4	213	2.5
Total	**1674**	**19.5**	**1634**	**19.1**

Prevalence Estimates: Single and Co-Occurrence (2)

	N	% of all children	% of children with SEN
None	6187	72.2	--
One or more kinds of SEN:	2381	27.8	100.0
One	1674	19.5	70.3
Two	539	6.3	22.6
Three	124	1.4	5.2
Four or more	44	0.5	1.9
Total	8568	100.0	--

About 30% of children have multiple SEN

Prevalence Estimates: Analysis Categories

Category	N	% of All Children	% of Children With SEN
No special educational need(s)	6187	72.2	
Medium risk EBD only	619	7.2	26.0
High risk EBD only	371	4.3	15.6
GLD	246	2.9	10.3
GLD with medium or high risk EBD	125	1.5	5.2
Dyslexia (including 15 cases with another specific SEN)	187	2.2	7.9
Dyslexia with medium or high risk EBD	100	1.2	4.2
Speech and Language disorder (including 24 cases with another specific SEN)	101	1.2	4.2
Speech and language disorder with medium or high risk EBD	91	1.1	3.8
Autistic spectrum disorder or Asperger's syndrome (66 of these also having another SEN or SENs)	69	0.8	2.9
Physical or sensory disability only	68	0.8	2.9
Physical or sensory disability with medium or high risk EBD and/or other general or specific SEN(s)	158	1.8	6.6
Other special educational need(s)	246	2.9	10.3

Note the co-occurrence of EBD with many other categories of SEN

Prevalence Estimates: Analysis Categories by Gender

SEN group	% of All Children	% Female	% Male
No special educational need(s)	72.2	53.9	46.1
Medium risk EBD only	7.2	48.0	52.0
High risk EBD only	4.3	33.0	67.0
GLD (including some cases with another SEN)	2.9	53.6	46.4
GLD with medium or high risk EBD	1.5	47.4	52.6
Dyslexia (including some cases with another SEN)	2.2	50.3	49.7
Dyslexia with medium or high risk EBD	1.2	41.7	58.3
Speech and Language disorder (including some cases with another SEN)	1.2	34.0	66.0
Speech and language disorder with medium or high risk EBD	1.1	41.7	58.3
Autistic spectrum disorder or Asperger's Syndrome	0.8	17.5	82.5
Physical or sensory disability only	0.8	44.7	55.3
Physical or sensory disability with medium or high risk EBD and/or other SEN(s)	1.8	53.9	46.1
Other special educational need(s)	2.9	48.0	52.0
All children	100.0	51.4	48.6

Weighted and Unweighted Estimates (RR=57%)

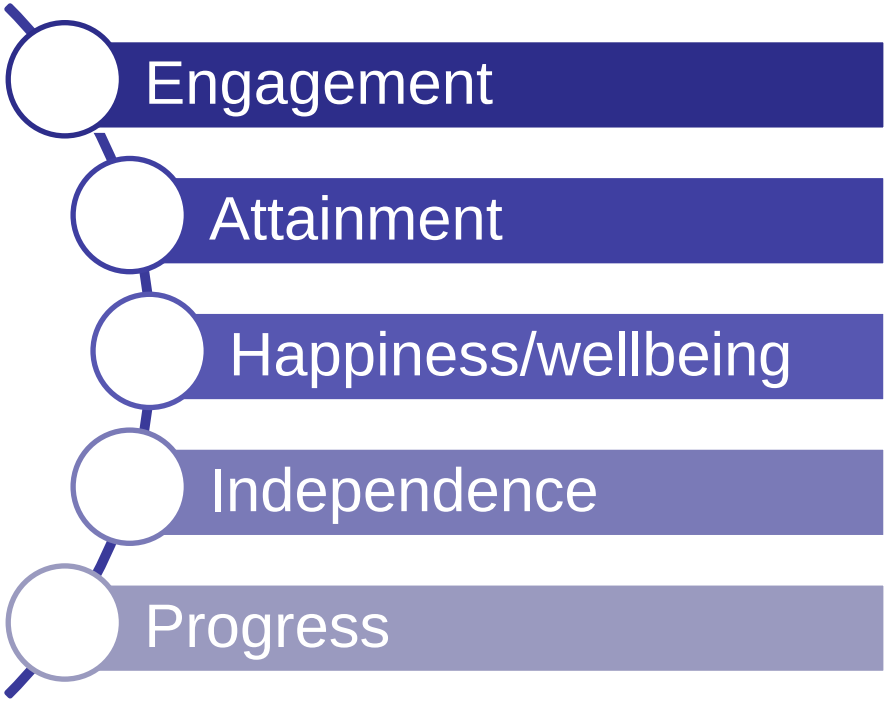
Category	Weighted %	Unweighted %
No special educational need(s)	72.2	76.9
Medium risk EBD only	7.2	6.3
High risk EBD only	4.3	3.2
GLD	2.9	2.3
GLD with medium or high risk EBD	1.5	1.1
Dyslexia (including 15 cases with another specific SEN)	2.2	2.1
Dyslexia with medium or high risk EBD	1.2	0.8
Speech and Language disorder (including 24 cases with another specific SEN)	1.2	1.1
Speech and language disorder with medium or high risk EBD	1.1	0.7
Autistic spectrum disorder or Asperger's syndrome (66 of these also having another SEN or SENs)	0.8	0.7
Physical or sensory disability only	0.8	0.9
Physical or sensory disability with medium or high risk EBD and/or other general or specific SEN(s)	1.8	1.6
Other special educational need(s)	2.9	2.4

Prevalence Estimates – Other Studies Using GUI

- **Banks and McCoy (2011) estimated SEN prevalence using the GUI data in three steps:**
  - Baseline estimates of physical, speech, learning and emotional/behavioural difficulties from teachers
  - Additional estimates of learning difficulty, communication or co-ordination disorder, speech difficulty or chronic physical or mental health problem, illness or disability from parents
  - Addition of children scoring in the 10th percentile on the SDQ (teachers' reports)
- **Overall prevalence of 25% is similar to the 27.8% in the present study**
- **Present study estimate is lower if medium risk EBD is excluded (20.6%)**
- **Prevalence of co-occurring SEN is classified as multiple SEN by Banks and McCoy; in the present study we have tried to identify patterns of co-occurrence of SEN**

Outcome Measures

- **Driven by the framework in Douglas et al. (2012)**
- **Some categories better represented in the GUI data than others**



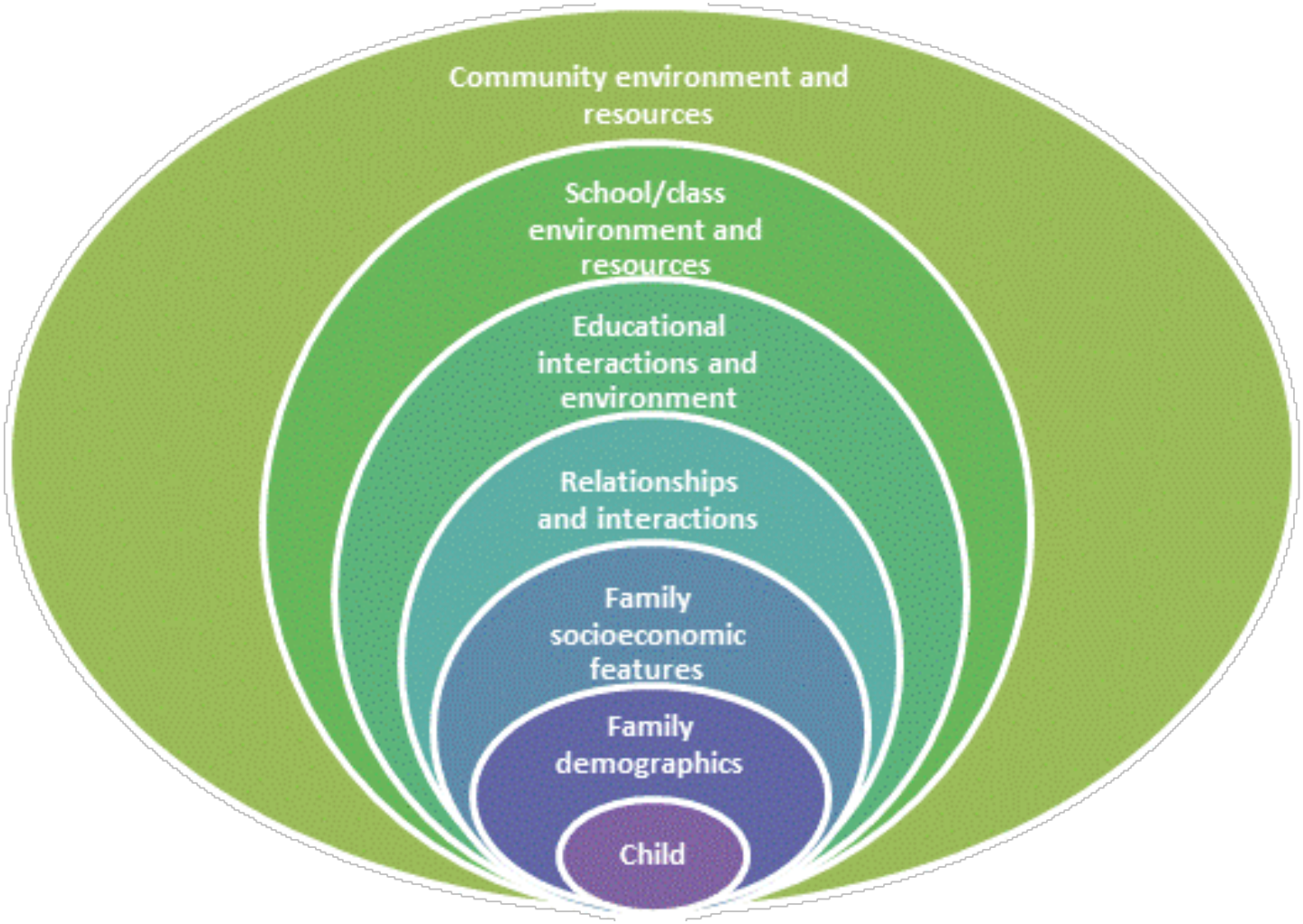
- Independence not covered in depth (children are 9 years old)
- Progress not covered at all in Wave I

Outcome Measures

- **Engagement:** Liking of school and school subjects; school attendance
- **Attainment:** Drumcondra reading and maths scores; teachers' and parents' ratings of children's achievement, with comparisons between test scores and ratings; parental expectations for their children's education
- **Happiness and wellbeing:** Piers-Harris scales, particularly freedom from anxiety and happiness and satisfaction; parent and child report of bullying, reasons for bullying, and impact of bullying; frequency of socialising with peers; number of close friends; frequency of physical activity
- **Independence:** Parents' perceptions of children's (in)dependence (derived from Pianta items); children's involvement in self-care tasks and in housecare tasks
- **Progress:** Wave II data?

  - Text marked in **green** shows key outcomes subjected to more detailed analysis

Background Measures



Background Measures: Focus on SES

- **We make distinctions between the following aspects of children's backgrounds:**
  - **Demographic**, e.g. child's gender, language spoken at home, family size and one-parent status
  - **Socioeconomic**, e.g. % of household income from social welfare, perceived household financial stress (rather than equivalised income)**,** socioeconomic scores based on parental occupation, parental education
  - **Home** social, educational and emotional **environment**, e.g. TV, computer, games console in children's bedroom, books at home, signs of lack of basic care, experience of adverse life events, primary caregiver depression
  - This section will focus mainly on the **socioeconomic index** used, since it may be of relevance to other research that uses GUI

Background Measures: Focus on SES

- **In some published research on GUI, reference to social class is made. This is based on the variable 'hsdclass' which has the following groups and distribution:**

Professional Managers	8.2
Managerial and Technical	33.3
Non-manual	18.8
Skilled manual	16.6
Semi-skilled	9.3
Unskilled	1.7
Validly no social class	10.1
Parents not resident	1.8
No response	.2

- 87.9% valid responses
- 10% 'no social class'? - This is likely to be a more socio-economically vulnerable group
- We think that there is a more effective way to use the data by converting it into ISEI scores, as developed by Ganzeboom, de Graaf and Treiman (1992)

Background Measures: Focus on SES

- **Ganzeboom et al.'s method maps ISCO 88 (and 08) codes onto an international socio-economic index (ISEI) using an optimal scaling procedure which maximises the role of occupation as an intervening variable between education and income**
- Provides a more refined continuous (as opposed to categorical) measure
- Provides potential to interpret analyses by going beyond the concept of 'social class' and its (outdated?) emphasis on prestige
- Allows parents' past and present occupations to be validly included
- Is supported by empirical validation work across a number of countries
- Invalid responses are reduced from 12.1% to 4.5% when we apply a recode to the GUI data

Incorporation of SES into analyses

- **Inclusion of SES in regression models in the present study:**
- We compare and contrast results for the SEN groups from 9 regression models for each outcome
  - Model 1: SEN groups only
  - Model 2: Model 1 + demographics
  - Model 3: Model 1 + SES (SEI, parental educ, % HHI from SW, financial stress)
  - Model 4: Model 1 + home environment
  - Model 5: Models 1, 2, 3, 4 combined
  - Model 6: Model 1 + classroom environment
  - Model 7: Model 1 + school/community environment
  - Model 8: Models 1, 6, 7 combined
  - Model 9: All previous models combined
- The aim of this approach is to understand how SES, both singly and in combination with other characteristics, is associated with the outcomes of children with SEN

Thank you!

- **Questions or comments?**
- Contact jude.cosgrove@erc.ie
- References from the presentation:
  - Banks, J., & McCoy, M. (2011). *A Study on the Prevalence of Special Educational Needs.* Meath: NCSE (http://www.ncse.ie/uploads/1/Prevalence_of_SEN_10_09_12.pdf)
  - Douglas, G., Travers, J., McLinden, M., Robertson, C., Smith, E., Macnab, N., Powers, S., Guldberg, K., McGough, A., O'Donnell, M., & Lacey, P. (2012). *Measuring Educational Engagement, Progress and Outcomes for Children with Special Educational Needs: A Review*. Meath: NCSE (http://www.ncse.ie/uploads/1/Outcomes26_11_12Acc.pdf)
  - Ganzeboom, H.B.G. De Graaf, P.M. & Treiman, D.J. (1992): *A Standard International Socio-Economic Index of Occupational Status*. Social Science Research, 21 (1), 1-56. (http://home.fsw.vu.nl/hbg.ganzeboom/Pdf/1992-ganzeboom-degraaf-treiman-isei68-(ssr).pdf)