Niamh at 9 months



Niamh at 3 years



Niamh at 5 years



Bold Boys and Good Girls? The Gender Gap in Special Educational Needs in Irish Primary Schools

Denise Frawley, Selina McCoy and Joanne Banks (ESRI)









Outline

- Context
- Research questions
- Data and methods
- Descriptive results
- Multivariate analysis
- Summary of findings
- Policy implications





- Recent focus on apparent gender disparity in special education
- Boys outnumber girls by 2: 1 (Internationally and in Ireland)
- Boys with behavioural and emotional difficulties tend to attract most attention, concern and resources (Lloyd, 1996)
- New research on 'withdrawn girl' linked to notion that success for girls is defined as 'being good' (Arms et al., 2009)
 - Girls with potential disabilities do not want to 'risk' exposure or need for special attention
 - o Invisibility of girls with SEN? Double jeopardy? (Wehmeyer and
 - **Schwartz**, 2001)



Context II

- No clear explanation as to why the gender disparity exists. Are boys over-represented? Are girls underrepresented? Are some of the disparities appropriate?
- Three theories (Coutinho et al., 2001) have emerged to explain the gender differences for SEN identification rates:
 - 1. Biological differences
 - 2. Behavioural differences
 - 3. Bias in referral and identification processes



Biological

- Higher rates (among boys) for foetal mortality, postnatal mortality, complications during pregnancy/childbirth and congenital malformations (Eme, 1984)
- Boys mature more slowly than girls (Nass, 1993)
 This may impact on their adaptability to educational environment
- Genetic link to autism?
 - Recent research (e.g. Werling and Geschwind, 2012) has suggested that the absence of a second X chromosome in males could render them more susceptible to autism



Behavioural

- Boys who are frustrated academically 'act out' (Oswald et al., 2003), tend to be physical in class and express themselves verbally
- Girls tend to internalise their feelings and work harder to please; girls experiencing anxiety issues tend to remain silent (Biederman et al., 2002).
- These qualities may skew the numbers and imply boys have higher incidence of emotional behavioural difficulties



Bias in referral

- Issues around over-identification of minority groups in special education (e.g. De Valenzuela et al., 2006)
- Evidence of disproportionality in EBD (Dyson and Kozleski, 2008; Banks et al., 2012)
- Disproportionality greatest among children aged 5-11, during which rates for boys surge (Philips, 1982)
- Bias based on gender stereotyping (Arms et al., 2008)
- Boys far outnumber girls in the groups referred and identified through school system
 - Externalising behaviours (e.g. disruptive classroom behaviour) more commonly result in referral than internalising behaviours (e.g. symptoms of anxiety or depression) (Caseau et al., 1994)



Research questions

- What factors influence teachers' perception of wellbeing among 9-year-olds in Irish primary schools?
 - Are boys experiencing more 'externalising problems' (hyperactivity and conduct) than girls?
 - Are girls experiencing more 'internalising problems' (peer and emotional) than boys?



Data and method

- Important to consider both 'externalising problems' and 'internalising problems' of children
- Teacher reported SDQ
- High risk group approximately 10% (Goodman, 1997):
 - Total difficulties (4 sub-scales added)
 - Hyperactivity + Conduct = 'externalising problems'
 - Peer Problems > 'Internalising problems' but arguably
 - Emotional / measuring different things?

• Other important factors:

- Social class, teacher reported SEN type, school context



SDQ Total Difficulties (teacher reported) by Gender





'Externalising Problems' by Gender





'Internalising Problems' by Gender





Model 1: High Risk of SDQ Total Difficulties





Model 2: High Risk of 'externalising problems'





Model 3: High Risk of Peer Problems





Model 4: High Risk of Emotional Symptoms





Summary of Findings: Gender

- Boys significantly more likely to be in high risk category for total difficulties
- However, total scores appear to be masking important gender differences
- Boys more likely to be in the high risk category for 'externalising problems'
- Gender is not significant for peer problems
- Boys less likely than girls to be in the high risk category for emotional symptoms



Summary: SEN

- All SEN groups (except physical) significantly more likely than peers with no SEN to be in the SDQ total high difficulties category
- However, all SEN groups more likely to suffer from high risk 'externalising problems', peer problems and emotional problems
- 1st signal of difficulties for physical group. Recent research has shown positive peer and academic engagement
- Effects are particularly pronounced for the EBD and multiple (mostly EBD + learning disability) groups



Summary: Other groups

• Social class

 - 'Economically inactive' group at higher risk of total difficulties, peer problems and emotional symptoms

School Context

- Urban band 1 & 2 higher risk of total difficulties and emotional symptoms
- Urban band 1 higher risk of 'externalising problems'

• Gender mix

- Interestingly, boys' and co-ed schools less likely (than girls' schools) to be identified as high risk for 'externalising problems'
 - Teachers influenced by the composition of the class and reference group?
- Boys' schools more likely to be indentified as higher risk of emotional symptoms
 - Linked to the absence of a female reference group?



Next steps

- More research necessary on gender, social class and social context differentials in special education
- Multi-level techniques for school effects
- Gender interactions by school context
- Teacher versus parent SDQ reports
- 13-year data will allow for greater insights in tracking the transition of these students into secondary education



Policy Implications

- This research points to the need for further questioning of the processes at play around SEN identification:
 - Are boys being over-identified? (and/or)
 - \circ Are girls being under-identified?
- Identifying 'introverted' forms of need in addition to those more easily identified through behaviour
- Implications for teacher training
- Implications for school supports and services
- Putting the 'E' back in 'EBD'? (Bowers, 1996)



References

- Arms, E., Bickett, J. And Graf, V. (2008) 'Gender bias and imbalance: Girls in US special education programmes', *Gender and Education*, 20, 4, 349-359.
- Banks, J., Shevlin, M. and McCoy, S. (2012) 'Disproportionality in Special Education: Identifying Children with Emotional Behavioural Difficulties in Irish Primary Schools', European Journal of Special Needs Education, 27, 2, 219-235.
- Biederman et al., (2002) 'Influences of Gender on Attention Deficit Hyperactivity Disorder in Children Referred to a Psychiatric Clinic', *American Journal of Psychiatry*, 159: 36-42.
- Bowers, T. (1996) Putting the "E" back in "EBD". *Emotional and Behavioural Difficulties*, 1, 1.
- Caseau, D.L., Luckasson, R., & Kroth, R.L. (1994) 'Special education services for girls with serious emotional disorders: A case of gender bias?', *Behavioral Disorders*, 20, 51-60.
- Coutinho, M.J., Oswald, D.P. and King, M. (2001) *Differences in the special education identification rates for boys and girls: Trends and issues*. Richmond, VA: Projects PROGRESS, Virginia Commonwealth University.
- Dyson, A. And Kozleski, E. (2008) 'Dilemmas and alternatives in the classification of children with disabilities: New perspectives'. In Florian, L. & McLaughlin, M.J. (Eds.) *Disability Classification in Education: Issues and Perspectives.* Thousand Oaks California, USA: Corwin Press, p. 170-190.
- Eme, R.F. (1984) 'Sex-role stereotypes and the epidemiology of child psychopathology'. In C.S. Widon (Ed.). Sex roles in psychopathology (p. 289-312). Albany: State University of New York.
- Goodman, R. (1997) 'The strengths and difficulties questionnaire: A research note', *Journal of the Child Psychology Psychiatry*, 38: 644-51.
- Lloyd, G. ed., 1996. *'Knitting Progress Unsatisfactory'. Gender and Special Issues in Education.* Edinburgh: Moray House Publications.
- Maccoby, E.E. & Jacklin, C.N. (1978) *The psychology of sex differences*. Stanford, CA: Stanford University Press.
- Nass, R.D. (1993) 'Sex differences in learning abilities and disabilities', Annals of Dyslexia, 43, 61-77.
- Philips, P.M. (1982) 'The LD learner is often a boy-why?', Academic Therapy, 17, 4, 425-430.
- Wehmeyer, M.L. & Schwartz, M. (2001) 'Research on gender bias in special education services'. In Housso & M.L. Wehmeyer (Eds.) *Double Jeopardy: Addressing gender equity in special education (p. 271-288). Albany: State University of New York.*
- Werling DM, Geschwind DH (2013) 'Sex differences in autism spectrum disorders'. *Curr Opin Neurol* 26(2): 146–153.



Thank you

• Questions?