Growing Up in Ireland
National Longitudinal Study of Children




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Educationally maintained inequality? The role of risk factors and resilience at 9, 13 and 17 in disabled young people's post-school pathways at 20.

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Context & Research Questions

- **Context**
  - Neglect of disability and its interaction with education in social stratification research
  - Rapid rise in number of students identified with SEN and in the resources allocated in Irish schools
  - Policy emphasis on inclusion, but implementation has often struggled to live up to the ideals expressed

- **Research Questions:**

  1. How do young people identified as having a disability or special educational need in primary school fare in accessing postsecondary education?

  2. What individual, family and school context effects at earlier ages shape these outcomes?

Previous Research: International

- Much focus on school experiences and attainment, less on **post-secondary outcomes**
- US NLTS2: disabled YP from lower income families less likely to enrol in postsecondary education (Wagner et al., 2014)
- Evidence on more affluent disabled YP accessing HE (Riddell & Weedon, 2014)
- Europe: strong policy emphasis on HE access, but wide variation in HE disability gaps across countries (Eurostat)
- Differentiation between "primary effects" (achievement scores directly linked to post-school pathway) and "secondary effects" (other key factors like parental expectations which indirectly affect student progression)
    - Role of parental expectations in academic & socio-emotional outcomes for disabled YP (McCoy et al., 2016)

The Irish Context: Schools

- Leaving Certificate and “points race”: High stakes competitive system
  - Very high levels of HE progression generally, but wide gaps by disability and socioeconomic status
- Strong access agenda at higher education and clear targets
  - Disability Access Route into Education(DARE): Effective, but research suggests it has favoured high SES disabled YP (Byrne et al. 2013)
- DEIS: Programme targeting resources at schools located in areas with high levels of poverty
- Strong evidence of school context effects (identification of SEN, adequacy of supports & attainment)

Theoretical Framework: Effectively Maintained Inequality

- Effectively maintained inequality (EMI) (Lucas 2017)
- Qualitative differences at the same level of education represent a persistent barrier to greater equality
- Expansion in post-compulsory educational participation - growth in two distinct higher education sectors in Ireland ('first' & 'second' tier) (McCoy, Smyth, 2011)
- We apply EMI to inequality by disability and family resources

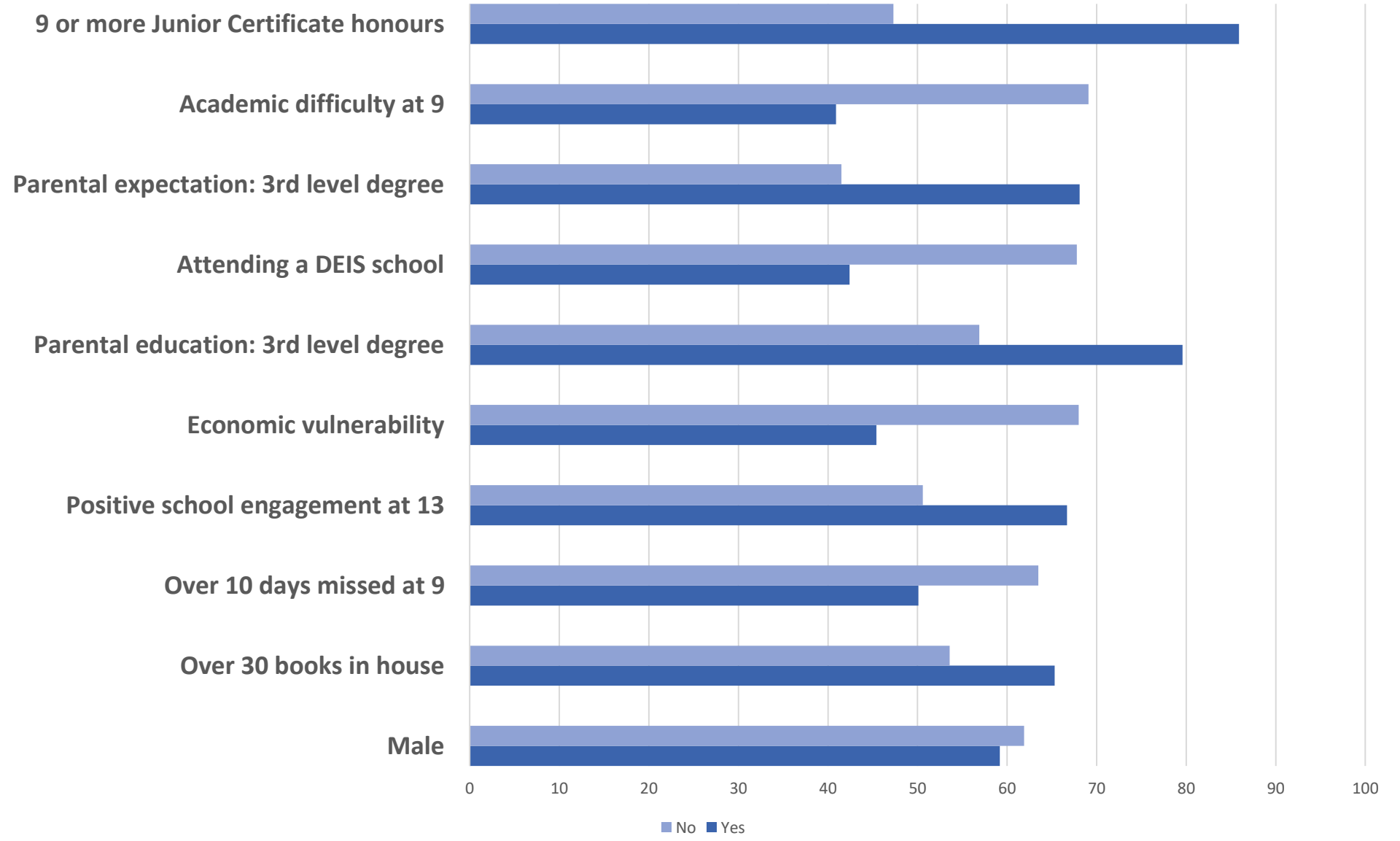
Methodology

- Growing Up in Ireland: longitudinal study of fixed panel of one-in-seven 9 year olds (born in 1998), followed at 13, 17 & 20 years
- Rich evidence- YP, parents, teachers, school leaders
- Two Outcomes:
  - Higher Education Entry- binary Yes (60.5%) or No (39.5%)
  - Post-Secondary Pathway: highest level of education completed or currently engaged in
    - University Level 8 (37.1%)
    - Institute of Technology Level 8 (16.4%)
    - Higher Education Level 6/7 (6.9%)
    - Further Education and Training (22.4%)
    - Did not finish (4.8%)
    - No Post-School education (12.3%)

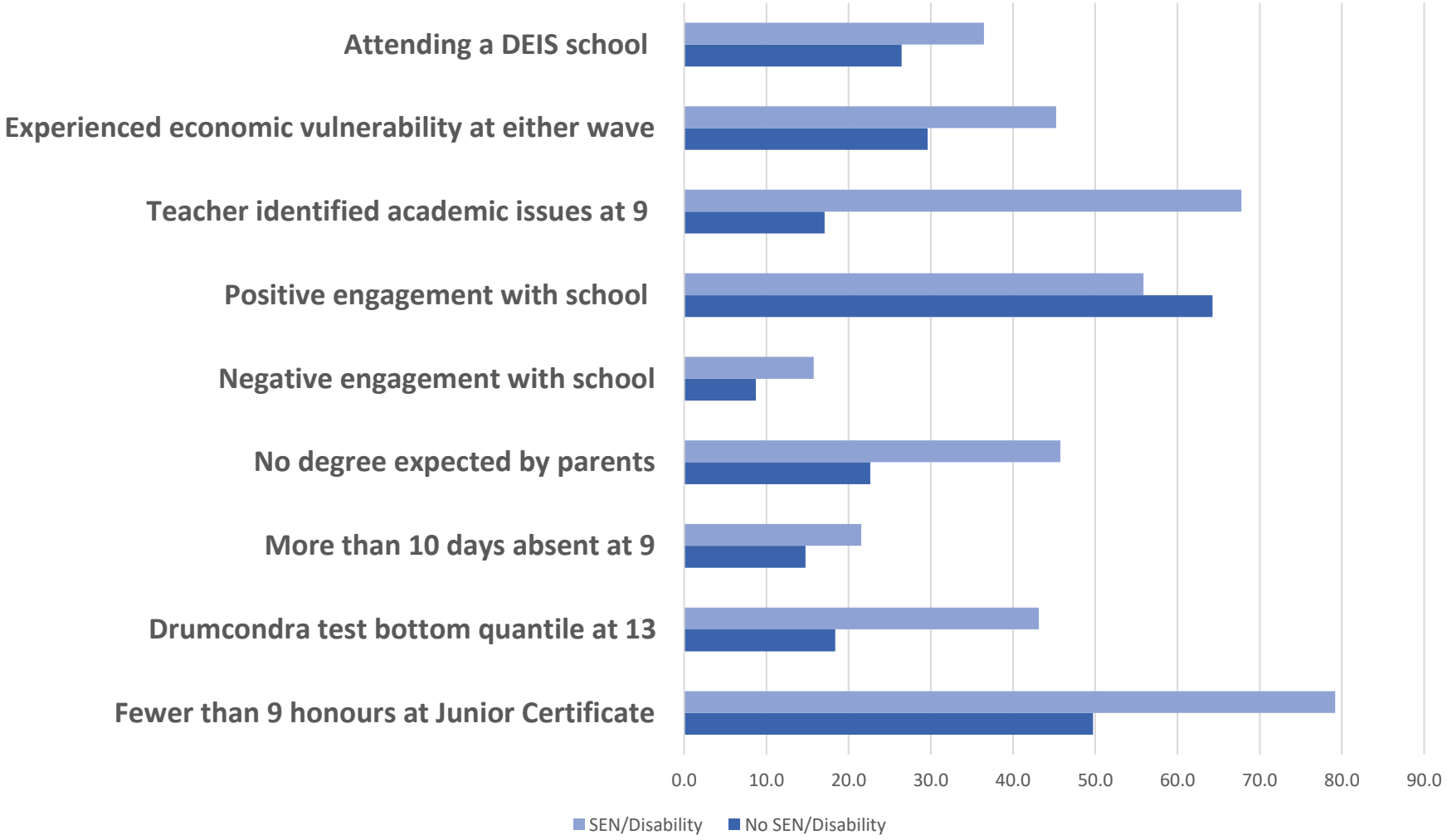
Key Predictor Variables

- **Disability/ SEN status**: information from multiple informants at 9 years to derive an additive disability measure (vast majority in mainstream schools). See Appendix 1 for further details
- **Gender**
- **Economic vulnerability**: composite measure based on latent class analysis - income poverty, household joblessness & financial strain
- **Proxy for socioeconomic class:** primary caregiver 3rd level degree
- **Parental educational expectations at 9 years:** Degree or no degree
- **Proxy for cultural capital:** More than 30 books in the home at 9?
- **School social mix**: DEIS or non-DEIS
- **Engagement**: Liking school at 13, Teacher conflict at 13
- **Achievement:** Aptitude test focusing on reading and mathematics at 13, number of Junior Certificate honours achieved at 17 years

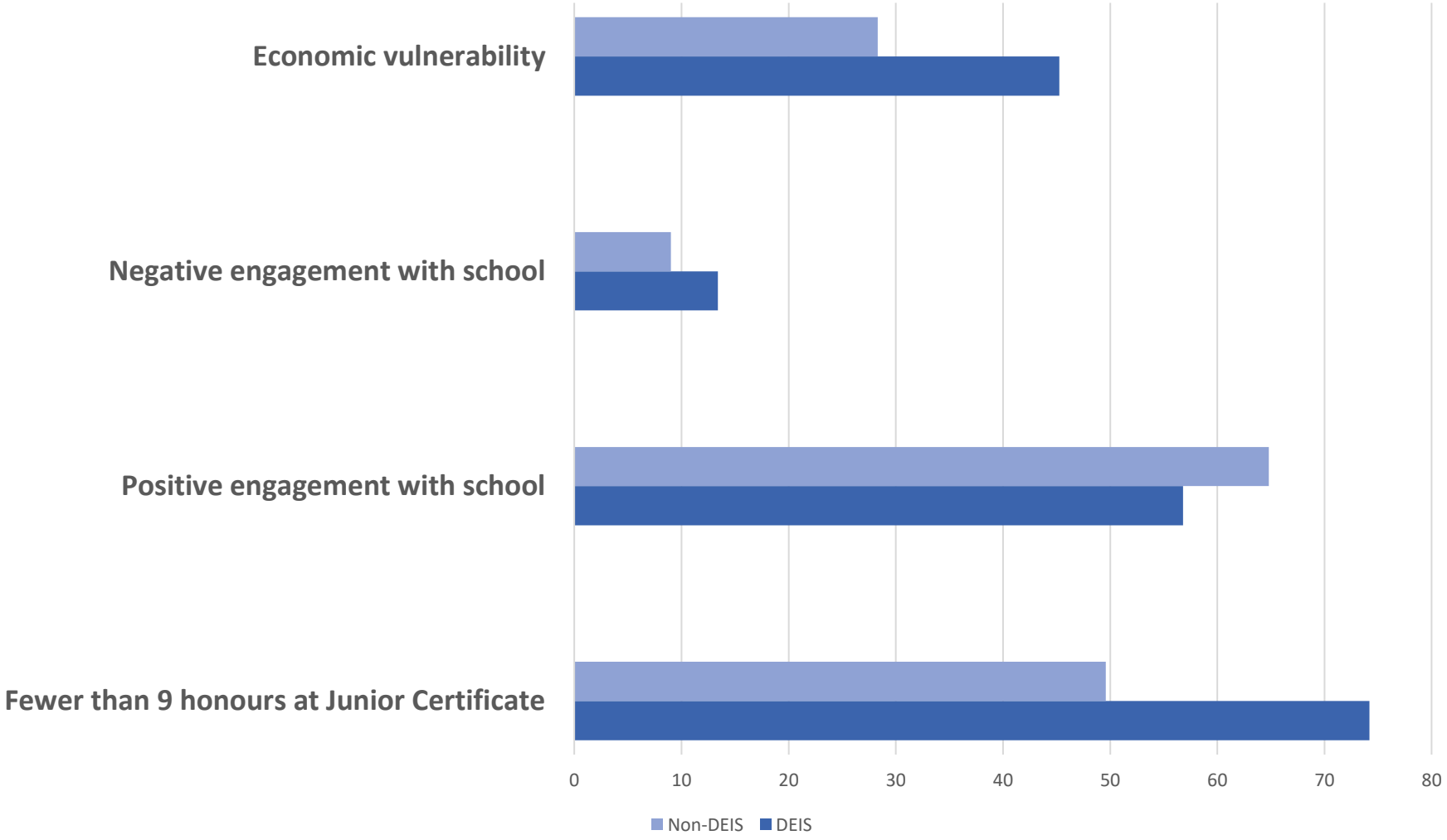
Higher Education Access Gaps



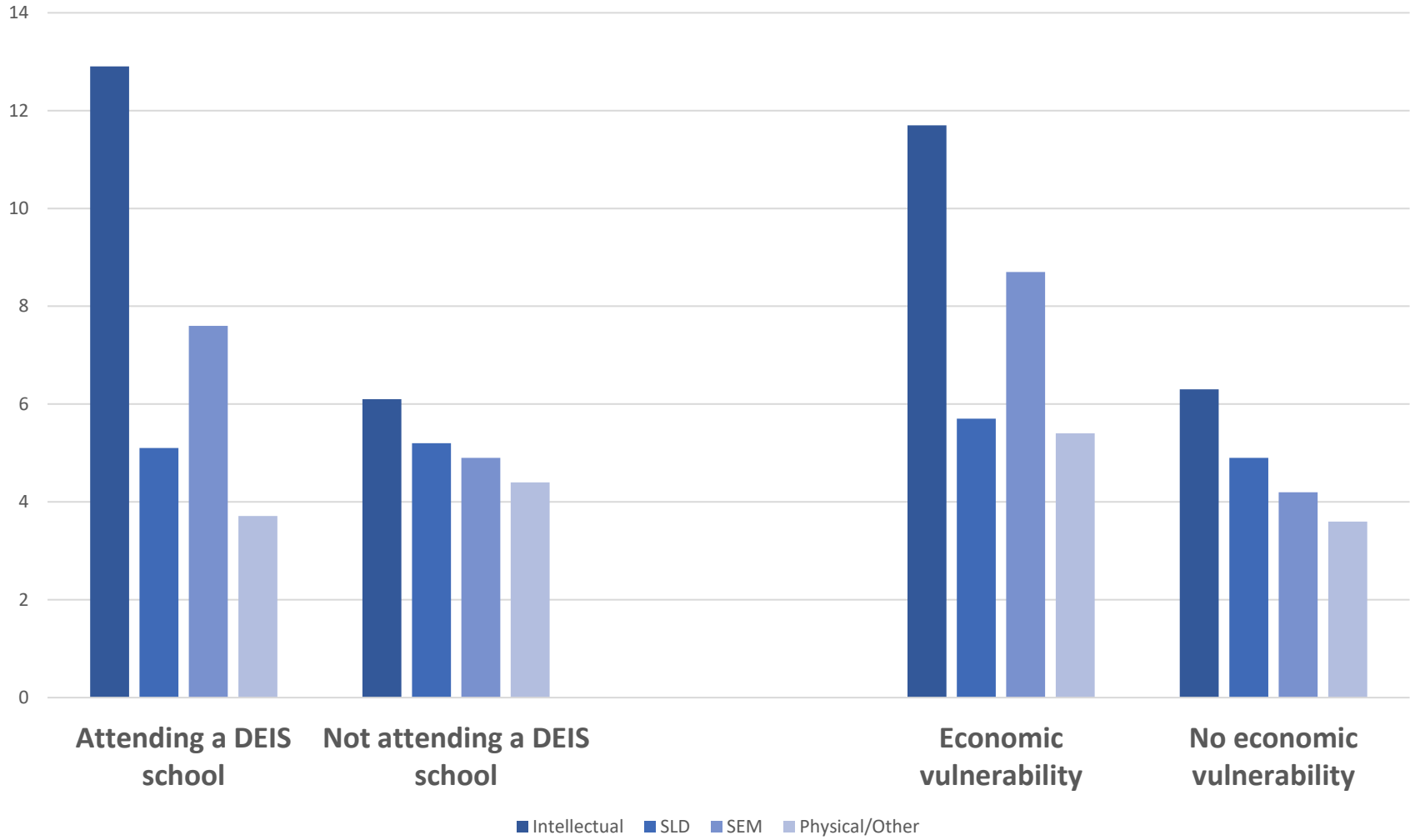
Key Characteristics by SEN/Disability Status



Key Characteristics by DEIS status



Disability Type by Key Socioeconomic Factors



HE Participation Logistic Regression

Logistic Regression Model 1: SEN/Disability and Gender

Variables	HE Participation (B)
Constant	2.039***
SEN/Disability:	
Intellectual	0.194***
Specific Learning	0.485***
SEM & Behavioural	0.342***
Physical/visual/speech	0.829
Other	0.429**
(Base: no SEN/disability)	
Male	0.939

The effect of having a specific learning difficulty on HE progression is moderated by key context factors at age 9, while having a physical or sensory disability is not significantly associated with HE progression in Model 1

Logistic Regression Model 2: Wave 1 controls

Variables	HE Participation (B)
Constant	2.067***
SEN/Disability:	
Intellectual	0.473**
Specific Learning	0.716
SEM & Behavioural	0.49***
Physical/visual/speech	1.017
Other	0.529*
(Base: no SEN/disability)	
Male	0.948
Economic vulnerability	0.543***
Parent has 3rd level degree	1.64***
Parental expectation: 3rd level degree	1.802***
More than 30 books in house	1.184
Academic issues at 9	0.559***
>10 days of school missed at 9	0.648***
DEIS school at 9, 13 or 17	0.479***

Logistic Regression Model 3: Wave 2 controls

Variables	Model 3: Wave 2 controls (B)
SEN/Disability: (Base: no SEN/disability)	
SEM & Behavioural	0.588*
Other	0.487*
Male	0.755**
Economic vulnerability at wave 1, 2 or 3	0.593***
Parent has 3rd level degree	1.406**
Parental expectation: 3rd level degree	1.408**
More than 10 days of school missed at 9	0.637***
DEIS school at 9, 13 or 17	0.513***
Teacher conflict at 13	0.668***
Positive engagement at 13	1.44***
Drumcondra Test score at 13: (Base: 1st quintile)	
2nd quintile	1.804***
3rd quintile	2.981***
4th quintile	3.609***
5th quintile	4.184***

However, even among students with similar ability, "secondary effects" like parental expectations and socioeconomic background are significant

"Ability" as measured by Drumcondra Test (aptitude measure) has the largest effect sizes, reflecting its status as a "primary effect"

Logistic Regression Model 4: Wave 3 control

Variables	Model 4: Wave 3 controls (B)
Constant	3.179***
SEN/Disability: (Base: no SEN/disability)	
SEM & Behavioural	0.610*
Other	0.501*
Male	0.834#
Economic vulnerability at wave 1, 2 or 3	0.708**
> 10 days of school missed at 9	0.645***
DEIS school at 9, 13 or 17	0.6***
Positive engagement at 13	1.354**
Drumcondra Test score at 13: (Base: 1st quintile)	
2nd quintile	1.458*
3rd quintile	2.024***
4th quintile	2.092***
5th quintile	2.015***
8 or fewer Junior Certificate honours	0.275***

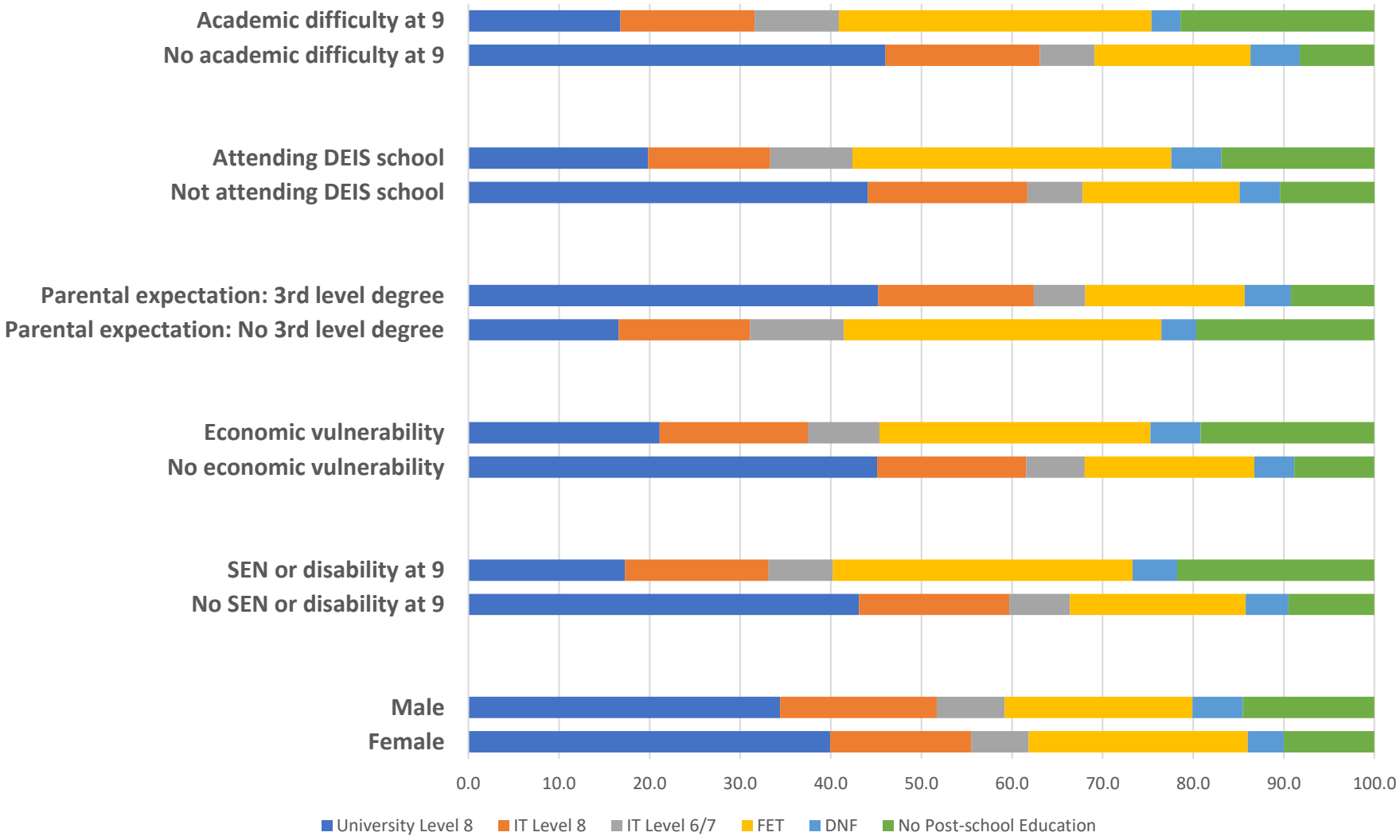
After including controls from wave 1, 2 and 3, only SEM & Behavioural and Other disability status remains significant

Experiencing economic vulnerability, absences at 9, attending a DEIS school and liking school at 13 all significant with moderate effect sizes

Ability highly significant – "primary effect". Once Junior Cert honours are included the effect size becomes much smaller and similar across the top 3 quintiles

Achieving 8 or fewer Junior Certificate Honours associated with much lower odds of progression, even accounting for ability and other factors.

Higher Education Pathway Gaps



Multinomial Logistic Model

Variables	Uni. Level 8	IT Level 8	HE Level 6/7	FET	Did not Finish Programme	No Post-school education or training
Constant	(base)	0.415***	0.217***	.538***	0.077***	0.182***
SEN/Disability		1.801***	1.3	2.164***	2.05*	2.599***
Male		1.184	1.162	0.892	1.54*	1.457*
Economic vulnerability		1.921***	2.04***	2.523***	2.246***	3.644***
Parental expectations at 9		0.57***	0.278***	0.297***	0.707	.311***
Academic issues at 9		1.612*	2.598***	2.784***	1.008	3.179***
DEIS school		1.468***	2.596***	3.339***	2.463***	2.363***

Multinomial Logistic Model

- **Having a SEN/disability** (not differentiated by type) is significantly associated with greater relative risk of attending IT Level 8 or FET, not finishing a programme or not attending any post-school education or training rather than attending a University level 8 course
- **Young men** are slightly more likely to not finish a programme or not attend any than young women, disability status, parental expectations, academic issues at 9 and socioeconomic factors being equal
- **Economic vulnerability** is significantly associated with a greater relative risk at each level of non-University Level 8 education, with a particularly strong risk of no post-school education or training
- **Experiencing academic issues at 9** is significantly associated with a greater relative risk of each level of education, apart from not finishing a programme. There is a particularly strong risk of not attending any post-school education or training
- **Parental expectations of completing a degree** are associated with a lower relative risk of each level of education, apart from not finishing a programme
- **Attending a DEIS school** is significantly associated with a greater relative risk of each level, with a particularly strong association with attending FET

Postsecondary Pathway

- Higher Education binary no longer enough to capture differing post-school pathways- breaking post-school pathways down further is crucial to understanding how inequality is effectively maintained by young peoples' differing engagement with further and higher education.
- HE graduates continue to experience better post-education outcomes across earnings, job satisfaction and general life satisfaction, and the more prestigious the institution the more pronounced the premium.
- As long as this remains the case, differential access to these higher-status courses by disability status and socioeconomic background will continue to be a key driver of social reproduction, and the education system will continue to effectively maintain inequality.

Policy Recommendations (I)

- Need for a greater emphasis on encouraging engagement among young people with a disability or SEN:
  - Attendance at 9 and positive feeling towards school at 13 were significant in young people's HE participation even after controlling for other factors
  - Making schools engaging places where students want to be is crucial to improving these
  - Engaging disabled young people requires transforming schools into genuinely inclusive spaces:
    - Teaching and learning which reflects students' strengths and needs
    - School culture which welcomes all students
    - Opportunities for new ways of engaging young people through digital learning: blended learning for students who miss school due to health issues, greater use of alternative approaches for specific subjects/types of content or specific students as needed

Policy Recommendations (II)

- Holistic evaluation of DEIS programme:
  - Recent expansion of DEIS scheme in breadth of schools included is welcome, but what about depth of support?
  - Are current supports adequate to complexity of needs among students in DEIS schools?
    - Do they enable schools to support students who are socioeconomically disadvantaged **and** have a disability or special educational need?
    - In particular, do they enable schools to close achievement gaps **and** promote student engagement, as captured in this study by attendance, relationships with teachers and positive feelings towards schools?
  - Does the DEIS designation reinforce social homogeneity in schools, intensifying the issues facing DEIS schools beyond what allocated supports can address?
    - What about students facing economic vulnerability or without a family history of HE participation who are attending non-DEIS schools? Are they better served by receiving DEIS supports or by attending socially mixed school?

Policy Recommendations (III)

- Further extension of pathways and removal of barriers in school and post-school education
  - Move towards new framework for Junior Cycle, especially common level subjects, vital in removing early barriers to later pathways
  - As the new framework for Senior Cycle is constructed and implemented, expanding pathways through school education to post-school settings is crucial:
    - Focus on recognising strengths beyond academic subjects through broader approach to assessment and greater subject choice
    - Creation of NFQ Level 1 and 2 programmes for students currently completing Junior Cycle Level 1 and 2 programmes is vital, but must be accompanied by strong transition supports for these students to move onto the next level in a post-school setting
    - Links between FET and HE particularly important for young people with SEN or a disability – very small number in our sample on this pathway, but many respondents were not out of school long enough to complete FET and enter HE

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Q & A

Appendix 1: Disability/SEN Measure at 9

Stage	Source	Domains	Prevalence Rate		
			Incidence in population%	Additional group %	**Total prevalence %**
Step 1	Teachers	• Physical disability • Speech Impairment • Learning disability • Emotional/ behavioural problem (ADD, ADHD)	} 14.1	} 14.1	**14.1**
Step 2	Parents	Learning difficulty, communication or co-ordination disorder (inclu dyslexia, ADHD, autism, speech and language difficulty, dyspraxia, slow progress, other)	10.6	} + 5.9	**20.0**
		Speech difficulty	1.4		
		Chronic physical or mental health problem, illness or disability hampering daily life	4.8		
Step 3	Teachers	• Emotional/psychological wellbeing/EBD (SDQ Measure): identifying a 'high risk' group	10.5	+ 5.0	**25.0**