Grammar schools: Socio-economic differences in entrance rates and the association with socio-emotional outcomes

Executive Summary

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Executive Summary

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Selective education in the United Kingdom remains a contentious issue. Although most grammar schools in England were closed during the 1960s and 1970s, they were never completely phased out, with around 160 remaining in 2019. In Northern Ireland, academic selection in the form of grammar schools remains throughout the country, though they are often highly segregated not only by academic achievement, but also by religion. Such schools retain support amongst some groups, who argue that they increase social mobility. Yet most existing academic research suggests that this is not the case, with little evidence of an increase in average levels of achievement, but signs that selective education may increase educational and labour market inequalities (Hanushek and Woßmann 2006; Burgess, Dickson and Macmillan 2014; Burgess, Crawford and Macmillan 2017, Gorard and Siddiqui 2018).

This report provides new evidence on socio-economic inequalities in grammar school entrance rates and the potential impact that access to grammar schools is having upon young people’s lives. Much of the existing contemporary research on grammar schools focuses upon academic achievement outcomes alone. In contrast, the focus of this report is a broader array of socio-emotional measures, such as motivation and engagement in school, wellbeing, educational expectations and mental health. These are all issues that are important to parents and young people when selecting a secondary school (Wespieser, Durbin and Sims 2015), and to labour market outcomes, social mobility and wellbeing more generally (Blanden, Gregg and Macmillan 2007). Our analysis considers whether such outcomes are, on average, better in selective versus comprehensive education areas in England, and if there are particular benefits for certain groups, e.g. those from high-income backgrounds. We also consider the link between family income and grammar school attendance, investigating the potential mechanisms that may drive this relationship.

Methodology
Using data from the Millennium Cohort Study (a nationally-representative survey that has followed a sample of children from birth through to age 14), our analysis begins by modelling the relationship between family income and the probability that a child attends a grammar school. Results are presented separately for England and Northern Ireland, where we explore the extent to which socio-economic differences in grammar school entry rates can be explained by a wide array of factors, including prior academic achievement, private tuition and parental school preferences. We then turn our attention to whether a range of socio-emotional outcomes, e.g. motivation at school, behaviour, wellbeing, future aspirations, differ between children who live in academically-selective parts of England where grammar schools are still prevalent, e.g. Kent, to comparable children who live in areas with a comprehensive education system where grammar schools are not present, e.g. Norfolk. Statistical techniques such as regression and matching, where each child who lives in a selective area is matched to a child with similar characteristics who lives in a non-selective area, are used to ensure a fair basis for comparison. A similar analytic approach is then used to compare socio-emotional and academic outcomes between grammar and non-grammar pupils, amongst the sub-set of children who live within selective education areas in England such as Kent, and Northern Ireland.

Findings
Our key findings can be summarised as follows:

- There is a strong relationship between family income and the probability of attending a grammar school in England and Northern Ireland. Although this can be partially explained by differences in prior achievement, young people from lower-income family backgrounds remain significantly less likely to attend a grammar school than their high-income peers, even when they have similar academic abilities.
• High-income families are more likely to pay for private tuition and coaching for grammar school entrance tests than low-income families. Children who receive private tuition are more likely to go on to attend a grammar school than those who do not, regardless of their background.

• There is no evidence that academic and socio-emotional outcomes differ between selective and comprehensive education areas in England. Limited evidence emerges that selective education areas have greater levels of inequalities than comprehensive areas (in terms of academic and socio-emotional outcomes) within our research.

• We find no evidence that children who attend a grammar school develop stronger socio-emotional skills than those who do not. This is consistent across a wide range of outcomes, including their engagement in school, wellbeing and self-confidence in their academic abilities. Within selective education areas, grammar school pupils do however go on to obtain better GCSE grades than their peers who attend a non-selective state school (this difference is equivalent to around three-quarters of a GCSE mathematics grade).

**Recommendations**

In combination with previous academic evidence, these findings have important policy implications. Our results are consistent with a now wide body of research that suggests the overall effect of grammar school systems is essentially zero when compared with comprehensive education systems (Hanushek and Woßmann 2006; Burgess; Atkinson, Gregg and McConnell 2006, Gorard and Siddiqui 2018). Our contribution has been to illustrate how this continues to hold true when using a particularly rich dataset and for a much wider array of outcomes than has previously been considered. Together, this suggests that there is very little to be gained from policies designed to increase between-school academic selection in England. Moreover, we have highlighted some significant issues with the selective elements of the education system in England that are currently in place, most notably the extensive use of private tutoring and coaching for the entrance test.

Nevertheless, we cannot rule out the possibility that grammar schools may offer longer-term advantages (e.g. increasing the chances of attending a selective university) and parents may still want their child to attend a grammar school, even if this does not lead to vast improvements in educational and socio-emotional outcomes. Consequently, in parts of the country where academic selection is still widespread, the government should do more to reduce barriers to grammar schools. For instance, they might seek to address high-income families' disproportionate use of private tuition by introducing a tax upon such services, with the revenue this generates used to subsidise extra lessons for pupils from lower-income backgrounds.

**Academic papers**

Three academic papers have been produced within this project, which provide further detail to the results provided in this report. The references to these journal papers are as follows:


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