

## DATA INSIGHTS

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# Selective schools: do they improve health?

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## OVERVIEW

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Educated groups have better physical and mental health in later life. But is the type of school per se a cause of better later life health or it is simply that, for example, those attending “better” schools tend to come from a more advantaged background? This study looks at long term effects of education, specifically stratifying students based on their academic ability through selective schooling.

We tracked those that attended Aberdeen secondary schools in the 1960s and found that those with higher test scores at age 11 had better self-assessed and NHS recorded health in their 50 and 60s and were less likely to die prematurely. However, the type of school they attended did not seem to be important.

## WHAT WE DID

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We take advantage of a natural experiment in school assignment that occurred in Britain in the 1960s. This was a primary school test taken aged eleven called the 11+ which assigned children to academic or technical focussed schooling, and using this we evaluate the long-term causal effects of selective schooling on health.

We anonymously and confidentially linked the birth and school records of a cohort of Aberdeen school children born in the 1950s to their NHS records in adulthood. We also included answers to a questionnaire the cohort completed when aged about 50.

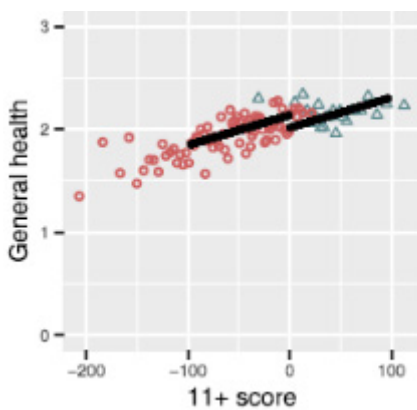
We considered a wide range of outcomes including self-reported physical health and mental health, diagnoses of thirty chronic conditions from hospital records, and premature death. These were analysed at two age points when participants were in middle age and early old age.

## WHAT WE FOUND

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While we found that people who attended an academic focussed secondary school had better health, there was little effect of attending an academic focussed school itself on adult health. This was true of health measures that were self-reported or derived from government records, whether measured in mid-life or later life.

For example, figure 1 shows academic focussed school pupils (blue triangles) had better self-rated general health at age 50 than technical focussed school pupils (red circles). It also shows a higher school test at age 11 was associated with better health. However, at the cut point (11 plus test score of 0) for entry to academic focussed secondary school there was no jump in general health. If anything the difference at the cut point (shown by the black lines not meeting) suggests that academic focussed pupil's health was lower but the difference is small.



*Figure 1: General health (aged 50) against 11+ score (aged 11). 0 on the 11+ score is the cut off for entrance to academic (blue triangle) rather than technical school (red circle). The two regression lines are for the two types of school.*

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## WHY IT MATTERS

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Debates continue about the merits of selective schooling in the UK and elsewhere to improve education levels. Our results suggest that population health may not be improved by such a policy and so should not be used as a reason to argue for the return to grammar schools.

More generally, studies such as these provide an evidence-base for policy and planning and show the long term effects of policy on people's outcomes and lives.

## WHAT NEXT?

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Future work could aim to discover why school type itself did not have an impact on health.

One plausible reason is that income level did not depend on school type for this cohort because of the prosperity following the oil boom in Aberdeen.

### Further information:

Butler and Popham et al, **The long-term health effects of attending a selective school: a natural experiment**, BMC Medicine, Volume 18, Article 77 (2020) :  
[www.bmcmedicine.biomedcentral.com/articles/10.1186/s12916-020-01536-7](http://www.bmcmedicine.biomedcentral.com/articles/10.1186/s12916-020-01536-7)

**Learn more about the Aberdeen Children of the 1950s study:**  
[www.abdn.ac.uk/birth-cohorts/1950s/](http://www.abdn.ac.uk/birth-cohorts/1950s/)

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