

Understanding post-16 subject choices: an empirical study into the role of student rank order

Conference Abstract

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Abstract

Students' post-16 pathways matter: different subjects as well as qualifications are associated with variable future opportunities in higher education, training, and careers, and differing labour market returns (Hupkau et al., 2017). Known influences on post-16 subject choices include perceptions of usefulness, domain-specific self-concept (e.g., "I'm good at Science"), interest, and perceived subject difficulty, but the factors driving these remain under-researched.

Research has shown that after accounting for students' own grades, a high-achieving reference group (e.g., class) can negatively affect students' conceptions of being 'good at' a subject and subject interest (e.g., Trautwein et al., 2006). Studies have also shown direct associations between student rank order and subsequent choices: Murphy and Weinhardt (2020) demonstrated that students' rankings within primary school subjects predicted their subject choices in secondary school, while Elsner et al (2021) showed similar effects among undergraduates.

This empirical study investigated whether students' within-peer-group ranking in GCSE subjects relates to post-16 subject choices. We obtained summer 2020 GCSE data from an awarding organisation, which included teachers' rank orderings of students, and linked this to a national dataset listing the courses students were studying in autumn 2020. This data (N=116,500 students) enabled us to statistically model the effect of within-group ranking on the likelihood of continuing a subject after GCSE, while controlling for potentially confounding variables (GCSE subject grade, average grade across all *other* GCSE subjects, gender, ethnicity, and school type). Multilevel logistic regression models were used to account for the clustering of students within schools.

The results showed that within-group ranking was a statistically significant predictor of post-16 subject progression in almost all subjects analysed. For GCSE students with the same characteristics (including grades), the predicted likelihood of continuing a subject increased as within-peer-group ranking in that subject improved, in some cases substantially. We argue that such reference-group effects merit attention from all those wishing to understand post-16 choices in England.

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Full paper

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