ABSTRACT:

Class Rank and Sibling Spillover Effects

Alexandra de Gendre
University of Sydney

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Siblings are perhaps the most important childhood peers, yet we know little about sibling spillover effects on school achievement and their potential mechanisms. I estimate the effect of children’s rank in primary school on their younger sibling’s schooling outcomes, using administrative records from the Netherlands, where pupils leave primary school with a national standardized test score and a tracking recommendation. Variation in class rank conditional on ability and on cohort-by-school fixed effects is credibly exogenous in this setting, and isolates sibling spillovers driven by behavioral and psychological mechanisms, as opposed to direct transmission of human capital. A 1SD increase in child rank decreases their younger sibling’s test scores in Dutch by 2.1% standard deviation and in Math by 2.6% standard deviation. I explore parental investments, teacher expectations and sibling interactions as mechanisms. In particular, I show that child rank decreases the likelihood that younger siblings attend the same school. For families of non-Western migration background, younger siblings attend slightly higher quality schools. I further show that child rank also increases by 0.8 percentage point (2.7 percent) the likelihood that their sibling’s teacher recommends the Vocational school track for Dutch-born children, while they are 1.2 percentage point more likely to recommend the Academic track for children of Western migration background. These findings indicate that teachers imperfectly update their expectations about children, which ultimately widens socioeconomic achievement gaps. Overall, my findings show that school inputs can be important drivers of within-family human capital spillovers.