

# Do Peers Affect Student Achievement ? Evidence from Canada Using Group Size Variation

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## Abstract

We provide one of the first empirical applications of a new method proposed by Lee (2007) to estimate peer effects. The method is promising, as it allows both to solve the reflection problem and to control for group-level unobservables, without imposing ad hoc exclusion restrictions or requiring peers to be randomly assigned to groups. We investigate the presence of peer effects in Math, Science, French and History scores at the end of secondary school in the province of Quebec (Canada). We use an original dataset that covers about one fifth of all schools in Quebec and provides test scores to the provincial standardized exam required for graduation. We estimate the model using two methods, Conditional ML (CML) and Generalized 2SLS (G2SLS). We find evidence of peer effects. The endogenous peer effect is positive, when significant. We generally reject models that ignore group-level heterogeneity or impose no contextual effects. We also find that CML estimates are generally more precise than G2SLS ones, which may indicate weak identification in the latter case. We investigate this issue further using calibrated Monte Carlo simulations.

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