

Laws of attraction

The effects of teacher recruitment difficulties on students' academic and labor
market outcomes

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Abstract

In this study, I estimate the causal effect of increased commute distance to schools on how well they can attract teachers and how this affects student performance. I identify the causal effect of an increase in commute distance using a natural experiment in which more than one third of Danish teacher training colleges(TTCs) closed, where some schools experienced an increase in distance to the nearest TTC while other schools did not. I hypothesize that the increase in distance to the nearest TTC would have led to an increase in commute distance, particularly for newly graduated teachers, and that this would have adverse effects on schools' ability to attract teachers and students' academic performance. I estimate the effects using a differences-in-differences design, accounting for the staggered rollout of TTC closures using newly developed estimators. While proximity to the nearest TTC is mentioned in the scholarly literature as a factor impacting schools' attractiveness to teachers, the results in this study are largely inconclusive regarding increased distance to the nearest TTC impacting teacher body composition or student academic performance. While it is not possible to infer a

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direction of the effect for the majority of estimates, the majority of the point estimates suggest that effects are modest in size, particularly for outcomes pertaining to students' academic performance. While the results suggest that schools that experienced larger increases in distance also experienced larger adverse effects, these results are also inconclusive. This is even though results clearly show that an increase in distance to the nearest TTC increased the commute distance of teachers. I discuss that the closure of TTCs likely also affected the mobility of teachers, mitigating possible effects of TTC closure. As such, the results of this study suggest that 1) The hypothetical effects of commute distance are likely overestimated in the literature on teacher mobility and recruitment, 2) The willingness of teachers to commute is likely underestimated, and 3) Small effects on teacher composition lead to even smaller effects on student academic performance. As such, the results of this study provide evidence that it requires very substantial increases in commute distance to produce changes in teacher composition that have a discernible impact on student performance.

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