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Editor: Gabriel Heller Sahlgren

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Editor's Pick

School Vouchers and Student Achievement: First-Year Evidence from the Louisiana Scholarship Program

By: Atik Abdulkadiroglu, Parag A. Pathak, and Christopher R. Walters

NBER Working Paper No. 21839

[Free version](#)

In the past decades, an increasing number of school voucher programmes have been implemented in the US. Geared toward low-income households, these programmes allow participants to use vouchers toward tuition fees in private schools. Since the schemes generally have more applicants than places, lotteries have often been used as a tiebreak device. This means that one can compare like for like when studying the effects of attending private schools using the vouchers. Such studies have generally found no or small positive effects on test scores, but larger positive effects on graduation rates and college enrolment (at least among certain sub-groups). There has been little evidence of negative effects.

Until now. In a new study, Abdulkadiroglu and colleagues analyse the Louisiana Scholarship Program, a targeted voucher scheme providing funds for poor children currently enrolled in low-performing state schools – graded “C” or lower in the state accountability programme – to opt out of the state system and attend eligible private schools. If the number of applicants exceeds the number of places at any given school, lotteries determine the final pupil allocation. The researchers exploit these lotteries to obtain random variation in private school attendance, which allows them to study the effects on achievement in the first year after the programme was rolled out over the entire state.

The authors find large negative effects. After one year, pupils who received the voucher performed the equivalent of 41 PISA points lower in mathematics, 33 PISA points lower in social studies, 26 PISA points lower in science, and 8 PISA points lower in reading. They are also between 24 to 50 per cent more likely to fail. Pupils from different socio-economic backgrounds and locations are similarly hurt by private school attendance, but younger pupils are somewhat more negatively affected. These are large negative effects and strongly suggest the programme, as currently designed, does not work well. Recent [findings](#) also suggest that these negative effects persist after two years of private school attendance, although they appear to be less distinct in reading.

What can explain this large negative impact? Pupils who lost the lottery did not attend worse state schools than the Louisiana average, so this is unlikely to be the issue. However, the authors find that private schools that chose to participate

in the programme are more likely to have significant downward trends in enrolment prior to entering the program – compared to those that did not participate – indicating that private schools with pre-existing problems were the ones that joined it. However, the authors find that the negative impact of private school attendance is not generally larger in schools with more sharp enrolment declines prior to the start of the programme, compared with other participating private schools.

Still, over two-thirds of private schools chose not to participate and those schools had more favourable enrolment trends on average. Why did not most private schools choose to participate? One reason may have been overregulation – participating schools can't charge fees on top of the voucher, select pupils, and must administer the state-wide test. These features may have induced most private schools to opt out of the programme – leaving the poorly performing schools to participate – and there is survey [evidence](#) in favour of that argument. If so, the lack of high-quality private schools in the programme may explain the negative effect estimated in the study.

Personally, I'm not convinced by this argument. The state schools that formed the comparison group were also poorly performing and there is no evidence that the participating private schools [were](#) really bad schools. Overall, in fact, I find it implausible that school quality could explain the large negative impact in just one year. Another reason suggested is a potential transition effect for the private schools that had to adjust to a new type of test they haven't administered before. But the second-year negative effects do not generally offer support for this story.

Overall, then, it is difficult to provide a clear-cut reason why the Louisiana programme has worked so poorly in the short term. Before this issue has been investigated more rigorously, it's impossible to prescribe what should be done to improve it. But one thing is certain: without the randomised trial, enabled by lotteries, we would have no way of knowing it needed to improve in the first place.

Effects of Policy and Practice – Developed World

Do Charter Schools Improve Student Achievement?

By: Melissa A. Clark, Philip M. Gleason, Christina Clark Tuttle, and Marsha K. Silverberg

Educational Evaluation and Policy Analysis (December, 2015)

[Published version](#)

[Working paper version \(free\)](#)

This article presents findings from a lottery-based study of the impacts of a broad set of 33 charter middle schools across 13 states on student achievement. To estimate charter school impacts, the authors compare test score outcomes of students admitted to these schools through the randomised admissions lotteries with outcomes of applicants who were not admitted. They find that impacts varied considerably across schools and students, with more positive impacts for more disadvantaged schools and students and more negative impacts for the more advantaged. On average across the schools in the study, the impacts of charter middle schools on student achievement were negative but not statistically significant, regardless of whether the authors examined the impact of the offer of admission or actual attendance at these schools.

Does Intensive Coaching Reduce School Dropout? Evidence from a Randomised Experiment

By: Marc van der Steeg, Roel van Elk, and Dinand Webbink

Economics of Education Review (October 2015)

[Published version](#)

[Working paper version \(free\)](#)

School dropout is an important social and economic problem. This paper investigates the effect of an intensive coaching program aimed at reducing school dropout rates among pupils aged 16–20. Pupils received support and guidance with their study activities, personal problems and internships in firms. The coaching program lasted one or two years. Pupils were randomly assigned to the coaching program. The authors find that one year of coaching reduced school dropout rates by more than 40% from 17 to 10 percentage points. The second year of coaching further reduced school dropout by 1 percentage point. The program is most effective for pupils with a high ex-ante probability of dropping out, such as pupils no longer obliged to be in formal education, male pupils, and

pupils not living with both parents. Cost-benefit analysis suggests that one year of coaching is likely to yield a net social gain.

Can School Competition Improve Standards? The Case of Faith Schools in England

By: Rebecca Allen and Anna Vignoles

Empirical Economics (forthcoming)

[Published version](#)

[Working paper version \(free\)](#)

This paper measures the extent to which the presence of state-funded Catholic secondary schools in England alters the educational experiences of pupils who attend neighbouring schools, whether through school effort induced by competition or changes in peer groups induced by sorting. National administrative data are used to estimate pupil test score growth models between the ages of 11 and 16, with instrumental variable methods employed to avoid confounding the direct causal effect of Catholic schools. The historical Catholic population, holding constant the current Catholic population, is used to predict current Catholic school supply. The authors find little evidence that competition from Catholic schools raises area-wide pupil attainment.

The Publication of School Rankings: A Step toward Increased Accountability?

By: Luis C. Nunes, Ana Balcão Reis, and Carmo Seabra

Economics of Education Review (December 2015)

[Published version](#)

[Working paper version \(free\)](#)

This paper contributes to the discussion of the effects of the publication of school rankings based on students' scores on national exams. The authors study the effectiveness of this (low-stakes) accountability mechanism. Our results suggest that the publication of rankings has clear effects upon families and schools in Portugal. After the rankings publication, fewer students enrol in schools that are rated poorly and the probability of closure of these schools increases. These effects are stronger for private schools.

School Entry Age and Children's Social-Behavioural Skills: Evidence From a National Longitudinal Study of U.S. Kindergartners

By: Ashlesha Datar and Michael A. Gottfried

Educational Evaluation and Policy Analysis (September 2015)

[Published version](#)

[Working paper version \(free\)](#)

Prior research evaluating school entry age effects has largely overlooked the effects on social-behavioural skills despite the growing recognition of returns to such skills. This study is the first to examine the effects of kindergarten entry age on children's social-behavioural outcomes using 9 years of panel data on a national sample of U.S. children. The authors leverage exogenous variation in birth dates and kindergarten entrance age policies to estimate instrumental variables models. Their results show that entering kindergarten a year later is associated with significantly better social-behavioural outcomes during elementary school. However, these effects largely disappear by the end of middle school. Larger gains over time among younger entrants support the notion that the estimated effects are age-at-test effects.

Effects of Policy and Practice – Developing World

Estimating the Impact of Language of Instruction in South African Primary Schools: A Fixed Effects Approach

By: Stephen Taylor and Marisa von Fintel

Economics of Education Review (February 2016)

[Published version](#)

[Working paper version \(free\)](#)

For many children around the world, access to higher education and the labour market depends on becoming fluent in a second language. In South Africa, the majority of children do not speak English as their first language but are required to undertake their final school-leaving examinations in English. Most schools offer mother-tongue instruction in the first three grades of school and then transition to English as the language of instruction in the fourth grade. Some schools use English as the language of instruction from the first grade. In recent years a number of schools have changed their policy, thus creating within-school, cross-grade variation in the language of instruction received in the early grades. Using longitudinal data from the population of South African primary schools and a fixed-effects approach, the authors find that mother tongue instruction in the early grades significantly improves English acquisition, as measured in grades 4, 5 and 6.

Impact of Private Secondary Schooling on Cognitive Skills: Evidence from India

By: Mehtabul Azam, Geeta Kingdon, and Kin Bing Wu

Education Economics (forthcoming)

[Published version](#)

[Working paper version \(free\)](#)

The authors examine the effect of attending private secondary school on educational achievement, as measured by students' scores in a comprehensive standardized math test, in two Indian states: Orissa and Rajasthan. They use propensity score matching (PSM) to control for any systematic differences between students attending private secondary schools and public secondary schools, and assess the sensitivity of our estimates with respect to unobservables using the Rosenbaum bounds. They find that students in private schools in rural (urban) Rajasthan scored about 1.3 (0.4) standard deviation (SD) higher than their counterparts in the state schools. Importantly, the positive private school

impact in rural (urban) Rajasthan survives a large (moderate) amount of positive selection on unobservables. They do not find statistically significant difference in urban Orissa, while a positive impact of 0.3 SD in rural Orissa is susceptible to small amount of positive selection on unobservables.

General Education

School Quality and the Gender Gap in Educational Achievement

By: David H. Autor, David N. Figlio, Krzysztof Karbownik, Jeffrey Roth, Melanie Wasserman

NBER Working Paper No. 21908

[Free version](#)

Recent evidence indicates that boys and girls are differently affected by the quantity and quality of family inputs received in childhood. The authors assess whether this is also true for schooling inputs. Using matched Florida birth and school administrative records, they estimate the causal effect of school quality on the gender gap in educational outcomes by contrasting opposite-sex siblings who attend the same sets of schools – thereby purging family heterogeneity – and leveraging within-family variation in school quality arising from family moves. Investigating middle school test scores, absences and suspensions, the authors find that boys benefit more than girls from cumulative exposure to higher quality schools.

The Impact of Classroom Peers in a Streaming System

By: Arna Vardardottir

Economics of Education Review (December 2016)

[Published version](#)

[Working paper version \(free\)](#)

This paper investigates educational production with a focus on the influence that socio-economic status of class peers has on academic outcomes of students in a streaming system. Employing the Swiss subsample of the PISA data, the author provides evidence that while classroom assignment is not random within schools or tracks it is random within tracks-by-schools. Track-by-school fixed effects therefore render peer group composition conditionally uncorrelated with students' characteristics, while track fixed effects and school fixed effects don't. Estimates based on track fixed-effects and school fixed-effects approaches are reduced sizably by employing a track-by-school fixed-effects approach while mean effects on test results in mathematics and problem solving remain significant.