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Editor: Gabriel Heller-Sahlgren

Table of Contents

Editor's Pick.....	1
Effects of Policy and Practice - Developed World.....	3
Effects of Policy and Practice - Developing World.....	5
General Education	7

Editor's Pick

Early, Late or Never? When Does Parental Education Impact Child Outcomes?

By: Matt Dickson, Paul Gregg, and Harriet Robinson

Economic Journal (October 2016)

[Published version](#)

[Free version](#)

The correlation between parental education levels and children's academic achievement is well established. But whether or not this correlation is causal is unclear since parental education levels are also associated with many other things that affect pupil performance, including income and heritable factors.

Still, if the correlation between the level of parental education and children's performance reflects a causal relationship, raising the overall education level in the population may carry positive benefits further down the line regardless of how it affects those who receive the extra education.

This paper studies this question using detailed cohort data from Avon, England. To study the causal impact of higher parental education levels, the authors use the 1972 increase in the minimum school leaving age from 15 to 16. The law affected all people who turned 15 on or after 1 September 1972. Comparing children of parents who turned 15 close to this cut-off (on both sides), while adjusting for the separate effect of the age of parents, it is possible to estimate the causal impact of having parents who were affected by this reform.

The authors find that increasing the parental educational level by one year on average raises the performance of children at the age of 4. The impact continues to be visible up to and including KS4 examinations with an effect size that corresponds to about 10 PISA points per parent (about a fourth of an academic year's worth of learning). In other words, having two parents with one additional affected by the reform increases performance by about 20 PISA points, corresponding to half a year of schooling. These findings are only relevant for children of rather low-educated parents, since these were the only ones who were de facto affected by the reform.

So parental education levels truly do have a positive causal impact on pupil achievement, at least in Avon, although it is smaller than the raw correlation would suggest. At the same time, there is little indication that parental education matters for children's IQ at age 8, which is in line with prior research that suggests this is a more innate measure of ability.

A prior paper analysed in the [digest](#) found no effect of income on pupil performance, indicating that unseen factors that correlate with both background and performance appear to explain the simple correlation between the two. This paper provides quite strong evidence to the contrary.

While the findings are convincing, this does not mean that pupil performance automatically will increase if we force their parents to get more education. This is because the effects are likely to differ depending on exactly what reform is implemented and what type of additional education it mandates. It is also not clear the same reform today would have the same impact today as in 1972.

Nevertheless, the paper is a good example of research in education economics, which goes beyond mere correlation and digs deeper into causal relationships. Indeed, it is this type of research that should guide policymakers in their quest to improve educational performance.

Effects of Policy and Practice – Developed World

Assessing the Effect of School Days and Absences on Test Score Performance

By: Esteban M. Aucejo and Teresa Foy Romano

Economics of Education Review (December 2016)

[Published version](#)

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

While instructional time is viewed as crucial to learning, little is known about the effectiveness of reducing absences relative to increasing the number of school days. Using administrative data from North Carolina public schools, this paper jointly estimates the effect of absences and length of the school calendar on test score performance. The authors exploit a state policy that provides variation in the number of school days prior to standardized testing and find substantial differences between these two effects. Extending the school calendar by ten days increases math and reading test scores by only 1.7% and 0.8% of a standard deviation, respectively. A similar reduction in absences would lead to gains of 5.5% in math and 2.9% in reading. They perform a number of robustness checks including utilizing flu data to instrument for absences, family-year fixed effects, distinguishing between excused and unexcused absences, and controlling for a contemporaneous measure of student disengagement. The results are robust to these alternative specifications. In addition, the findings indicate considerable heterogeneity across student ability, suggesting that targeting absenteeism among low performing students could aid in narrowing current gaps in performance.

What is the Added Value of Preschool? Long-Term Impacts and Interactions with a Health Intervention

By: Maya Rossin-Slater and Miriam Wüst

IZA Discussion Paper No. 10254 (October 2016)

[Published version \(free\)](#)

The authors study the impact of targeted high quality preschool over the life cycle and across generations, and examine its interaction with a health intervention during infancy. Using administrative data from Denmark together with variation in the timing of program implementation between 1933 and 1960,

they find lasting benefits of access to preschool at age 3 on outcomes through age 65 – educational attainment increases, income rises (for men), and the probability of survival increases (for women). Further, the benefits persist to the next generation, who experience higher educational attainment by age 25. However, exposure to a nurse home visiting program in infancy reduces the added value of preschool. The positive effect of preschool is lowered by 85 percent for years of schooling (of the first generation) and by 86 percent for adult income among men.

The Effects of Computers on Children's Social Development and School Participation: Evidence from a Randomised Control Experiment

By: Robert W. Fairlie and Ariel Kalil

Economics of Education Review (April 2017)

[Published version](#)

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

Concerns over the perceived negative impacts of computers on social development among children are prevalent but largely uninformed by plausibly causal evidence. The authors provide the first test of this hypothesis using a large-scale randomised control experiment in which more than one thousand children attending grades 6–10 across 15 different schools and 5 school districts in California were randomly given computers to use at home. Children in the treatment group are more likely to report having a social networking site, but also report spending more time communicating with their friends and interacting with their friends in person. There is no evidence that computer ownership displaces participation in after-school activities such as sports teams or clubs or reduces school participation and engagement.

Effects of Policy and Practice – Developing World

Cycling to School: Increasing Secondary School Enrollment for Girls in India

By: Karthik Muralidharan and Nishith Prakash

American Economic Journal: Applied Economics (forthcoming)

[Published version](#)

[Free version](#)

The authors study the impact of an innovative program in the Indian state of Bihar that aimed to reduce the gender gap in secondary school enrolment by providing girls who continued to secondary school with a bicycle that would improve access to school. Using data from a large representative household survey, the authors employ a triple difference approach (using boys and the neighbouring state of Jharkhand as comparison groups) and find that being in a cohort that was exposed to the Cycle program increased girls' age-appropriate enrolment in secondary school by 32 per cent and reduced the corresponding gender gap by 40 per cent. We also find an 18 per cent increase in the number of girls who appear for the high-stakes secondary school certificate exam, and a 12 per cent increase in the number of girls who pass it. Parametric and non-parametric decompositions of the triple-difference estimate as a function of distance to the nearest secondary school show that the increases in enrolment mostly took place in villages that were further away from a secondary school, suggesting that the mechanism of impact was the reduction in the time and safety cost of school attendance made possible by the bicycle. They also find that the Cycle program was much more cost effective at increasing girls' secondary school enrolment than comparable conditional cash transfer programs in South Asia.

Heterogeneous Treatment Effects in the Low Track: Revisiting the Kenyan Primary School Experiment

By: Joseph R. Cummins

Economics of Education Review (February 2017)

[Published version](#)

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

The author present results from a partial re-analysis of the Kenyan school tracking experiment first described in Duflo, Dupas and Kremer (2011). His

results suggest that, in a developing country school system with state-employed teachers, tracking can reduce short-run test scores of initially low-ability students with high learning potential. The highest scoring students subjected only to the tracking intervention scored well below comparable students in untracked classrooms at the end of the intervention. In contrast, students assigned to tracking under the experimental alternative teacher intervention experienced gains from tracking that increased across the outcome distribution. These alternative teachers were drawn from local areas, exhibited significantly higher effort levels and faced different incentives to produce learning. He concludes that although Pareto-improvements in test scores from tracking are possible, they are not guaranteed.

General Education

The Impact of Education on Political Ideology: Evidence from European Compulsory Education Reforms

By: Andrew G. Meyer

Economics of Education Review (February 2017)

[Published version](#)

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

Previous research documents a correlation between education and political ideology, usually indicating a positive relationship between education and left-wing political views. In this paper, the author examines to what extent this association is causal. He merges political ideology data from 25 waves of Eurobarometer surveys with information on 18 educational reforms in 11 European countries. He then instruments for educational attainment with a regression discontinuity design that estimates the increase in education due to compulsory educational reforms. Notably, it appears that omitted variables bias is important here. He finds a significant causal effect of education moving individuals to the right when properly addressing the endogeneity whereas there is a significant association between education and left-wing political ideology when treating education as exogenous. He finds that on average, among the individuals compelled into additional education from these specific reforms, an additional year of education moves individuals to the right of the political continuum by about 5–6%. However, he also finds no evidence of a causal effect on political ideology for a subgroup of countries.

Ethnic Gaps in Educational Attainment and Labour-market Outcomes: Evidence from France

By: Gabin Langevin, David Masclot, Fabien Moizeau and Emmanuel Peterle

Education Economics (January 2017)

[Published version](#)

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

The authors use data from the *Trajectoires et Origines* survey to analyse ethnic gaps in education and labour-market outcomes between second-generation

immigrants and their French-native counterparts. Their three main findings underscore the importance of family background in explaining lifelong ethnic inequalities. First, second-generation immigrants are on average less likely to experience education success than their native counterparts, with the education gap mainly being rooted in ethnic differences in family backgrounds. Second, while second-generation immigrants have on average a lower probability of employment and lower wages than natives, both gaps are mainly explained by the differences in education. Third, they find considerable heterogeneity across ethnic groups.