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Editor: Gabriel Heller-Sahlgren

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Editor's Pick

Paid Parental Leave and Children's Schooling Outcomes

By: Natalia Danzer and Victor Lavy

Economic Journal (Forthcoming)

[Published version](#)

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

In the past decades, governments in most developed countries have expanded provisions for paid parental leave, accompanied by rapidly increasing female labour force participation rates. Whether or not such provisions have a causal positive effect on maternal labour market performance has become an important topic of investigation in economics.

Yet paid parental leave could also affect other important outcomes, one of which is children's performance at school. Reducing time spent in employment could increase time spent with children in their first years of life, which may have spill-over effects on their cognitive development – and in the longer-term perspective therefore on their performance in school and in life. Research is somewhat mixed but on average suggests that maternal employment during children's first year of life may have negative consequences for their development. However, some research also suggests heterogeneous effects depending on parental background: children of more privileged backgrounds may be hurt by maternal employment, whereas children of less privileged backgrounds may benefit because of its positive impact on overall family income. This indicates that the level of generosity of parental leave provisions, and their design more generally, are likely key for their impact on children's outcomes.

In this paper, Natalia Danzer and Victor Lavy seek to analyse the impact of increasing the time mothers spend with children on the latter's performance in PISA tests at age 15. To do so, they exploit a reform in Austria that increased the maximum duration of paid paternal leave by one year for all mothers who gave birth from 1 July 1990 and onwards. The reform was announced shortly before coming into effect, thus giving no time for parents to change their fertility plans to take advantage of the new policy. This means that it can be utilised as a natural experiment to study the effects of paid parental leave on those children who were born just after the cut-off date, and as a result spent more time with their mothers than those who were born just before it. To ensure that results are not driven by mere age or season of birth effects, the authors compare the *difference* in performance between the children born just before and just after the relevant cut-off date with the *difference* in performance between children born just before and just after 1 July in a year prior to the reform.

The results display no average effect of expanding paid parental leave on children's PISA scores. However, this impact masks a heterogeneous effect depending on children's background: children from higher socio-economic backgrounds performed on average fully 20 PISA points better because of the reform, whereas children from lower socio-economic background performed worse. Both the positive impact among children of more privileged backgrounds and the negative effect among children of less privileged backgrounds are concentrated among boys. However, girls from lower socio-economic backgrounds were also more likely to attend a lower than regular grade level as a result of the reform, indicating that it increased the likelihood of grade retention among girls. The Austrian reform therefore appears to have had no impact on overall attainment while increasing inequality in outcomes between children from different backgrounds, a clear negative unintended outcome of a well-intentioned policy.

Interestingly, the same reform has previously been found to have increased time spent with children more among highly-educated mothers than among low-educated mothers. Also, whereas the reform had no impact on overall fertility levels among mothers from more privileged backgrounds, it actually increased fertility levels among low-wage mothers. Such differences in maternal behaviour may very well explain the heterogeneous effects found in the paper.

Furthermore, it is important to note that the effects of parental leave reforms on children's school performance are likely to be dependent on the context. Indeed, similar [research](#) in Norway has found positive effects on educational attainment and wages later in life – which are especially pronounced among children from low socio-economic backgrounds. As in Austria, there was little formal childcare available at the time of the Norwegian reforms, suggesting such availability cannot explain the different results. Indeed, a similar reform in [Sweden](#) carried out at a time when the main alternative to paternal leave was formal child care had no effects either on average or among children from less privileged backgrounds – while having a positive impact on schooling outcomes of children of more highly-educated mothers.

Overall, therefore, the mixed effects of parental leave expansions on children's outcomes indicate that politicians would be well advised to carefully consider potential unintended consequences of such expansions prior to implementation. Indeed, unless carefully designed and accompanied by other interventions to take into account the overall context, they may do more harm than good from an education-policy perspective.

Effects of Policy and Practice – Developed World

Does Universal Preschool Hit the Target? Program Access and Preschool Impacts

By: Elizabeth U. Cascio

IZA Discussion Paper No. 10596

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

Despite substantial interest in preschool as a means of narrowing the achievement gap, little is known about how particular program attributes might influence the achievement gains of disadvantaged pre-schoolers. This paper uses survey data on a recent cohort to explore the mediating influence of one key program attribute – whether disadvantage itself is a criterion for preschool admission. Taking advantage of age-eligibility rules to construct an instrument for attendance, the author finds that universal state-funded prekindergarten (pre-K) programs generate substantial positive effects on the reading scores of low-income 4 year olds. State pre-K programs targeted toward disadvantaged children do not. Differences in other pre-K program requirements and population demographics cannot explain the larger positive impacts of universal programs. The alternatives to universal and targeted state pre-K programs also do not significantly differ. Together, these findings suggest that universal preschools offer a relatively high-quality learning experience for low-income children not reflected in typical quality metrics.

Compressing Instruction Time into Fewer Years of Schooling and the Impact on Student Performance

By: Mathias Huebener and Jan Marcus

Economics of Education Review (forthcoming)

[Published version](#)

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

Is it possible to compress instruction time into fewer school years without lowering education levels? A fundamental reform in Germany reduced the length of academic track schooling by one year, while increasing instruction hours in the remaining school years to provide students with a very similar core curriculum and the same overall instruction time. Using aggregated administrative data on the full population of students, the authors find that the

reform increases grade repetition rates and lowers final grade point averages, without affecting graduation rates. The results suggest adverse reform effects on student performance, but the economic significance of the effects appears moderate.

Is it the Way they Use it? Teachers, ICT and Student Achievement

By: Simona Lorena Comi, Gianluca Argentin, Marco Gui, Federica Origo, and Laura Pagani

Economics of Education Review (February 2017)

[Published version](#)

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

The authors provide evidence on whether ICT-related teaching practices affect student achievement. They use a unique student-teacher dataset containing variables on a wide set of very specific uses of computer and ICT by teachers matched with data on national standardised tests for 10th grade students. Their identification strategy relies on a within-student between-subject estimator and on a rich set of teacher's controls. They find that computer-based teaching methods increase student performance when they increase students' awareness in ICT use and when they enhance communication. Instead, they find a negative impact of practices requiring an active role of the students in classes using ICT. The findings suggest that the effectiveness of ICT at school depends on the actual practice that teachers make of it and on their ability to integrate ICT into their teaching process.

Effects of Policy and Practice – Developing World

Peer Effects in Computer Assisted Learning: Evidence from a Randomized Experiment

By: Marcel Fafchamps and Di Mo

NBER Working Paper No. 23195

[Published version](#)

[Free version](#)

The authors conduct a large scale RCT to investigate peer effects in computer assisted learning (CAL). Identification of peer effects relies on three levels of randomisation. It is already known that CAL improves math test scores in Chinese rural schools. The authors find that paired treatment improves the beneficial effects of treatment for poor performers when they are paired with high performers. They test whether CAL treatment reduces the dispersion in math scores relative to controls, and they find statistically significant evidence that it does. They also demonstrate that the beneficial effects of CAL could potentially be strengthened, both in terms of average effect and in terms of reduced dispersion, if weak students are systematically paired with strong students during treatment. This is the first time that a school intervention has been identified in which peer effects unambiguously help weak students catch up with the rest of the class without imposing any learning cost on other students.

Estimating the Impact of Private Tutoring on Academic Performance: Primary Students in Sri Lanka

By: Rachel Cole

Education Economics (volume 25 2017)

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

Worldwide private tutoring is documented extensively, but its impact is unclear. The author estimates the impact of tutoring on performance to assess the degree to which tutoring is a vehicle of educational stratification in Sri Lanka. She finds that on average, five months of tutoring has no impact on Year 5 students' exam scores. She produces suggestive evidence impacts vary only slightly with advantage; so its impact on stratification is likely minimal. Policy-makers may want to urge parents to reconsider sending their children to tutoring, and further research should identify stratification mechanisms.

General Education

Cool to be Smart or Smart to be Cool? Understanding Peer Pressure in Education

By: Leonardo Bursztyn, Georgy Egorov, and Robert Jensen

NBER Working Paper No. 23020

[Published version](#)

[Free version](#)

Concerns about social image may negatively affect schooling behaviour. The authors identify two potentially important peer cultures: one that stigmatises effort (thus, where it is “smart to be cool”) and one that rewards ability (where it is “cool to be smart”). They build a model showing that either may lower the take-up of educational activities when take-up and performance are potentially observable to peers. They design a field experiment allowing them to test whether students are influenced by these concerns at all, and then which they are more influenced by. The authors examine high schools in two settings: a low-income, high minority share area and a higher-income, lower minority share area. In both settings, peer pressure reduces take-up of an SAT prep package. They show that this is consistent with a greater concern for hiding effort in the lower-income school, and a greater concern with hiding low ability in the higher-income schools.

Measuring Instructor Effectiveness in Higher Education

By: Pieter De Vlieger, Brian Jacob, and Kevin Stange

NBER Working Paper No. 22998

[Published version](#)

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

Instructors are a chief input into the higher education production process, yet we know very little about their role in promoting student success. This is in contrast to elementary and secondary schooling, for which ample evidence suggests teacher quality is an important determinant of student achievement. Whether colleges could improve student and institutional performance by reallocating instructors or altering personnel policies hinges on the role of instructors in student success. In this paper, the authors measure variation in post-secondary instructor effectiveness and estimate its relationship to overall and course-specific teaching experience. They explore this issue in the context of the University of Phoenix, a large for-profit university that offers both online and in-person courses in a wide array of fields and degree programs. They focus on

instructors in the college algebra course that is required for all BA degree program students. They find substantial variation in student performance across instructors both in the current class and subsequent classes. Variation is larger for in-person classes, but is still substantial for online courses. Effectiveness grows modestly with course-specific teaching experience, but is unrelated to pay. The authors' results suggest that personnel policies for recruiting, developing, motivating, and retaining effective postsecondary instructors may be a key, yet underdeveloped, tool for improving institutional productivity.