

Increasing mothers' education benefits their children's school performance

It is well known that there is a strong link between children's family background and their performance at school but it is much less clear what drives this relationship. A new study by **Pedro Carneiro**, **Costas Meghir** and **Matthias Parey** has investigated how a mother's education affects her children's school performance.

The findings, from research carried out at the Institute for Fiscal Studies, which were presented at the Royal Economic Society's 2006 Annual Conference at the University of Nottingham, reveal that:

1. Parents' education has important 'intergenerational' effects on children's 'human capital' – the level of education they achieve themselves.
2. Increasing a mother's education improves her child's performance on achievement tests: an additional year of mother's schooling will raise the child's ranking in the test score distribution by about 3-4 percentage points and the probability of grade repetition (a child having to repeat the year at an American high school) is reduced by around 7 percentage points.
3. The effect of the mother's education is transmitted to the child via a number of potential channels, including:
 - additional income through having higher qualifications;
 - increased mother's maturity through having children at a later point in her life;
 - and 'mating effects' – a better education makes it more likely you will meet a better-educated spouse.

These results have important implications for policy. Increasing schooling attainment will not only benefit those who obtain higher education, but also create spillover effects to the next generation. Increasing parental schooling could be seen as a potential path to helping children who would otherwise be performing poorly in school.

Furthermore, this research is closely related to the study of intergenerational mobility: parental education can be understood as a possible link between parents' and children's outcomes.

The paper contributes to a growing literature indicating that there are substantial benefits to education, which go beyond improving the immediate labour market possibilities for the person who obtains more education. It challenges the view that a child's test score performance can be taken as a measure of inherent ability. The research confirms that there is a causal link between a mother's education and her child's achievement, and that differences are not just due to associated factors, such as inherited ability or social circumstances.

The study uses a dataset from the United States – the National Longitudinal Survey of Youth – which has followed several thousand mothers and their children. The mothers were born between 1957 and 1964. Since the beginning of the survey in 1979, mothers have been interviewed in regular intervals (annually up to 1994, biennial since then).

This work improves on previous research because the dataset contains detailed measures of characteristics of both the mother and the child. The analysis of potential transmission channels provides insights into why mothers' schooling might be related to children's schooling outcomes.

Children's schooling outcomes (measured at ages 9 and 10) are relevant from an economic viewpoint: it is well understood that test score measures are strong predictors of schooling attainment and of labour market success later on in their lives.

The challenge was to separate out the causal effects of mothers' education on child outcomes from the impact of confounding factors such as differences in socio-economic background. This paper uses variations in schooling costs at the time and place where the mother grew up. Differences in college tuition fees and in labour market opportunities affect the mothers' schooling decisions, leading to different schooling outcomes for otherwise similar mothers, allowing us to make meaningful comparisons between them.

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Notes to editors:

1. 'Intergenerational Effects of Mother's Schooling on Children's Outcomes: Causal Links and Transmission Channels' by Pedro Carneiro, Costas Meghir and Matthias Parey was presented at the Royal Economic Society's 2006 Annual Conference at the University of Nottingham, 18-20 April. For more information about the conference, contact Romesh Vaitilingam on 0117-983-9770 or 07768-661095 (email: romesh@compuserve.com).