

The Effect of Early Skills on Schooling Attainment, Employment and Starting Wages

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Abstract

Early life disparities among children can have long lasting effects in adulthood (Bharadwaj et al., 2013; Heckman and Mosso, 2014). This paper examines whether differences in skills at age six translate into relevant outcomes later in life, like educational attainment, employment and starting wages. We use exogenous variation in the skills that children have at the beginning of primary school in Chile due to school entry age rules. We rely on rich administrative records to track students as they progress through primary and secondary school, finish high school, transition to post-secondary education and enter the labor market. We examine what are traditional measures of achievement, like standardized scores and GPA, but also include other non-test-score outcomes such as attendance, on-time grade progression. Precise regression-discontinuity estimates based on birth dates cutoffs show large in-school effects on GPA, test scores, attendance and persistence, which is consistent with prior literature (Bedard and Dhuey (2006); Puhani and Weber (2008); Datar (2006); McEwan and Shapiro (2008); Elder and Lubotsky (2009); Smith (2010)). However, our data shows that those effects vanish by the end of high school and have no effect on the likelihood of receiving a high school degree, and no effect on higher education enrollment or completion. We also study labor market outcomes up age 27 and find precise zero effects on employment or the starting wages. Our analysis suggest that younger entrants (with lower initial skills) catch-up with the more skilled older entrants due to parental investments over the life cycle, which occur at a faster rate for those from more advantaged socioeconomic backgrounds.

Keywords: Human Capital; School Entrance Age; Test Scores; College Enrollment; Labor Market Outcomes; Parental Investments; Regression Discontinuity Design.

JEL codes: I21, I26, I28, J24, J31.

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