Impact of Information on the Returns to Education on the Demand for Schooling in the Dominican Republic

Researchers:

Robert Jensen

Sector(s): Education, Labor Markets

Location: Dominican Republic

Sample: 2,250 eighth grade boys

Target group: Students

Outcome of interest: Enrollment and attendance

Intervention type: Information

Partner organization(s): Fundación Global Democracia y Desarrollo (FUNGLODE)

People make decisions about education based on what they perceive to be the returns to education, and these perceptions may be inaccurate, causing people to under-invest in education. In the Dominican Republic, researchers investigated families' perceptions of the returns to education and whether providing information on the actual returns to education would change their schooling decisions. They found that students significantly underestimated the returns to secondary education, and providing them with information about the actual returns led them to complete 0.2 additional years of schooling.

Policy issue

If the costs of investing in schooling, in terms of enrollment fees, uniforms, materials, and lost time, are smaller than the benefits people expect from having more education, then families are likely to keep their children in school for longer. For this reason, many interventions which seek to increase school enrollment and attendance focus on lowering the costs of schooling. However, people make these decisions based on what they perceive to be the returns to education, and these perceptions may be inaccurate, causing people to under-invest in education. This could be particularly true for the poorest families, who may have fewer well-educated acquaintances to serve as examples for the returns to schooling. If people are in fact underestimating the returns to education, then it may be possible to increase their demand for schooling by simply informing them of the actual increase in earnings they could see with additional years of education.

Context of the evaluation

In the Dominican Republic, more than 80 percent of youths complete primary school, but only 25 to 30 percent go on to finish their secondary schooling. There are many potential reasons why families may withdraw their children from school: they may believe the quality education is poor, or that wages from child labor are more important than the value of additional education, etc. Yet surveys have shown that the long-term benefits of education are quite high, with secondary school graduates in the Dominican Republic earning more than 40 percent higher average wages than their counterparts who only finished primary school. (These survey results come from a sample of men, because female labor market participation is very low in the Dominican Republic, and many women were therefore unwilling to estimate their future earnings.) While it is possible that the costs of

schooling are high enough to outweigh even these benefits, this also suggests the possibility that people could be unaware of these high returns to education.



Secondary school student walks home from school in the Dominican Republic.

Photo credit: aleksandr paraev, Shutterstock.com

Details of the intervention

Researchers investigated whether low perceived returns to education were related to schooling attainment, and whether providing families with information on the actual returns to education would change their schooling decisions. To estimate the actual returns to secondary schooling, researchers conducted a nationwide household survey in 150 clusters around the Dominican Republic. In twenty randomly selected households in each cluster, men were asked questions about their education, employment and earnings, and background demographics. To estimate perceived returns, surveyors then visited the school where students in each cluster attended eighth grade and held meetings with 15 randomly selected boys. During this meeting, boys were asked to estimate the average earnings among men with different levels of education (primary school, secondary school, or university), to gather data on their pre-existing conceptions of the returns to education.

Half of the surveyed schools were randomly allocated into the "treatment group," and during the individual meetings at these schools, boys received an intervention providing information on the actual returns to education in the Dominican Republic. Surveyors verbally provided information on average earnings by education level that had been collected through the earlier household survey. For instance, boys were told that "Workers who finish secondary school earn about 41 percent more than those who don't. And people who go to university earnabout 85 percent more than those who finish only primary school."

Over the next four years, two follow-up surveys were conducted to determine boys' perceptions of the returns to education, and gather information about their schooling attainment.

Results and policy lessons

Perceived Returns to Education: Pre-intervention survey results show that on average, eighth grade boys significantly underestimated the returns to secondary education. In fact, around 42 percent of students expected that there would be no difference in their future earnings if they completed only primary school, while 12 percent of students expected to receive higher returns than were seen in the data. Initial expectations about the returns to education were highly correlated with schooling attainment for every RD$1,000 (US$50) increase in a boy's perceived returns to schooling, his likelihood of returning to school the next year increased by nine percentage points.

Impacts of Information: Providing boys with information on the actual increases in earnings among those with more years of education raised average perceived returns by RD$366 , and about 28 percent of the treatment group increased their perceived returns by RD$1,000 or more. As a result, boys in the treatment group attended 0.2 additional years of schooling over the next four years relative to their counterparts in the comparison group. Cost-effectiveness analysis has shown that this relatively inexpensive one-time intervention is a very cost-effective way of increasing students' time in school.

Impacts for the Poorest Families: Even if families are aware of the returns to education, low family income, schooling costs, and credit constraints may still prevent them from attending. Results show that, while the intervention had a similar impact on the perceived returns for the poorest and the least poor households in the sample, there was no significant increase in schooling among the poorest households. This suggests that complementary programs to address the costs of schooling may be needed to increase schooling for the poorest of children.

In J-PAL's comparative cost-effectiveness analysis, providing families with information on the actual returns to education led to 0.23 additional years of education per $100 spent. For more information, see the full comparative cost-effectiveness analysis.

Jensen, Robert. 2010. "Impact of Information on the Returns to Education on the Demand for Schooling in the Dominican Republic." Quarterly Journal of Economics 125 (2010): 515-548.