Role of Information on the Returns of Post-Primary Education on School Dropout

Researchers:

Francisco Gallego

Oswaldo Molina

Christopher Neilson

Sector(s): Education

Fieldwork: Innovations for Poverty Action (IPA)

Location: Peru

Sample: Over 75,000 students in 2,495 urban schools (evaluation 1); 7,500 students in 516 urban and rural schools (evaluation 2)

Target group: Parents Students

Outcome of interest: Enrollment and attendance

Intervention type: Information

Research Papers: Decidiendo para un futuro mejor: El efecto de la información sobre la deserción...

Partner organization(s): Peru Ministry of Education (MINEDU), U.S. Department of Labor, Bureau of International Labor Affairs

One reason children from disadvantaged backgrounds receive less schooling and join the labor force at younger ages with fewer skills may be that they and their families lack crucial information needed to make the right long-run investment decisions regarding their human capital. In Peru, IPA and J-PAL worked with researchers and the Ministry of Education to evaluate at scale two low-cost ways of providing relevant information to help students and their families make more informed decisions. Using a series of telenovela-style videos screened as part of the curriculum in schools as well as through an interactive tablet app, the research project evaluated how information provided at different ages could shape human capital decisions. Results suggest that the programs were effective at changing educational plans and lowering dropout rates, while significant effects on child labor were mixed. The policy has now been adopted by the government and scaled up to 100 percent of public schools with full class days.

Policy issue

In many countries, students drop out of school and enter the labor force as children at persistently high rates. One reason for this may be that students and their parents are making their educational decisions without the appropriate information. They may underestimate the long-term benefits of continuing their education. They may also not understand the differences in types of education tracks or fields of study. Importantly, they may not be aware of financial aid programs that would make continuing education feasible for them. This can lead to a series of mistaken decisions about questions like how long to stay in school, how hard to try, and what types of subjects to focus on. These mistakes may accumulate and compound over time, making exiting the system and working with less skills more likely and reproducing poverty. In contexts where students and parents are less informed, previous research suggests that providing students and their parents with accurate information can shift their education decisions (see, for example, evaluations in Chile, , and the Dominican Republic). However, less is known about whether cost-effective ways to share relevant information as a policy implemented by the government can work at scale.

Context of the evaluation

In Peru, despite recent improvements in the coverage and quality of the education system, high school dropout rates are a significant problem. At the national level, 12 percent of children leave school before age 13, and 17 percent do not finish secondary school.[1] Child labor in Peru is common as well. Figures from the ILO and the Ministry of Labor show that 21.8 percent of children aged 5-17 in Peru were working in 2015. In rural areas, the child labor rate was almost four times higher than in urban areas.

The initial survey conducted for this study found that students and parents underestimated the earnings of graduates of different fields of study in both technical and college tracks. For example, the median child participating in the survey expected a university graduate to earn 31 percent less than the real average wages for a university graduate in 2015. Students and parents were also often unaware of important financial aid programs such as Beca18, which provides scholarships for poor students to attend universities.

Watch the below videos for an overview of the evaluation and student and parent testimonials.

Two students in school uniforms using a tablet together in Peru.

Photo credit: Shutterstock.com

Details of the intervention

Researchers partnered with Peru's Ministry of Education to conduct a randomized evaluation measuring the impact of delivering information on the returns to education through video and an interactive tablet app on school dropout and child labor rates. The information campaigns provided information about the financial and social benefits of education to improve knowledge about the returns to education.

This study involved two different interventions:

- *Video series*: This program comprised a telenovela-style video series whose plot conveyed messages about the social value of education, real earnings information for different education levels and fields, and options for financing higher education. Students watched these videos in their schools as part of the curriculum.
- *Tablet application ("app")-based intervention*: This program delivered similar messaging through a more intensive, tablet-based information campaign, built into an app-based survey which used infographics, interactive activities, and in-depth presentations to present information to students and parents. Some students interacted with the tablets in their homes, and others at their schools.

In the first year of the intervention, the evaluation design differed slightly between urban and rural areas:

- In urban areas, researchers randomly assigned 2,611 schools to either receive the video campaign or serve as part of the comparison group. The sample who received the program included half of all the urban schools in Peru. Within the schools in urban Lima that were part of this sample, researchers randomly selected 3,334 students and 1,816 parents to either receive the application-based intervention or serve as part of the comparison group.
- In rural areas, researchers randomly assigned 249 schools to either receive the policy pilot video campaign (125 schools) or serve as part of the comparison group (124 schools). In these groups, researchers randomly selected 3,000 primary students and 993 parents to either receive the app-based intervention or serve as part of the comparison group.

In the second year of the evaluation, both interventions were scaled back due to budget constraints and to focus on improving implementation, and researchers focused on in-depth follow-up to identify mechanisms underlying the evaluation's results.

Results and policy lessons

Overall, results suggest that the information provision policy implemented by the government at scale via videos affected human capital accumulation of students, and seemed to help reduce school dropout rates in particular. The impact on child labor was mixed, with some groups such as women in urban areas lowering the amount of work provided at home.

*Providing information to students increased perceptions of the returns to education***:** Students in urban areas who received the video series intervention expected returns to university education that were 8 percent higher than those of students in the comparison group, closer to the actual benefits to study. However, in rural areas, the policy pilot did not have significant effects. Both students and parents who received the app-based intervention had increased perceptions.

The treatment increased the perceived feasibility of pursuing higher education and families updated their long-term education plans: The perceived feasibility of achieving higher education increased for both parents and students in urban areas right after the app information was delivered. Treated households changed long-run educational plans: in addition to updating their beliefs about the long run educational plans, children and parents were 10 percent more likely to improve their educational plans right after receiving new information through the app in both urban and rural areas. As students updated their beliefs about the returns to

higher education, they began to consider finishing higher levels of education, and parents tended to be more willing to support their children in this pursuit.

Dropout rates fell as a result of the video series in both rural and urban areas: In urban areas, the video series led to a decrease in the two-year dropout rate of 1.8 percentage points—equivalent to a decrease in dropout rates of 18.8 percent. In both urban and rural areas, the effect was driven largely by the behavior of boys. The one-year effects were largest for fifth- and sixth-graders, and the two-year effects were larger for younger children than older ones.

Effects on child labor from both the video series and app were mixed: Neither intervention reduced child labor overall. However, the video series reduced child labor for girls in urban areas by 15 percent. For children in urban areas who worked at the beginning of the intervention, the video series increased average work hours by 2.2 hours per day. In rural areas, the policy pilot reduced work hours for certain groups—particularly boys and sixth graders. Additionally, the application-based intervention reduced child labor for 6th graders in rural areas by 7 percent, but not for the overall sample.

---

1. Ministry of Education, Peru. 2015. *SAIGIE 2015.*
2. International Labour Organization and Ministry of Labor, Peru. 2015. *Magnitud y Caracterîsticas del Trabajo Infantil en el Perú, Informe 2015.*