

# The Role of Information and Preferences in School Choices in Romania

**Researchers:** 

Robert Ainsworth

Rajeev Dehejia

Cristian (Kiki) Pop-Eleches

Sector(s): Education

J-PAL office: J-PAL Europe

Location: Romania

**Sample:** 3,898 students from 194 middle schools

Target group: Parents Students Families and households

Outcome of interest: Student learning

Intervention type: Information

**AEA RCT registration number:** AEARCTR-000449

**Partner organization(s):** Columbia University Center for Development Economics and Policy (CDEP), Faculty Grants Program at SIPA (Columbia University), New York University, KDI School of Public Policy and Management

Households face many choices on a daily basis that can affect their health, income, and standard of living, and frequently make choices that are not the most effective or optimal. In choosing educational institutions, households often do not select schools that would maximize children's academic improvement. In this randomized evaluation in Romania, researchers compared the roles of preferences and information in households' decision-making, with regard to high school selection. Results suggest that households provided with information on school quality tend to choose schools that have a greater academic impact on their children. However, households' preferences for other school attributes also factor into their decision-making, including peer quality, location, and, most importantly, curriculum.

#### **Policy issue**

Households face many choices on a daily basis that can affect their health, income, and standard of living. In the context of education, for instance, households often do not select the best schools that offer the highest "value added" – or the potential to maximize their children's learning outcomes. This may stem from a combination of households' beliefs, preferences, and information about their school options. On the one hand, households may not know which schools will lead to the highest increase in student learning outcomes, or have inaccurate beliefs regarding school quality. On the other hand, households may prioritize other school traits, such as a safe environment or a short commute, which may lead them to select schools that offer smaller learning gains. While evidence suggests that households do not always favor schools that offer the highest value added, little research examines what constraints or factors lead them to do so. In particular, there is limited understanding of the trade-off between households' preferences and lack of information, in leading them to prioritize other school traits.

#### **Context of the evaluation**

In Romania, where this evaluation took place, students take a national admissions test called the "transition exam" prior to entering high school, and a national exit test called the "baccalaureate exam" before graduating. High performance on the baccalaureate exam is crucial for moving on to higher education, and can help students win merit scholarships and enter selective programs. In the Romanian school system, high schools cover grades 9-12 and are divided into one of three broad track categories: humanities, math or science, and technical subjects (such as business or agriculture). Students are admitted to tracks based on their "transition score" – or a combination of their score on the transition exam, and their GPA from middle school (grades 5-8).

Regarding track allocations, the Romanian government uses the following "serial dictatorship" algorithm to assign students to high schools. First, households rank an unlimited number of Romanian high schools according to their preferences. Second, based on students' transition scores, the algorithm assigns each student to their most-preferred school that has not yet reached capacity. In turn, this produces admissions cutoffs for each high school in Romania, or the "minimum transition score" (MTS), which are used to select the final students.



Students taking an exam in Bucharest, Romania.

Photo: Shutterstock | Roibu

### **Details of the intervention**

Researchers conducted a randomized evaluation to examine the impact of preferences and information on household decision-making, with regard to students' high school selection and academic outcomes.

Researchers invited parents of 3,898 eighth-grade students from the 2019 admissions cohort, spanning 194 middle schools in 48 towns, to participate in the study. To start, they asked students' parents about their track preference rankings and to score tracks

on characteristics such as location and quality of peers and teachers. This allowed them to measure households' baseline preferences and beliefs around school options. As researchers were able to match 83 percent of these students with administrative data, this resulted in a final group of 3,186 students, spanning 173 schools from 46 towns, who were assigned to a track.

Among these schools, researchers randomly assigned them to one of two groups:

- *Comparison group* (85 middle schools): Parents and students in this group received a flyer with links to government websites, including one listing the prior-year minimum transition score for each track.
- *Information group* (88 middle schools): Parents and students in this group received the same flyer, with an additional bullet point that ranked all the tracks in the town by their value added, or school's effectiveness in improving students' chances of passing the baccalaureate exam. This ranking was based on administrative data from all high school tracks from 2004 to 2014, which researchers used to estimate the value added for admissions cohorts in those years.

Finally, after high school allocation in June 2019, researchers conducted a follow-up phone survey on final track preference rankings submitted by households, their beliefs on school quality, and experiences with the admissions processes. Researchers also obtained students' track assignments from the Ministry of Education for all students.

Researchers noted that it is common for Romanian schools to provide parents with information at "back to school" nights. While this evaluation shared further information than what is normally provided, they commented that it fit within local norms of the school selection process. As such, they did not believe the intervention raised significant ethical concerns.

## **Results and policy lessons**

Researchers found that providing information on schools' predicted increases in learning outcomes increased households' rankings of higher quality schools, and improved the accuracy of their beliefs. This effect was strongest among households with low-achieving students, by influencing both their beliefs and preferences. Researchers also found that the information intervention did not change students' top two rankings.

*Learning losses*: Survey data showed that, prior to the evaluation, households were not fully informed about schools' value added, and did not generally choose the school with highest value added. By choosing higher quality schools, students could have increased their probability of passing the baccalaureate exam by 12 percentage points, relative to the average pass rate of 53 percent.

Impact on school choice and learning outcomes: Providing information on value added had a modest impact on school quality. This effect was larger on households with low-achieving students than on those with high-achieving students. For low-achieving students, information provision caused students to attend higher quality schools, which increased their probability of passing the baccalaureate exam by 1.45 percentage points (a 5 percent increase from an average pass rate of 29 percent). However, for high-achieving students, there was no effect on school assignments. These different effects on households with low- versus high-achieving students may stem from varying levels of certainty in their beliefs, or levels of trust in information.

Role of preferences and information: Researchers found that households similarly prioritized such school attributes as location, siblings and friends, peer quality, and value added. Surveys showed that the curricular focus of a track was the most important attribute. Thus, researchers suggested that providing information on value added would only have a limited effect in shifting students toward better schools, as households' preferences for peers and curricular focus most importantly affect their decision-making.

Researchers noted that interventions leveraging information provision are not currently being considered by the Romanian government. However, many countries beyond Romania are assessing the role of information on school choice, including Chile

buseholds' underlying preferences for different dimensions of school quality.					