

On improving education opportunities

Citation for published version (APA):

Bernal N., G. L. (2021). *On improving education opportunities: Preferences and performance of High School students in response to scholarships, information, and co-education*. [Doctoral Thesis, Maastricht University]. Boekenplan. <https://doi.org/10.26481/dis.20210623gn>

Document status and date:

Published: 01/01/2021

DOI:

[10.26481/dis.20210623gn](https://doi.org/10.26481/dis.20210623gn)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

- A submitted manuscript is the version of the article upon submission and before peer-review. There can be important differences between the submitted version and the official published version of record. People interested in the research are advised to contact the author for the final version of the publication, or visit the DOI to the publisher's website.
- The final author version and the galley proof are versions of the publication after peer review.
- The final published version features the final layout of the paper including the volume, issue and page numbers.

[Link to publication](#)

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal.

If the publication is distributed under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license above, please follow below link for the End User Agreement:

www.umlib.nl/taverne-license

Take down policy

If you believe that this document breaches copyright please contact us at:

repository@maastrichtuniversity.nl

providing details and we will investigate your claim.

Summary

Educational opportunities are diverse, finite, and dependent on many factors. Public policy in education is constantly looking for ways to improve these opportunities and to increase students' performance in an effort to achieve a better society. The presence of inequality in access to (and the quality of) education is a main concern that requires public intervention. After setting the scene in Chapter 1, this dissertation explores the effect of introducing the merit-based Ser Pilo Paga (SPP) scholarship to low-income students in Colombia on their subsequent academic performance and effort (Chapter 2). It also surveys low-income high school pupils to explore their preferences for higher education over different hypothetical scenarios, and tests whether the provision of basic information on financial aid and the returns to education could alter those preferences (Chapter 3). Furthermore, we exploit the SPP's sudden cancellation in 2018 to study the consequences of this shock on the higher education preferences of those who would have been eligible for the program based on the family's poverty index (Chapter 4). We find that the scholarship raised the level of effort of high achievers (particularly males and students living in urban areas). Moreover, we show that students' educational choices are markedly determined by scholarship opportunities: after the SPP was cancelled, eligible students' educational aspirations fell significantly; females and the lowest-income students were affected particularly hard. Prior research has concluded that financial opportunities for low-income students are a key driver of their effort and an important determinant of their decisions about whether to pursue higher

education. Moreover, preferences for higher education can be mediated by the provision of information -particularly information about financial aid and the cost of tertiary education. Here, provision of information also benefited disproportionately more females than males, which shows a tool to alleviate academic gender inequalities perceived in several levels of education in Colombia, a country with one of the largest gender gaps in math and one of the smallest gender gaps in favor of girls in reading across PISA-participating countries (OECD, 2018).

Chapter 5 investigates the academic gender inequalities in Colombian secondary schools, which have been widely documented. This chapter explores gender peer effects, looking for insights as to how to increase academic performance in high school exit examinations, for female students in particular. In this chapter, we study how the conversion of single-sex schools into coeducational (coed) schools affected the academic achievement of incumbent students (Chapter 5). The results suggest that males in formerly male-only schools did not benefit, whereas females did so only marginally. The debate on the proper environment for students to maximize their learning is ongoing, although single-sex education is unlikely to return in many cases.

This study aims to provide new insights that can help students, parents, schools, and governments close the academic gap between low- and high-income students, as well as between females and males. This thesis provides evidence-based insights to pursue this aim and discuss the policy implications of those findings. The results have important implications for developing countries like Colombia, where academic achievement is highly dependent on opportunities, income, and sex, rather than individual academic potential.