

Working papers economics - Beyond Access: Gender gaps in university education in Colombia

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Gender gaps in university education do not originate in higher education institutions themselves; rather, they reflect accumulated inequalities and selection processes that occur earlier in the educational trajectory.

Publication Date: Tuesday, 18 of August 2026 **Approach**

This study examines gender gaps in university education in Colombia, considering both access to higher education and academic performance at the end of the degree program. Although women have surpassed men in enrollment, retention, and graduation rates over recent decades, differences persist in learning outcomes measured by achievement tests taken upon completion of university studies, particularly in quantitative fields. Using data from the Saber Pro examination (2016–2024) linked to results from the Saber 11 examination, the analysis explores how these gaps evolve throughout students' educational trajectories. Specifically, it assesses the role of individual, family, institutional, and higher education characteristics, as well as prior academic achievement. The study seeks to determine whether gender gaps observed at the end of higher education reflect differences generated within universities themselves or whether they are primarily the result of inequalities accumulated earlier in the educational system.

Contribution

This study provides novel evidence by combining longitudinal information on educational trajectories with econometric techniques that distinguish between observed gender gaps and those explained by selection processes and pre-existing differences. In particular, it shows that considering both the skills developed before entering university and the mechanisms determining who progresses through the educational system is essential. This approach reveals that gender gaps in academic performance at the end of university education are largely driven by differences accumulated prior to university entry and by selection processes, rather than by factors associated with the higher education experience itself. In this way, the study contributes to a better understanding of educational disparities in contexts characterized by substantial expansion of university education.

Results

The findings show that, although gender gaps that disadvantage women persist in quantitative reasoning at the end of university education, these gaps narrow substantially once individual, family, and institutional factors are taken into account. Moreover, when prior performance on the Saber 11 examination is considered, the gaps decline markedly and even reverse in areas such as critical reading and written communication, where women

achieve, on average, better outcomes than men. This suggests that a significant share of the differences observed at the university level reflects inequalities accumulated during earlier stages of education rather than the higher education process alone. However, gender gaps in quantitative skills remain even after these adjustments, pointing to the influence of deeper structural factors, such as gender stereotypes, differences in confidence, and patterns of self-selection.

Fuente: <https://www.banrep.gov.co/en/publications-research/working-papers-economics/access-gaps-gender-education>