

Gender Peer Effects in Post-Secondary Vocational Education ¹

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Abstract

Although Chilean women have higher rates of graduation and educational persistence, they account for only 23% of undergraduate students in technology and basic sciences. Additionally, there is evidence that in a high school context gender peer composition is connected to the math gender gap and that females benefit from having more female peers. The post-secondary realm remains unexplored in this context.

Using information on 104,146 students from one post-secondary vocational institution in Chile, I estimate a gender peer effect linear model with major-by-branch fixed effects that links educational outcomes to percentage of female peers in STEM ³ and Non-STEM majors. The model uses idiosyncratic within major-by-branch variation in gender peer composition to estimate the effect.

The results suggest that a 11% increase in the percentage of female peers within major-by-branch units, equivalent to the mean idiosyncratic variation in the data, is associated with a reduction of 12.1% (2 percentage points) in female students' dropout rate and a 0.07 standard deviation increase in GPA ⁴. This result supports the hypothesis that in STEM majors, female students educational outcomes are positively related with having more female peers in their cohorts. For males, this relationship is significant but of a smaller magnitude, suggesting that men in STEM programs also benefit from having more female peers.

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³STEM: science, technology, engineering, and mathematics.

⁴Graduate Point Average