

# **Gender Differences in Performance: The Role of External Testing Environments**

José Montalbán †  
SOFI at Stockholm University

Almudena Sevilla ‡  
London School of Economics

## **Abstract**

We exploit a randomized control trial intervention on a large student population to study gender differences in response to externally and internally administered testing environments. Specifically, grade 6 and 10 students were exposed to different testing environments, while other factors such as competition, stakes, and time pressure were held constant. Our findings indicate that girls perform worse than boys in external test-taking environments, particularly in subjects with strong stereotypes of female inability, like mathematics. A survey administered after each exam reveals that girls seem to have a lower tolerance for pressure and a lower incentive to exert effort in external testing conditions in mathematics, but not in verbal. These findings may explain the widening gender gap in mathematics in external examination settings.

Keywords: stakes, competition, gender gaps in mathematics, pressure, performance  
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