

The Gender Gap in Student Performance: The Role of the Testing Environment

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Abstract

Our research question is to what extent does the familiarity with the testing environment impact the relative performance of boys and girls in standardized testing. We use an RCT-design on the full population of students in Grade 6 and 10 across several subjects in the Region of Madrid (Spain). This standardized test was either "Externally" administered, meaning that teachers from different schools were centrally allocated by the government to invigilate and mark the test, or internally administered by each school, meaning that invigilators and markers were teachers from the school. Whether schools had externally or internally administered tests were randomly assigned. We find that girls underperform boys in externally administered testing environment, particularly in traditionally male-dominated subjects, such as Math and Science. Additional evidence from surveying students at the end of the tests suggests that girls experience higher levels of pressure than boys in "Externally" administered testing environments. We contribute to the literature in 2 important ways: 1) Most of the previous work on gender differences are based on natural experiments of particular samples (high achieving graduates) or lab experiments. Here we have an RCT on the entire population. 2) Previous work was not able to look directly at the direct mechanisms at play for girls relative underperformance, which we do with our survey.