



Motivation

YOUNG LABOR ECONOMISTS AWARD “Ezio Tarantelli” 2017

Stereotypes and Self-Stereotypes: Evidence from Teachers’ Gender Bias

Michela Carlana

The paper written by Michela Carlana investigates the role of teachers’ gender stereotypes in influencing student performance. The empirical exercise is based on a sample of middle schools placed in the provinces of Milan, Brescia, Padua, Genoa and Turin and makes use of four sources of data, namely teacher and student survey data, administrative information from the Italian Ministry of Education (MIUR) and from the National Center for the Evaluation of the Italian Education System (INVALSI). The richness of the data collected along with the Implicit Association Test (IAT) conducted to Italian and Maths teachers working in the sampling schools allow to test their implicit gender bias in the subject they teach (i.e. math teachers may unintentionally behave differently towards boys and girls). The measure of teacher gender stereotypes is then used to analyse its effect in affecting performance in math and high school track choice, helping to shed light on how teachers’ bias influence self-assessment of math ability and in turn the underperformance of girls in the same subject. Providing descriptive evidence that teachers’ experience in school does not shape their implicit bias and that teachers are randomly assigned to classes, Carlana finds that (i) female students assigned to female teachers or to teachers with a degree in Science, Technology, Engineering and Math (STEM) have lower math achievement test scores in grade 8 compared to their classmates, (ii) higher teacher implicit bias affects especially females from disadvantaged backgrounds, (iii) males are not influenced by teachers’ gender stereotypes, (iv) teachers foster negative self-stereotypes on girls only in male-typed domain, (v) teacher bias has an impact in high school track choice, reducing the probability for females to enrol in scientific schools.

In line with recent studies suggesting that the females interest in STEM subjects dropped dramatically at the age of 15 because of gender stereotypes, lack of female role models, peer pressure and poor encouragement from parents and teachers, this paper provides an important contribution to the existing evidence for the Italian context since it can help policy makers to define adequate interventions aimed at removing gender stereotypes (i.e. policies to inform teachers about their bias or training programmes to stimulate equal behaviour towards boys and girls) and promoting equality of opportunities.

The AIEL executive board feels that the paper is highly deserving of the Young Labor Economists Award “Ezio Tarantelli” because of its novelty in the data used and in the careful estimation strategy applied to identify the impact of teachers’ gender stereotypes in affecting student performance. Results, albeit based on a sample limited to five Italian provinces, provide important policy implications to prevent females from facing increasingly poor job opportunities, due to the fact that most future employment opportunities will likely require STEM competencies.