

Stereotypes about immigrant students and discrimination in grading

- Michela Carlana, *Harvard Kennedy School, United States*
- Eliana La Ferrara, *Bocconi University, Italy*
- Paolo Pinotti, *Bocconi University, Italy*

on “Anti-Immigrant Stereotypes and Discrimination”

Anti-immigrant stereotypes are widespread in most contemporary societies. These negative stereotypes are partly due to misinformation and partly to rejection of diversity, especially in countries which had been historically homogenous and now receive a large influx of immigrants. Negative stereotyping may lead to discrimination and, possibly, self-fulfilling prophecies by influencing the behavior of discriminated groups in the direction predicted by stereotypes (Glover et al., 2017; Carlana, 2019).

Immigrant children in schools are particularly vulnerable to stereotypes, which may induce them to undertake suboptimal decisions impacting their future careers and well-being. In a recent paper (Alesina et al., 2018), we study the impact of revealing implicit stereotypes to teachers by randomizing the timing of disclosure around the date on which they assign term grades. We focus on the Italian context, where mass immigration is relatively recent and politically salient, and we collect a unique dataset merging a survey with around 1,400 teachers with administrative data on student outcomes.

Stereotypes: Implicit Association Tests

We measure implicit stereotypes using an Implicit Association Test (IAT). This is a computer-based tool, developed by social psychologists, which exploits the reaction time to associations between positive/negative adjectives and native/immigrant names (Greenwald et al., 1995). Recently, IAT scores have also been used by economists when studying race and gender discrimination. The scores predict (not perfectly, of course) relevant choices and behaviors in lab experiments and in real-world interactions (Glover et al., 2017; Corno et al., 2018).

Over 67% of the teachers in our sample exhibit moderate to severe degree of associations between immigrant-bad and native-good, i.e. a score greater than 0.35 according to the typical thresholds in the literature, while almost no teachers exhibit the opposite associations.



Michela Carlana is Assistant Professor of Public Policy at the Harvard Kennedy School. She is affiliated with the Malcolm Wiener Center for Social Policy and the Women in Public Policy Program. Her research interests are in inequality and education, with a focus on gender and immigration. She is also a Faculty Affiliate of J-PAL, LEAP- Bocconi and a Research Affiliate of IZA and CEPR.

Contact:
michela_carlana@hks.harvard.edu

Teacher-assigned grades and IAT

Immigrant students in Italy receive lower teacher-assigned grades compared to native Italian students, holding constant performance on standardized, blindly graded tests. Previous papers provide similar results from other countries comparing minority and non-minority students (e.g., Botelho et al., 2015).

Teachers who are biased implicitly against immigrants give lower grades

In principle, lower grades to immigrants may reflect differences in unobservable characteristics compared to natives, which are captured by teacher assigned-grades but not by multiple choice, standardized test scores. The key here is that now we can relate differences between blind and non-blind grades to teachers' negative biases. In particular, we find that math teachers who are implicitly biased against immigrants give immigrant student lower grades compared to native students, keeping constant their performance in standardized tests. This is not true for literature teachers.

We suggest two non-mutually exclusive explanations for this difference. First, multiple choice standardized tests may be ill-suited to measure skills evaluated by literature teachers. Second, considering the additional difficulties faced by non-native speakers in their subject, literature teachers may impose lower standards on immigrant than on native students. This latter explanation is consistent with additional evidence on differential grading of first- and second-generation immigrants.

Revealing implicit stereotypes

We designed an experiment aimed at understanding whether increasing awareness of own stereotypes affects teachers' behavior. We administered this intervention in 65 schools in Italy, with 6,031 students in grade 8 in the school year 2016-2017 and their 533 teachers (262 in math and 271 in literature).¹



Eliana La Ferrara is

Professor of Development Economics at Bocconi University. She is leading the Laboratory for Effective Anti-poverty Policies (LEAP). She was president of the Bureau for Research and Economic Analysis of Development (BREAD) in 2016-2019 and president of the European Economic Association in 2018. She is a Fellow of the Econometric Society and of CEPR, EUDN and IGIER, a J-PAL Affiliate and a Member of the American Academy of Arts and Sciences.

Contact:

eliana.laferrara@unibocconi.it



Paolo Pinotti is Professor in Economic Analysis of Crime at the Department of Social and Political Sciences of Bocconi University and Endowed Chair in the Economic Analysis of Crime at the CLEAN Research Unit on the Economics of Crime of the Baffi-Carefin Center. He is also Coordinator of Fondazione Rodolfo De Benedetti and researcher at Dondena. He is an Associate editor of the Journal of the European Economic Association. Before joining Bocconi, he worked at the research department of the Bank of Italy from 2007 to 2011.

Contact:

paolo.pinotti@unibocconi.it

¹ We administered the survey with the IAT test in 102 schools but, due to logistical constraints, we only managed to complete the data collection for 65 of them before the end-of-semester grading in January.

We offered the option of receiving feedback on the IAT score by email to all teachers in our sample, and more than 80% of teachers chose to receive it. Teachers in half of the schools (the treated group) received the feedback before the end-of-semester grading, which took place at the end of January 2017. Teachers in the remaining schools (the control group) received the feedback within two weeks after the end-of-semester grading. The timing of the feedback was randomized across schools to avoid contamination between teachers in the treatment and control groups.

The results of the experiment are represented in Figure 1. The four graphs compare the distribution of grades for math teachers (top graphs) and literature teachers (bottom graphs) that were offered and not offered the feedback, respectively, to immigrant students (left graphs) and native

students (right graphs). Receiving the feedback on the IAT before grading shifts grades in favor of immigrant students. In particular, math teachers eligible for receiving the feedback on the IAT score give on average 0.25 points more to immigrants and 0.15 points less to natives, compared to teachers randomized into the control group. The effect on grading of immigrant students in literature is qualitatively similar, but smaller.

Furthermore, we elicit teachers' *explicit* biases by asking them if immigrant and natives should have the same right to jobs. We find that for both math and literature teachers the effect is driven by individuals that do not report explicit views against immigrants (i.e. who say that immigrants and natives should have the same right to jobs). This suggests that teachers actually react to being revealed as having a bias they were unaware of.

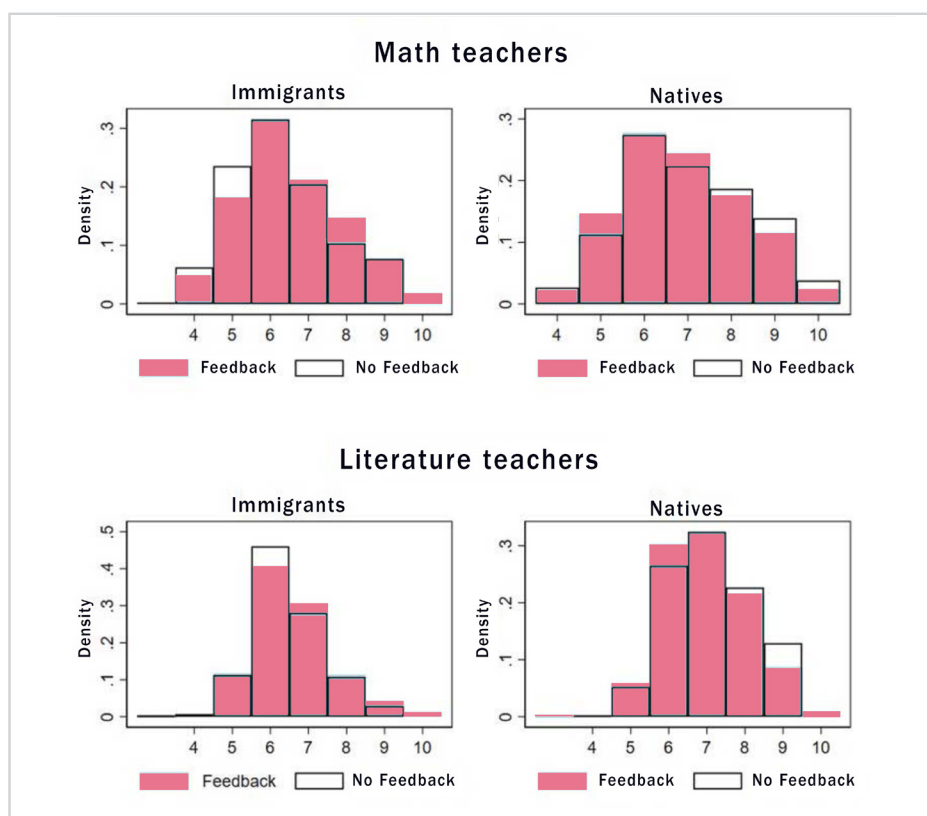


Figure 1:
The effect of revealing
implicit stereotypes

Conclusions

In recent years, employees of several corporations and academic institutions such as Starbucks and Harvard University have been encouraged to take Implicit Association Tests to reveal possible gender-based or racially based stereotypes, and to participate in implicit-bias training aimed at increasing awareness of unconscious associations. Our results imply that finding out one's own IAT score helps to counteract biased behavior, but it could also induce positive discrimination by teachers whose negative stereotypes do not translate into discriminatory

behavior. Furthermore, the part of the population that responds to the intervention is only that which does not report explicit views against immigrants, suggesting that revealing stereotypes to someone who already explicitly acknowledges them is ineffective.

Revealing unconscious stereotypes can help preventing discriminatory behaviour

Based on

Alesina, Alberto, Michela Carlana, Eliana La Ferrara, and Paolo Pinotti (2018), "Revealing stereotypes: Evidence from immigrants in schools", NBER Working Paper 25333. This policy brief is an updated version of "Revealing implicit stereotypes," appeared on www.voxeu.org on February 2, 2019.

References

Alesina, Alberto, Michela Carlana, Eliana La Ferrara, and Paolo Pinotti (2018). Revealing stereotypes: Evidence from immigrants in schools. NBER Working Paper 25333.

Botelho, Fernando, Ricardo A. Madeira, and Marcos A. Rangel (2015). Racial discrimination in grading: Evidence from Brazil. *American Economic Journal: Applied Economics* 7(4):37–52.

Corno, Lucia, Eliana La Ferrara, and Justine Burns (2018). Interaction, stereotypes and performance. Evidence from South Africa. BREAD Working Paper 549.

Carlana, Michela (2019). Implicit stereotypes: Evidence from teachers' gender bias. *Quarterly Journal of Economics* 134(3): 1163–1224.

Glover, Dylan, Amanda Pallais, and William Pariente (2017). Discrimination as a self-fulfilling prophecy: Evidence from French grocery stores. *Quarterly Journal of Economics* 132(3): 1219–1260.

Greenwald, Anthony G., and Mahzarin R. Banaji (1995). Implicit social cognition attitudes, self-esteem, and stereotypes. *Psychological Review* 102(1): 4–27.