

Goals and Gaps: Educational careers of Immigrant Children

Authors' reply to comments

We thank Melissa Dell, Rebecca Diamond, and Laura Giuliano for their insightful comments. For the sake of exposition, we summarize such comments into three main questions. First, which are the reasons for the educational choices of immigrant students? Second, what is the role of teachers? Third, what are the long run effects of the intervention and its spillovers to non-treated students? We next discuss each issue in turn.¹

The educational choices of immigrant students. In the absence of any intervention, immigrant male students disproportionately choose the lower track (i.e., vocational schools, instead of technical and academic) compared to native male students. By contrast, immigrant female students make similar choices as native females. As suggested by Melissa Dell, this may result from the combination of economic constraints to pursuing higher education and traditional gender roles entrusting males as breadwinners. To investigate this hypothesis, we explored the heterogeneity in the main effect along gender inequality in the origin country (as measured by the UN Gender Inequality Index) and family socio-economic status. The evidence is mixed. On the one hand, immigrant males from countries with more conservative gender norms enroll relatively more into the high-track compared to immigrant males from countries with less conservative gender norms – though they still enroll less than native males. On the other hand, the (differential) effect of gender norms is reversed for immigrants coming from families with low socio-economic status. These findings provide suggestive evidence that the combination of conservative gender norms and binding economic and financial constraints may partly explain the puzzle of different schooling choices by gender.

Related to the previous point, we agree that the probability of being unemployed 4 years after graduation is not the only indicator driving education choices, and that earnings and employment stability may be more relevant. Unfortunately, it is difficult to describe earning profiles by high school track for immigrant students in Italy, for two main reasons. First, immigration is a very recent phenomenon in Italy, so the population of students with an immigrant background graduating from Italian high schools is still quite small. Second, and most importantly, such population cannot be clearly identified in the Italian Labor Force Survey – the main source of information on employment and earnings. Therefore, we can only compute earning profiles by high school track (and gender) for all workers. Such evidence confirms that individuals graduating from vocational schools have more discontinuous careers and earn about 10 percent less than graduates from technical institutes, and about 40 percent less than those prosecuting into tertiary education. Of course, earning profiles could differ substantially for high school graduates with an immigrant background. In a few years, it should be possible to estimate the effects of the program on employment and earnings. Such evidence would allow for a better evaluation of the labor market returns of different educational choices for immigrant students.

The role of teachers. Teachers are more likely to recommend the high track for (male) treated students compared to the controls, which is possibly an important mechanism behind the main effect on educational choices. An obvious concern, expressed by Melissa Dell, is that higher recommendation for treated students may reflect experimenter demand effects, which would not take place once the program is scaled up. We believe such risk should be relatively low, because teachers were never involved in the program,

¹ All the additional results mentioned below are available from the authors upon request.

nor did they know that we were going to monitor any outcome – including their recommendations. Indeed, we obtained data on recommendations and student performance from centralized administrative registries. Incidentally, we notice that other general equilibrium effects could go in the opposite direction. If the scale-up phase contributed to diffuse “success stories” about immigrants’ educational and professional careers, teachers’ expectations (and recommendations) may permanently adjust upward.

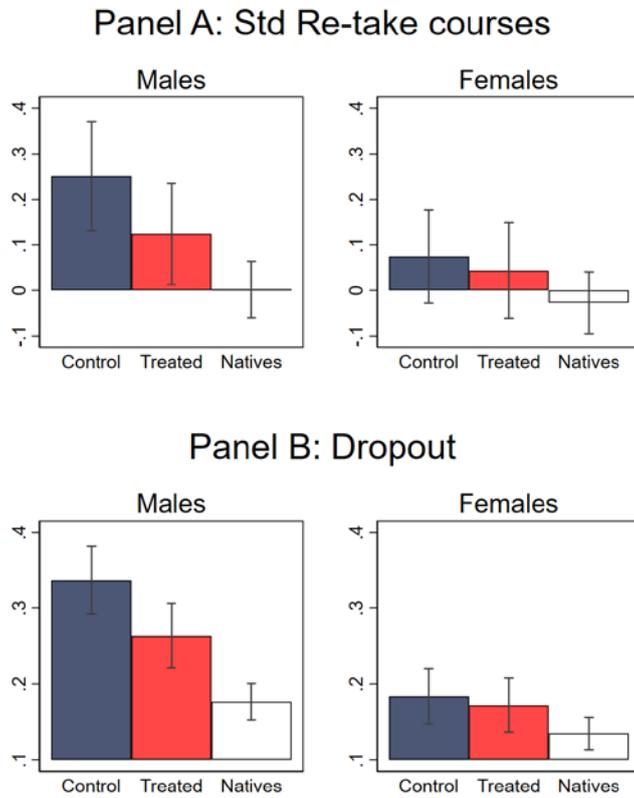
Turning to teacher involvement, we agree that it would be desirable for any scale-up of the program to rely more on school teachers than on external counsellors. This was unfeasible in the experimental phase due to legislative and administrative constraints. Of course, involving teachers raises issues concerning the existence, and extent, of teachers’ implicit biases against immigrant students. Our related work with Alberto Alesina addresses studies such biases and evaluates the effectiveness of bias revelation as a potential remedy.²

Long run effects and spillovers. Both Melissa Dell and Laura Giuliano raise interesting questions about the long-run effects (i.e., beyond high-school choice) and the spillover effects of the program. Starting with the former, we can only assess performance in high school, as we do not have yet information on university and employment careers. In the paper, we show that treated students do no worse in high school than control students, despite attending more demanding tracks. This is encouraging. Following the suggestion of Melissa Dell, we have also compared the outcomes during high school of treated immigrant students and native ones with comparable initial test scores. The results are presented in Figure 1: panel A shows the number of courses the students had to re-take at the end of the school year (standardized across tracks), while panel B shows the fraction that dropped out. We find that immigrant students in the control group, especially boys, tend to have more negative long-term outcomes compared to natives with the same test score in grade 6. EOP students have outcomes that are closer to the comparable native students, albeit not the same. For example, the dropout rate is 18 percent, 26 percent, and 34 percent for boys in the group of “comparable” natives, EOP treated and control students, respectively. For girls, these percentages are 13, 17 and 18, respectively.

We also compared the performance in high school of (treated) students attending and non-attending academic tutoring – an issue raised by Laura Giuliano – using the same RD design employed in Section 5.3 of the paper. In line with the results presented in Section 5.3 on the (null) effects on other outcomes, academic tutoring has no discernible effect – at least, on the intensive margin – on performance in high school (see Figure 2). Finally, we agree it would be interesting to explore the additional dimensions of heterogeneity in the spillover effects (e.g., by parents’ education), as suggested by Laura Giuliano. Unfortunately, our estimates become imprecise when we do so, due to our relatively limited sample size.

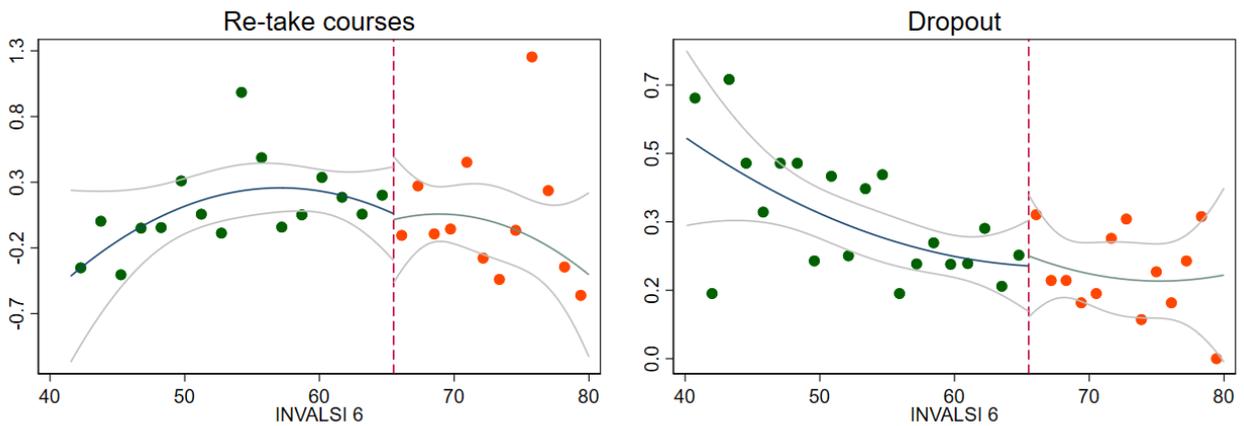
² Alesina, A., Carlana, M., Ferrara, E. L., & Pinotti, P. (2018). Revealing stereotypes: Evidence from immigrants in schools. NBER Working Paper 25333

Figure 1: High school outcomes of immigrants and comparable natives



Notes: These graphs show average outcomes (and associated 95% confidence intervals) of treated students, control students, and a group of Italian students that are comparable in terms of schooling ability. Specifically, we match each immigrant student with a native student of the same gender obtaining exactly the same score in the standardized test taken in grade 6 (INVALSI6).

Figure 2: Effect of additional CALP meetings on high-school outcomes, regression discontinuity estimates



Notes: These graphs plot treated students' outcomes against standardized test scores in grade 6 (INVALSI6). The vertical line indicates the cutoff score below which treated students are offered additional CALP meetings.