



Book of the Short Papers

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From high school to university: academic intentions and enrolment of foreign students in Italy

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Abstract

This work adopts a longitudinal perspective in analysing the academic intentions and enrolment of foreign students in Italy, by citizenship. Using logistic regression models, we investigate how citizenship is associated with the academic intentions and the transition to university of a national representative cohort of foreign students and their classmates, enrolled in the last year of Italian high school in 2015. We use a unique dataset linking survey data of the “Integration of the second generation”, carried out by Istat in 2015, with administrative data on students’ university enrolment, from the Ministry of University registers. We found higher academic intentions among foreign students, compared to their Italian classmates, with Ecuador and Peru, China and the Philippines showing a higher probability of academic intentions and enrolment than both Italians and the other groups.

Keywords: Foreign students, Citizenship, Integration of the second generation survey

1. Background

A vast literature shows that students’ educational intentions are key predictors of their future educational attainments. However, concerning foreign students, academic pathways may differ widely, depending on structural factors and individual characteristics.

Educational pathways of foreign students have been widely analysed by international literature (Zapfe & Gross 2021). Looking at the European context, several comparative studies show that the educational opportunities and school outcomes of second-generation students from the same group of origin vary considerably across countries (Crul et al. 2012, Griga & Adjar 2014, Gabrielli et al. 2022). Despite lower school results, children of immigrants generally tend to exhibit higher aspirations than ethnic majority peers. A great body of literature refer to this finding as “immigrant optimism” (Kao and Tienda 1995), or “bold choices” (Jackson 2012). Concerning school-university transition, a large sociological literature exists, showing mixed results, whereas there is a lack of statistical and demographic studies. A general finding in this field is that a stratified secondary school system reduces the educational chances of students with migrant background. Conversely,

a low-stratified secondary school system improves the probability of people with a migrant background attaining a higher education degree (Griga & Hadjar 2014, Zapfe & Gross 2021).

In this context, existing research in Italy is characterised by two major weaknesses: studies generally focus on small samples, that are not representative of the national situation and do not allow for a detailed analysis by citizenship. Moreover, existing literature in Italy rarely addresses this subject using a longitudinal perspective.

The aim of this work is to empirically contribute to this literature by investigating the academic intentions and the transition to university of a cohort of students enrolled in the last year of the Italian High school in 2015. We use a unique dataset that links survey data (the 2015 Integration of the second generation, carried out by Istat) with administrative records on university enrolment in a.y. 2015/16, 2016/17 and 2017/18.

To frame our research, we formulated three research hypotheses: (1) academic intentions of foreign students are higher than intentions of their Italian classmates; (2) despite their higher academic intentions, foreign students are less likely to enrol in university; (3) differences by citizenship exist, reflecting social and cultural specificities.

2. Data and methods

We created a pooled longitudinal dataset linking survey data of the ‘Integration of the second generation’ (hereafter, ISG) carried out by Istat in 2015, and administrative data on university enrolment from the Student register of the Ministry of University (“Anagrafe dello studente” hereafter, ANS-MUR).

The ISG survey collects information on a sample of 1,400 school of secondary education with at least 5 foreign students (more than 68,000 students). ISG analyses socio-demographic characteristics, behaviours and attitudes of students with a migrant background, namely those students without the Italian citizenship (Conti & Prati, 2020). In addition, this survey allows to distinguish the different models of integration of the first ten nationalities (Romania, Albania, Morocco, China, Philippines, Moldova, Peru, Ukraine, Ecuador and India) and the age at arrival, considering the age of enrolment at different levels of education in Italy (born in Italy, arrived before 6 years old, between 6 and 10 years old, and 11+)¹. Since our work studies differences in the academic aspirations and enrolment of Italian and foreign students, from this survey we selected only students enrolled in the last year of the Italian high school in 2015.

The ANS-MUR archive contains information on students enrolled and those who obtained a degree in an Italian University.

The ISG and ANS-MUR record linkage, performed using an individual anonymised code subsequently removed, allows to follow and distinguish, among the students enrolled in the last year of the Italian high school in 2015 (previously selected from the ISG survey), those that enrolled at university within three years from 2014/2015 and those who decided not to enrol at university.

Therefore, our final sample is composed of 3,940 students (46.6% foreign students).

We used two dependent variables. The first one is the ‘academic intention’ of students, which is derived from the ISG survey with different possible answers including ‘go to University’, ‘go to work’, ‘follow a vocationally-oriented course’, ‘stay at home’, and ‘I do not know’²; and the ‘academic enrolment’ of students derived from the ANS-MUR archive. For analysis purposes, the ‘academic intention’ variable takes value 1 when the student’s answer is ‘go to University’, 0 otherwise. The ‘academic enrolment’ variable takes value 1 if the student enrolled within three years from 2014/2015 (i.e., within 2015/16, 2016/17 and 2017/18)³, 0 otherwise.

¹ For further details, see Istat (2017), Conti, C., Quattrocioni L. (a cura di), *L’indagine sull’integrazione delle seconde generazioni: obiettivi, metodologia e organizzazione*, 2017.

² The cases that answered ‘I do not know’ were excluded from the sample.

³ We chose to follow students within three years from 2014/2015 because according to ad-hoc elaborations on the ANS-MUR archive, we observed that in the a.y. 2018/19, 75% of the second-generation enrolled had graduated from high

To test our research hypotheses, we applied two logistic regression models and conducted two separate analyses. In the first analysis, foreign status (foreigners vs Italians) was the main independent variable. In the second analysis, to overcome the Italians-foreigners dichotomy, we analysed any differences between Italians and foreign subgroups where we distinguished 9 communities (Romania, Albania, China, Philippines, Morocco, Moldova and Ukraine, Ecuador and Peru, Other HDC⁴, Other HMPC⁵).

In all analyses, we used a set of control variables which include socio-demographic characteristics, the student's school career, the attitude towards studying of both students and their families and the relational aspects of young people with their peers.

We applied population weights provided in the dataset. First, we estimated the odds ratios. Then, to improve the readability of results we computed predicted probabilities of the outcomes with 95% confidence intervals for pairwise comparisons. In addition, confidence intervals were centred on the predictions and had lengths equal to $2 \times 1.39 \times$ standard errors. This was necessary to obtain an average level of 5% for Type I errors in pairwise comparisons of a group of means (Goldstein & Healy, 1995).

3. Preliminary results

Figure 1 shows the results of the adjusted predicted probabilities for our first dependent variable, 'academic intentions', by foreign status (Figure 1a) and citizenship (Figure 1b).

Looking at the results considering migrants as a heterogeneous group, we observed that foreign students show higher academic intentions than their Italian classmates (55.2% and 50.2%, respectively) (Figure 1a). However, the analysis by citizenship highlights differences between and among the different foreign subgroups examined. Specifically, we found that students from Ecuador and Peru, the Philippines and China register a higher probability of academic intentions than both Italians and the other groups (75.4%, 70.7% and 65.4%, respectively). Conversely, Romanian students show the lowest probability of academic intentions than all the other subgroups (43.4%). Students from Albania, Morocco, Ukraine and Moldova, and other HDC and HMPC do not show significant differences in the academic intentions with respect to Italian classmates (Figure 1b).

Figure 2 shows the adjusted predicted probabilities for our second dependent variable, 'university enrolment', by foreign status (Figure 2a) and citizenship (Figure 2b). By comparing Italians and foreigners (considering them as a single group) results show no differences between the two groups (Figure 2a), while the analysis by citizenship reveals that the subgroups that show higher academic intentions (Ecuador and Peru, China and Philippines) are the same ones that also show a higher probability of academic enrolment (60.8%, 60.2% and 57.1%, respectively). We detected that students from Romania (35.7%) and other HDC (36.0%) show the lowest probability compared to Italian classmates and the other subgroups. Finally, students from Albania, Morocco, Ukraine and Moldova, and other HMPC do not show significant differences in the university enrolment with respect to Italian classmates (Figure 2b).

school in the same year, 14% one year earlier, and 4% two years earlier, compared to values registered by Italian students of 83%, 8% and 2%, respectively.

⁴ Foreigners coming from Highly Developed Countries.

⁵ Foreigners coming from High Migratory Pressure Countries.

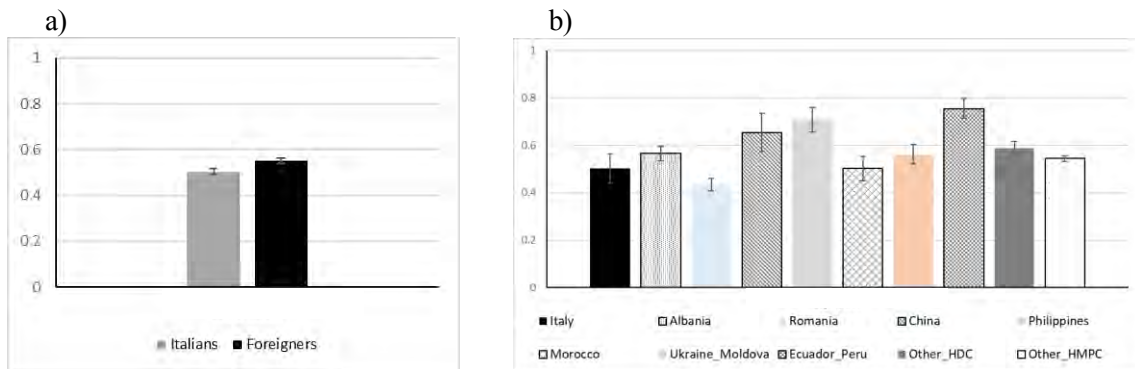


Figure 1: Adjusted predicted probabilities of the 'academic intention' by foreign status (panel a) and by foreign subgroups (panel b)

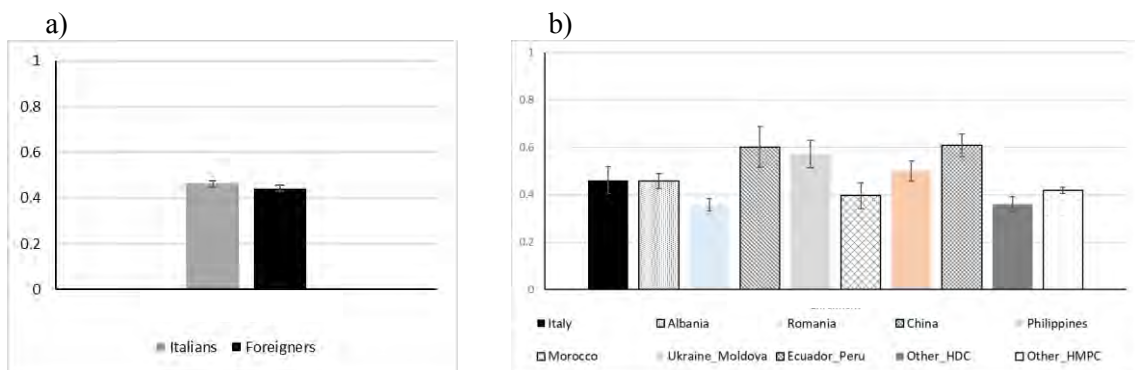


Figure 2: Adjusted predicted probabilities of the 'academic enrolment' by foreign status (panel a) and by foreign subgroups (panel b)

4. Discussion and further development

This work wants to contribute to the contemporary discussion on ethnic diversity as a major challenge for policy-makers, given the pivotal role that is played by education in the successful economic and social integration of children of immigrants.

Using a unique dataset which links the ISG survey data conducted by Istat in 2015 and the ANS-MUR archive, which contains administrative records, this is the first study which analyses academic intentions and the transition to university of foreign students in Italy. Results confirm our research hypotheses: overall, we found that academic intentions of foreign students are higher than intentions of their Italian classmates. Even though results show no differences between the two groups in terms of university enrolment, a more detailed analysis allows us to highlight differences by citizenship. Although the analysis of the factors underlying these patterns go beyond the scope of this work, we could speculate that differences by citizenship reflect social and cultural specificities of the highly heterogeneous foreign population residing in Italy. In order to deeply understand the mechanisms that explain educational choices of foreign students enrolled in Italian High School, further development of this study envisages to take into account the age at arrival, as a proxy of the social and educational integration level.

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