

The transition to secondary school of the second generation of immigrants in Italy

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Introduction

At the beginning of 2007 the number of children who were born to immigrants in Italy is close to 400 thousand. This rapid growth of the second generation meant a profound modification in the educational system. In fact, the population in school with non-Italian nationality passed from 70 thousand in the 1997 to over 500 thousand in the 2007. In the same period the percentage of foreigners in school increased from 0.8% to 5.8%. According to the data from the Italian Ministry of Education, foreign students appear to be more vulnerable than natives in the educational system. They are, in fact, more likely to achieve lower scholastic outcomes, higher dropout rates and lower levels of school attainment, (Italian Ministry of Education, 2008).

School is the first major formal organization that children encounter on their own, and of course, a major conduit to social integration. Compared to other major European countries, Italy is characterized by lower educational attainments and low intergenerational mobility (Checchi, 2003). It is not clear, however, if this background represents a barrier to the human capital investments of immigrant families. The extraordinary low fertility rate starting from the 1990's led up to a low number of siblings among children in school age. Moreover, the surfeit of "familism" in the social structure (Dalla Zuanna, 2007), characterized by the intense interdependence between generations, might heighten the investment of human capital for natives' children. In such a context, immigrant families found a very competitive setting for their children. Are these youths able to progress easily through the educational system? Does the school provide them the necessary instruments, to overcome the initial differences between foreigners and natives?

In this paper we focalize on a specific point of time of the educational career of a student: the passage from primary school to the secondary school. Statistics show that immigrant youths have a higher risk to choose vocational schools compared to natives. In fact, the incidence of foreign students at the first year of secondary school (9th grade) is 11% in the vocational school versus 3% in the high schools. The importance of focusing on the typology of secondary school is motivated for two reasons: first, the choice of the school influences the future educational attainments of the students and, in the case of vocational, it prevents the access to college education; second, the higher incidence of foreign student in the vocational schools might be a signal of segregation in the school system.

Immigrants in school are often observed to differ in performances and attainment. It is not clear, however, whether such differences would persist in the presence of statistical controls for compositional effects. Characteristics as the socioeconomic status, the education level and the composition of the family are closely tied with the immigration status. Using individual data for both Italians and immigrant adolescents, we are able to examine the determinants of the school results at the end of middle school and to follow the same student on the choice of secondary school. In our analyses we are interested to distinguish the effect of these factors.

Our first aim is indeed to analyze if the disadvantage of the second generation and immigrants remains after controlling for the characteristics of family background. Traits as the family structure and family socioeconomic status have been shown to influence academic performances (Bankston, 1998). Once identified what are the determinants of scholastic outcomes, we want to investigate their role in the educational trajectories of students. In a theoretical meritocratic perspective, school should nullify the initial differences between immigrants and natives. In this hypothesis, the access to secondary school would be influenced only by the previous outcomes achieved in the scholastic career. In our analysis we look if the

generational status plays a role on the choice of secondary school controlling for the outcomes at the end of middle school. Similarly to Glick and White (2003), we separate “recent immigrant” from “preschool” immigrants (i.e. those who arrived either before school age or in the early elementary school years) in comparison to the second generations and the natives. As well, we investigate the role of compositional characteristics. The effect of family structure and socioeconomic status, in fact, might influence not only the outcomes but also the intention of educational attainment of the families. Families with a bigger demand of human capital investment for their children, could be less sensitive to the scholastic outcomes and encourage them to take longer educational paths.

Moreover, we are interested if there are significative variations in both the outcomes and the trajectories among the outcomes of different countries of origin. There are some evidences that immigrants from different groups have access to specific resources, in terms of “social capital”, related to the country of origin (Borjas, 1998). Differentials in the educational outcomes of the children of different immigrant groups (after controlling for generational status and socioeconomic background), might highlights critical situation among disadvantages communities or point out successful situations of adaptation to the host society. The heterogeneity of results among different countries of origin does not necessarily mean segmented assimilation, but may emphasize different strategies of education investments among the immigrant groups. An analog reasoning can be applied to the choice of secondary school. Moreover, it becomes particularly interesting to investigate if there are specific concentration of some ethnic groups in specific typologies of schools. After controlling for the scholastic outcomes and the social background, if we observe an higher concentration of a specific groups in the vocational school, that might indicate a form of segregation and a form of incapacity by the scholastic system to favor the education attainment of disadvantaged groups.

Data and methods

Data were drawn from ITAGEN2, a survey of students attending Middle school living in Italy that begins during the 2005-2006 school year. ITAGEN2 is the first nation-wide extensive survey on children with at least one foreign parent, and focuses on the determinants of social integration. The baseline sample contains 6,368 foreigners and 10,537 Italians included as a control group. The subjects live in 44 provinces, and attend 228 junior high schools. The schools were randomly chosen among those with a foreign student body consisting of +10% of the total (in five of the Central and Northern regions: Lombardy, Veneto, Tuscany, Marche and Lazio) and +3% of the total (in four of the Southern regions: Campania, Puglia, Calabria and Sicily). The baseline questionnaire focuses primarily on the characteristics of the family, the migratory process, the use of the time by children, opinions and aspirations to the future. In the 2008 the first follow-up has been conducted. Data have been collected by a CATI interview among a sub sample of ITAGEN2 in five regions: Veneto, Marche, Puglia, Calabria and Sicily. The target population contains 1,389 foreigners † and 1,589 Italians. The follow-up survey took place two years later the first interview. Therefore almost two third of the initial sample of the students has completed Middle School. The follow-up questionnaire included a set of questions relating the scholastic attainment and the achievement of the respondents. The response rate was 70% among the Italians and 51% among the foreigners.

To compensate for unequal selection probabilities and response rates, observations are weighted according to the probability of being included in the second interview. Weights are computed assigning to each unit its inverse probability of being sampled. Moreover, we conducted sensitivity analysis to investigate different specification of the selection mechanism.

To investigate the transition to secondary school we run two different sets of regression models. In the first, we modeled the outcomes of the final exam taken by students at the end of Middle School using *ordinal logit regression models*. As a dependent variable we used the final outcome at the end of the 8th grade where “Sufficient or not admitted” is the reference category. In the second set of models we run a *multinomial logit regression* to describe the choice of secondary school. In this case we cannot assume a specific rank of the categories of the independent variable. Indeed, we do not make any assumption concerning the order between the categories. In this approach we obtain different estimates for the effect of same covariate about the probability to attend a typology of secondary school compared to a reference category. As reference category, we refer to “Vocational School”.

†by “foreigners”, we consider children with at least one parent born outside Italy

Preliminary results

Descriptive statistics show that immigrant children have lower scholastic results and are more likely to choose vocational tracks after completing the middle school, see table 1. Our preliminary results indicate that, with the exception of recent immigrants, the lower scholastic outcomes of immigrants are explained by socioeconomic status and background characteristics of the family (see table 2). We observe a disadvantage of recent immigrants (i.e. children arrived in Italy at age 10-14) who attended part of their scholastic education in the country of origin. This could mean that what really matters is the unobservable experience acquired with the length of residence in Italy (e.g. the linguistic proficiency or the assimilation to the Italian scholastic system), more than the place of birth. Nevertheless scholastic results are influenced by the country of origin (indicated as the mother's birthplace). Students from Morocco, Macedonia and Yugoslavia are more likely to have lower results while students originally from China, controlling for background characteristics and generational status, have higher results than italians.

The principal intent of this paper is to study the transition to secondary school. Our results show that the result of the final exam taken in Middle School cannot fully explain the choice of secondary education. In our analysis we modeled the different secondary school track using the previous result and adding in separate models background characteristics, generational status and country of origin. We observe that, after including the middle school result, there is still a significative effect of socioeconomic variables and generational status. Our preliminary results show that recent immigrants have lower probability to enroll in high school even if they had the same results of their italian schoolmate. We do not observe instead, differences between country of origin. Recent immigrant are disadvantaged in the italian scholastic system with respect to their italian peers. As an example, we report the predicted probability of two students, one with italian parents and the other recently arrived in Italy, with the same background characteristics. If both the students take the higher score in the exam, their probability to be enrolled in "High School" is 60% for the italian and 49% for the immigrant. On the other hand, in the case of minimum score, the probability to attend a vocational track is 47% for the italian and 70% for the immigrant. These results support the hypothesis of a disadvantage on the process of accumulation of human capital by immigrant children.

References

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Table 1. Outcomes of the Middle School final exam and Secondary school by generational status. Weighted frequencies.

Variable	Recent Immigrants	Preschool Immigrants	Second Generation	Natives
Outcome Middle school's Final Exam (%)				
Sufficient	52.3	47.8	44.4	21.5
Good	28.0	25.8	18.2	24.0
Very Good	9.6	15.6	18.2	24.0
Excellent	10.1	10.9	14.7	22.8
Total	100.0	100.0	100.0	100.0
Number of Cases	169	179	171	871
Secondary school (%)				
Vocational	54.6	40.6	26.3	17.4
Polytechnic	30.3	33.6	37.9	34.5
High school	15.1	25.9	35.7	48.1
Total	100.0	100.0	100.0	100.0
Number of Cases	147	162	164	853

Table 2. Ordinal logistic regression predicting the outcome of final middle school exam

	Model 1	Model 2	Model 3
Generational Status (vs. Native)			
Second generation	-0.63*	-0.31	-0.26
Preschool immigrant	-1.05*	-0.59*	-0.41
Recent immigrants	-1.47*	-1.13*	-1.91*
Country of origin (vs. Italy)			
Albania		-0.09	-0.09
Yugoslavia		-1.12*	-1.15*
Macedonia		-1.39*	-1.12*
China		0.51	0.86*
Morocco		-1.20*	-0.92*
Tunisia		-0.65	-0.36
Other developed countries		-0.50	-0.23
Others		-0.31	-0.39
Gender (vs. Male)			
Female			0.65*
Parents' education (vs. low)			
Medium			0.44*
High			0.97*
Unknown			-0.21
Household possession (vs. rentals)			
House owners			0.43*
Siblings (vs. 1-2 siblings)			
No siblings			0.08
3 or more siblings			-0.38*
μ_1	-1.14	-1.16	0.50
μ_2	0.12	0.12	1.87
μ_3	1.18	-1.20	3.00
Wald χ^2	156.59*	198.14*	349.96*