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# The educational aspirations of children of immigrants in Italy

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## ***Abstract***

The general aim of this paper is to investigate the educational aspirations of the children of immigrants living in Italy and attending the last year of primary school (8th grade). We look at the educational aspirations both as a predictor of educational choice and as a measure of social integration. We consider both secondary school track and university aspirations as indicators of educational preferences in the short and long run. Data have been collected during the 2005-2006 school year and they come from the ITAGEN survey: the first Italian nation-wide extensive survey on children with at least one foreign-born parent. First, we analyze association between aspirations and structural characteristics (e.g. migration status and country of origin) and social aspects such as family socioeconomic status, and friendship ties. These aspects seem to be determinants in defining both short and long time aspirations, while long-term aspirations are not associated with migration status. Second, we investigate the relevance of context in delineating educational aspirations. To develop this second aspect we perform multilevel analysis that takes into account both individual and school level variables. Our hypothesis, confirmed both for short and long aspirations, is that attending a school where most of the Italian pupils have high educational aspirations may lead children of immigrants to enhance their own aspirations.

## ***Keywords***

educational aspirations, immigrant integration, ITAGEN, friendship ties, scholastic context

## 1. Introduction

The growing presence of immigrants' children in the Italian school system leads social scientists to investigate aspects concerning children integration. Data from the Ministry of Education indicates that students with non-Italian citizenship are more likely to have lower educational attainment and poorer achievement and are more likely to enroll in vocational education. Official statistics show that 43% of students with non-Italian citizenship are attending vocational school compared to 20.3% of the whole population (scholastic year 2008/2009, data from MIUR, Italian Ministry of Education, University and Research). Vocational education prevents access to university education (Checchi 2003), and represents an obstacle to social mobility.

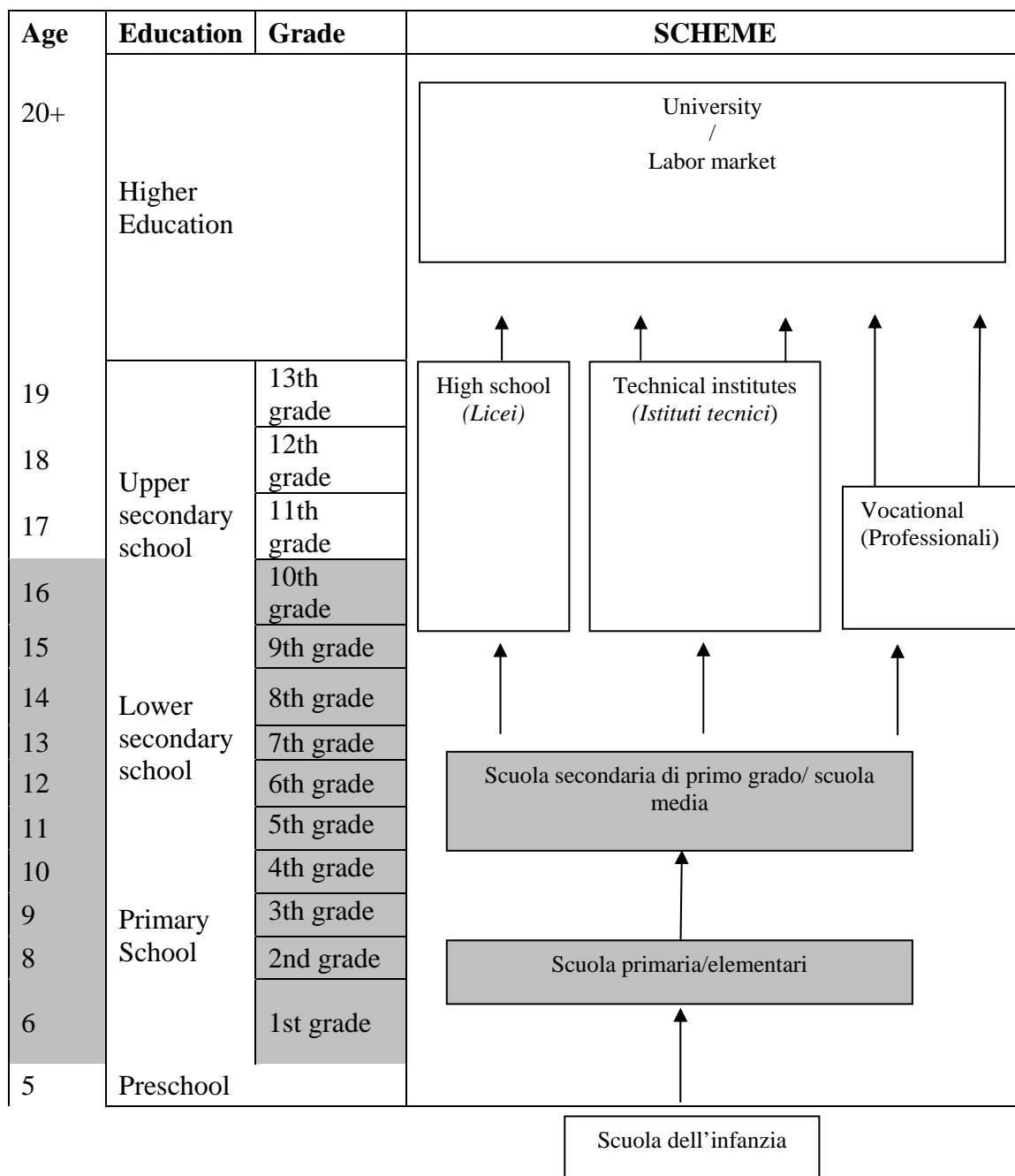
Considering these two aspects, our aim is to understand the educational aspirations of children of immigrants. We focus on aspirations as good predictor of future educational attainment, because we want to understand the immigrant children's self-perceptions and attitudes toward school. Moreover, we look at educational ambitions because, if not fulfilled, they could become factors of frustration and social isolation.

The paper will be developed as follows. After a brief description of the Italian school system, we explain the importance of looking at the educational aspirations as a measure of social integration. We briefly introduce our data and methods: we investigate educational aspirations of the children of immigrants living in Italy and attending the last year of primary school (8th grade). First, we explore if children of immigrants have different aspirations compared to natives, and if these aspirations are associated with generation status, country of origin and family background. Second, we analyze to what extent educational aspirations are influenced by peers and social context at school level. In particular, we are interested in evaluating if the aspirations of natives affect immigrant children's outcomes. To develop this aspect, we use multilevel models that take into account both individual and school level variables. Our hypothesis is that attending a school where most of the Italian pupils have high educational aspirations, may lead children of immigrants to enhance their own aspirations.

## 2. Children of immigrants in the Italian school system

We consider educational ambitions as an indicator of the level of integration of immigrants' children in the Italian school system. The current Italian education system (see Figure 1) guarantees free access to each level (even if families choose private schools) and it foresees:

- Preschool (duration: 3 years, not compulsory)
- First cycle: *Scuola primaria* (Primary school, duration 5 years) and *Scuola secondaria di primo grado* (Middle school, duration 3 years)
- Second cycle: High secondary school (duration 3-5 years)
- University (duration 3+2 years)



Note. Grey area indicates that this level is compulsory

**Figure 1.** The Italian educational system

The first cycle consists of two steps: *Scuola primaria* (Primary school) and *Scuola secondaria di primo grado* (Middle school). It culminates in a state exam. A student passing this examination is entitled to access the second cycle. This second segment of education is actually divided into different alternative tracks: *licei* (High Schools and Art School), *istituti tecnici* (polytechnical institutes), *istituti professionali* (Vocational schools). Attending school in Italy is compulsory until age 16. The first cycle is therefore expected to end at 14. Hence, the choice of secondary school is a turning point in a student's life. Each track can potentially be followed by tertiary education (after five years of secondary education). However, both official data and recent research demonstrate that choosing High School encourages access to university. The Vocational track, even if it does not exclude access to tertiary education, is

more related to work than to university. Technical institutes are both oriented to guarantee immediate professional opportunities, providing expertise directly applicable on the labor market, and they guarantee good training for access to tertiary education. Official data confirm this tendency: more than 57% of students who are enrolled in university, graduated from High School as opposed to 5.6% of students coming from the Vocational track (authors' calculation, from MIUR 2009/2010).

Our paper is focused on immigrants' children. It is clearly important to look at their presence in the Italian school system. The most recent official data on the presence of immigrants' children in the Italian school system refers to the school year 2007-2008. Students with non-Italian citizenship in the national school system were 6.4% of all pupils, corresponding to 574,133 units. Nearly eight percent (7.7%) of students attending primary school are foreigners, so are 7.3% of students in secondary level. Although preschool is not compulsory, the presence of non-Italian students represented a significant share of 6.7%. Since migration is an increasing phenomenon and since cases of drop out are extremely frequent for non-natives students, the presence of foreigners in high secondary school was small: just 4.3%. Generally we can observe that the presence of migrants in each step of education is increasing year by year and in 2007/2008 it was almost five times higher than during 2001/2002 (Table.1).

**Table 1.** Pupils with non-Italian citizenship per school level (1996/1997-2007/2008)

School Year	Total	Preschool	Primary School	Secondary	
				Lower secondary school	Upper secondary school
1996/1997	59,389	12,809	26,752	11,991	7,837
...					
2001/2002	196,414	39,445	84,122	45,253	27,594
2002/2003	239,808	48,072	100,939	55,907	34,890
2003/2004	307,141	59,500	123,814	71,447	52,380
2004/2005	370,803	74,348	147,633	84,989	63,833
2005/2006	431,211	84,058	165,951	98,150	83,052
2006/2007	501,420	94,712	190,803	113,076	102,829
2007/2008	574,133	111,044	217,716	126,396	118,977
2008/2009*	629,350	125,092	234,206	140,050	130,012

\* estimate. Source: MIUR Gli alunni stranieri nel sistema scolastico italiano 2008

Official data provide aggregate information on the increasing number of foreign students present in and graduated from Italian universities. Most recent data on university enrollment refer to 2006. Graduated foreign students were almost 2% of the total of 300,735 (5,027).

The Italian literature is mainly focused on school choice and attainment rather than on aspirations (for a complete review of Italian literature refer to Azzolini 2011). Most of the studies agree that children of immigrants in Italy exhibit lower propensity to enroll in high school and, at the same time, are disproportionately concentrated in vocational schools. Moreover, they are more at risk of dropping out and have lower scholastic achievements (Checchi 2009; Canino 2010; Azzolini and Barone 2011; Barban and White 2011). Immigrant generational status seems to be determinant in defining educational choice.

Second-generation students do not significantly differ from natives in their decision to enroll in high school, while recent immigrants exhibit higher probability to enroll in vocational schools if compared to Italians. Italians are more likely to enroll in longer educational careers even if they have low academic performances (Barban and White 2011).

Considering achievement, we have to mention that few studies refer to international surveys (PISA or TIMMS) because of the low number of migrants in the samples. However, preliminary results from a national test given by the National Institute for the Evaluation of the Education System (INVALSI) on students attending primary schools (INVALSI-SNV 2010) show that immigrants' achievement is inferior to that of Italians in reading, science, and mathematics. Some studies at local level have already pointed out this gap before (Borrione, et al. 2006; Mantovani 2008; Amistadi et al. 2009; Checchi and Braga 2009).

### 3. Literature and research questions

Educational aspirations correspond to the “level of education that respondents would ideally like to achieve” (Portes et al. 2010). Educational aspirations predict future educational attainment, denote self-perceptions and influence attitudes toward school and, if not fulfilled, they can represent a factor of frustration and social isolation, which can determine the success of the migration process (Krahn and Taylor 2005). In particular, we refer to Portes and colleagues' considerations about the “strong relationship between aspirations and achievement”, which they consider to be “one of the best established facts in social sciences” (Portes et al. 2010 p.793). The authors state that having high goals is essential to reach high goals. Even if you have high aspirations, you cannot be sure to be able to realize them, but, if you don't have high aspirations, you cannot have high results. In this sense, educational ambition is a necessary condition for educational achievement.

According to previous literature, a range of factors appears to shape educational aspirations. Focusing on educational aspirations of immigrants and ethnic groups, authors tend to focus first on ethnic identity, then on age at immigration as influential factors (Perron 1997; Dinovitzer et al. 2003; Khran and Taylor 2005). St Hilaire (2002), studying second generation Mexicans in the U.S., identified the length of residence in the host country as having a significant and positive effect on aspirations. Portes and Rumbaut (2001) also reported that second generation children had higher expectations than children born abroad to immigrants. Moreover Neidert and Farley (1995) stated that the educational aspirations follow an assimilation perspective, and differences between natives and second generation immigrants attenuate monotonically with time across generations.

Ethnic identity has been recognized as a main factor affecting educational aspirations. Cuban students in the United States, for example, have significantly higher levels of university aspirations than children with Mexican and Puerto Rican origins (Bohon, Johnson, and Gorman 2006). Louie (2006), interviewing Dominican and Chinese adolescents living in the U.S. and attending university, tried to measure differences in their outlook toward the future. The author discovered that educational ambition depended on reference group. The Dominicans compare themselves to their peers in Dominica and in the United States, while the Chinese compare themselves with highly successful U.S. compatriots. Although Dominicans have lower results than Chinese, they demonstrate higher degree of optimism with respect to their educational future.

Other factors intervening to shape aspiration include: gender; parents' socioeconomic status and involvement; and (as Krahn and Taylor 2005, note) “family structure; grades and other indicators of student performance; student self-perceptions and attitudes toward school” (Lowe et al. 1997; Perron 1997; Kao & Tienda 1998; Trusty 1998; Garg et al. 2002; Dinovitzer et al. 2003). Our research will emphasize the role of gender, parents' socioeconomic status and educational level. Recent literature, demonstrates that girls have superior educational aspirations than boys and that, consequently, they are more able to reach better attainment (Fernández-Kelly and Konczal 2005; Feliciano and Rumbaut 2005, Portes et al. 2010). Also parental human capital, measured through parental educational, plays a crucial role in shaping immigrants children aspirations (Kao and Tienda 1998; Feliciano 2006).

Starting from this theoretical background, we test if we can find a good degree of assimilation of children of immigrants in Italy considering their migration status and the relevance of school context, beginning from the analysis of their educational aspirations. Based on the previous mentioned series of results, it is possible to propose different research hypotheses concerning determinants of aspirations among children of immigrants:

### **H1a. *Immigrant status***

Educational aspirations of children of immigrants attending 8th grade in Italy are different if compared to those of natives. International literature mainly based on U.S. data highlights the differences in terms of aspirations between children of immigrants and natives (Kao and Tienda 1998; Portes et al. 2010). We expect to observe this difference also for the Italian case. Children of immigrants born in the host country have significantly higher expectations than those children born abroad (Portes and Rumbaut 2001, St. Hilaire 2002). Drawing on the principal studies conducted so far, it can be predicted that second generation and preschool immigrant children will have aspirations similar to those of Italians relative to those children who arrived in Italy when they were more than 10 years old.

### **H1b. *Country of origin***

Immigrants' children's aspirations are different if we consider their country of origin. Since immigrants' children have become the focus of international literature on aspirations, ethnic differences and migration status have been deeply studied. We can hypothesize that also in Italy, as for U.S. (Bohon, Johnson, and Gorman 2006; Louie 2006) children of immigrants have different ambitions depending on their country of origin.

### **H2. *Friendship ties***

Short and long run educational aspirations of the children of immigrants are associated to the perceived relevance of friendship ties. The literature speaks of the so called “network” social capital, referring to the effect of characteristics of friends, acquaintances, or groups on individual outcome (Mouw 2006). Portes (1998) states that one of the functions of social capital is to guarantee benefits through social networks developed out of the familiar context and he also provides a useful definition of this form of social capital as “the ability of actors to secure benefits by virtue of their membership in social networks or other social structures”. Social capital, in this sense, lies in the structure of relationships. Starting from this statement, we expect that perceiving friendship as relevant, and meeting often friends, could be a good indicator of social capital. Therefore, we hypothesize an association between this indicator and educational ambitions. More specifically we will consider both significance and form of friendship declared by students.



### **H3. Social Context**

The school context is important to determine educational aspirations. Comparing children's educational ambitions to actual reports from peers regarding their own academic attitudes and intentions, authors have confirmed the impact of peers on educational aspirations (Duncan et al. 1968; Hout and Morgan 1975). Since literature has consistently demonstrated the relevance of peers and parental influence in the formation of youths' educational aspirations, we decide to focus on schoolmates as representative of "significant others' influences". Our hypothesis is that a child attending a school where most of the Italian students are likely to attend high school, is somehow influenced in his or her short and long run ambitions.

Previous studies, mainly developed in the United States, have found that peers, parents and teachers not only help to shape educational aspirations (Buchmann and Dalton 2002), but also significant others (parents, peers, and teachers) strongly affect educational expectations, mediating the effects of other relevant aspects such as socioeconomic background and ability (Haller and Butterworth 1960; Duncan et al. 1968; Sewell and Shah 1968; Sewell et al. 1969). On the one hand, there are school compositional effects, given by the presence and the characteristics of schoolmates. They act regardless of the presence of individual social relationships among peers: "School compositional effects constitute the aggregate influence of school peers on a student's school experience, above and beyond the effects of the individual student's own particular peers" (Portes & Hao 2004). On the other hand, students benefit from the interaction with their peers. If pupils are part of a class where students are of higher level of ability, they can improve their results and reduce inequalities in terms of achievement, improving their efficiency thanks to the social interaction between less talented students and higher ability peers. The main idea is that "predictions of the overall effect of schooling systems seem to depend on the social interaction between high- and low-ability students and resulting peers effect" (Entorf and Lauk 2008).

This second aspect is strictly connected with the idea of "endogenous effect" proposed by Mansky (1993) to describe the influence of a behavior in some reference group on members of other groups. For instance, "educational attainment may vary with the average level of achievement of the students in the same peer group" (Cebolla-Boado 2007, p. 343). Some authors focus their attention on the duality native-immigrants' children (Hoxby 2000; Cebolla-Boado 2007; Entorf and Lauk 2008).

## **4. Data**

ITAGEN is a survey of students living in Italy and attending lower secondary school during the 2005-2006 school year. The data have already been used to investigate several aspects of social integration of children of immigrants and Italian students (Dalla Zuanna et al. 2009; Barban and Dalla Zuanna 2010; Barban and White 2011). ITAGEN is the first nation-wide extensive survey on children with at least one foreign-born parent, and focuses primarily on the determinants of social integration containing a complete series of information about school environment. Data were collected through a questionnaire filled out by the students under the supervision of a researcher and their teacher. The questionnaire was in part inspired by the Children of Immigrants Longitudinal Study (CILS), a large scale longitudinal investigation of the assimilation process into American society of a sample of "new" second generation teenagers. The baseline questionnaire focused primarily on the characteristics of the family, the migratory process, the use of time by children, opinions and aspirations for the future (Barban and White 2011). Schools were randomly chosen among those with a foreign student body of at least 10% in the north of Italy and 3% in the south. Although the total data

set is composed of 20,528 cases (11,910 Italians and 8,618 immigrants), our sample is reduced to 6,791 cases (4,037 Italians and 2,724 immigrants) since we focus on children attending 8th grade. Our choice is strictly related to our aims. Since we want to investigate aspirations, i.e., plans for the future, we have to consider that aspirations differ over time, as young people accumulate concrete scholastic experiences (Kao and Tienda 1998). Thus, for children attending previous scholastic years aspirations may be less realistic because the reality of secondary school and university is so distant in time, while the last year is the one in which choice has to be made, so students are probably much more realistic about their own likelihood of attending secondary school which, in Italian system implies the impossibility to access to tertiary education (Checchi and Flabbi 2006). Given this restriction, the sample used in this paper is composed of 51% males and 48% females (both for Italians and children of immigrants). Parents of immigrant children are from 92 different countries.

## 5. Method and variables

To measure aspirations, the earliest studies and much subsequent research used educational aspirations or university plans as the dependent variable of interest (e.g., Sewell and Shah 1968; Woelfel and Haller 1971; Checchi and Flabbi 2006 for Italy). The ITAGEN survey contains both a question regarding the wish to attend upper secondary school (and more precisely which kind of secondary school, distinguishing between high school and technical or vocational school) and a question related to the wish to attend university. We decided to investigate both these aspects comparing short and long-term aspirations.

We will propose initial explorative analyses using logit regression models. We run separate models for short-term and long-term aspirations. In the second part of the paper, we use multilevel modeling to study the impact of context on the ambitions of children of immigrants. Multilevel models represent a feasible approach to take into consideration heterogeneity within schools, since our core aim is to understand if context is determinant to formation of educational aspirations. Attention to context is now starting to be considered in Italian literature on education. The last INVALSI report (Rapporto Sistema Nazionale di Valutazione 2009) highlights that part of the variance in ability scores is due to differences at school level. Our paper will be focused on determining if being nested in a school where a high percentage of Italian students prefer to attend high school influences children of immigrants' ambitions in short and long run.

Recent literature justifies the choice of multilevel modeling and it is nowadays considered an important way to deal with topics related to education. One of the first reviews on multilevel approaches in school effectiveness is dated 1996 (Hill and Rowe). However it is clear that during recent years and thanks to the improvement of statistical software for analysis and the increasing of availability of data, this method has been implemented in much recent research on the topic (e.g. Portes and Lao 2004). The use of multilevel analysis is therefore justified both from a methodological and from a theoretical point of view.

### 5.1 Dependent variables

Considering short and long-term ambitions, the two different dependent variables measuring educational aspirations come from the questions shown in Table 2. Secondary school expectation and university ambition have been categorized as follows: high educational expectations (high school for short-term aspirations; university for long-term expectations)

and lower educational expectations (None, Vocational or technical school, don't know for short-term; No university or don't know for long-term expectations). As a result, our dependent variables are two binary variables.

**Table 2.** Questions used to measure the dependent variables

Which secondary school would you like to attend?	Do you think you'll go to university?
1 ___  None	1 ___  Yes
2 ___  Vocational or technical school	2 ___  No
3 ___  High school	3 ___  I don't know
4 ___  I don't know	

## 5.2 Independent variables

### *Migration status*

Migration status is categorized by immigrant generation and length of residency in Italy. Our first hypothesis concerns a comparison between migrants and natives, hence, our first models include the category of natives. To define our models, we identified children of immigrants as those youths living in Italy and having at least one foreign-born parent. We considered three different migration statuses: second generation (those children born in Italy from at least one foreign parent), pre-school immigrants (in Italy since before they were five years old), recent immigrants (arrived at five or older) (Glick and White 2003).

### *Country of origin*

To define this variable, we considered country of origin of parents. If parents were both foreign and countries of origin did not coincide, we considered mother's origin. We decided to separate the most represented countries of origin. We separated: Albania (17.3% of the sample), China (10.8%), Morocco (10.4%), Romania (8.3%), India (5.2%), Macedonia (4.5%), The Philippines (4%) and Tunisia (3.7%) and to aggregate in groups other nations of origin: Eastern Europe and the Balkans (9.3%); South America (8.9%); developed countries – USA, Japan and some European countries (2.6%); and categories called "Others from Africa" (8.6%) and "Others from Asia" (6.8%).

### *Friendship*

We identified some variables able to capture the relevance of friendship based on the dimension of social interaction and social capital. Table 3 presents the list of variable used as proxies of social capital. Given the different nature of the variables, it was not been possible to develop a single indicator. This is the reason why we decided to consider each variable as representative of different aspects concerning the relevance and presence of friends to capture social interaction as form of social capital.

### *School context*

Considering the specificity of our topic and especially the aim of our third hypothesis, we decided to define "context" as the aggregate of schoolmates. Therefore we designed a variable able to capture the educational ambitions of Italians attending 8th degree. For each school with more than 10 Italians interviewed, we calculated the percentage of Italian students who desire to attend high school and go to university. Starting from this variable we decided to identify thresholds that are associated with an increase in children of immigrants' ambitions both in short and long-terms. This variable, calculated at school level, has been introduced in the multilevel models.

**Table 3.** List of variables used to measure social interaction dimension of social capital for children

Friendship		
Social Interaction		
Contacts with friends	Do you have Italian friends?	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
	Do you have immigrant friends?	1 <input type="checkbox"/> Yes 2 <input type="checkbox"/> No
	Do you have more Italian or foreign friends?	1 <input type="checkbox"/> More Italian friends 2 <input type="checkbox"/> More foreign friends 3 <input type="checkbox"/> More or less the same number
	How often do you meet Italian friends?*	1 <input type="checkbox"/> Always 2 <input type="checkbox"/> Often 3 <input type="checkbox"/> Rarely 4 <input type="checkbox"/> Never
	How often do you meet immigrant friends?*	1 <input type="checkbox"/> Always 2 <input type="checkbox"/> Often 3 <input type="checkbox"/> Rarely 4 <input type="checkbox"/> Never
Form of interaction	Are your school friends important to you?***	1 <input type="checkbox"/> Not very 2 <input type="checkbox"/> Pretty important 3 <input type="checkbox"/> Very important

\* recoded as binary response: “always or often”, “rarely or never”

\*\* recoded as binary response: “not very or pretty important”, “very important”

### 5.3 Covariates

#### *Parental education level*

To define this variable we used a dominance approach, considering the highest education level obtained by one of the parents. In case of missing data concerning one of the two parents, we considered the one present in the dataset. This information was collected, like the rest, from students, but due to the difficulty of the question, the number of missing values in this case is extremely high, almost 25% of respondents. Parents' education has been measured using the age of parents at the end of their educational career and it has been recoded in four categories: high (if he/she has studied till he/she was more than 20 years old), medium (15-19), low (less than 15) and unknown.

#### *Socio economic status*

A standardized measure of socio-economic status (ISEI scale) has been used to determine the socio-economic condition of each child. After coding jobs using the Istat 2001 codification, we associated a ISEI code to each job. Similar to educational level, we used a dominance approach to identify the highest level of job between mother and father and to have as few missing values as possible (8%). Unfortunately we do not have any information about whether parents are self employed or salaried, which is the technical reason why we used ISEI scale, although it turns out in any case to be suitable for our models.

#### *Other covariates at individual level*

Other measures included in the analysis represent students' demographic characteristics: sex, number of siblings and geographic area of residence. Geographic area of residence has been coded dividing ten regions of residence in three areas. Northern regions are Lombardy and Veneto; central regions are Emilia-Romagna, Tuscany, Marches and Lazio, while Southern

regions are Campania, Apulia, Calabria and Sicily. We used this distinction because previous empirical studies demonstrate differences in the educational performance of children living in the three areas of Italy. We also included the number of siblings, because it represents a measure of the resources available in each family that can be allocated to education.

## 6. Results

First, we present some descriptive statistics and preliminary estimates from multinomial regression models.

### 6.1 Comparison between educational aspirations of children of immigrants attending 8th grade in Italy and those of natives

First, we investigate whether the ambitions of the children of immigrants differ from those of Italian pupils and if they are related to characteristics as generational status.

Natives have higher aspirations both in short and long perspective. They are more prone to prefer high school and more keen on going to university (Table 4). Migration background is defined by parents' birthplace and age at migration. As we will demonstrate, it reduces the propensity to choose an academic career. Recent immigrants have the lowest short-term ambitions, while there are no substantial differences in terms of long-term ambitions between recent and pre-school immigrants.

**Table 4.** Upper secondary school and university aspirations by generational status (data: ITAGEN)

	<i>Short-term educational aspirations</i> High aspirations (%) <i>Licei</i>	<i>Long-term educational aspirations</i> High aspirations (%) University	<i>N</i>
Natives	48.6	49.9	4,093
Second Generation	38.2	39.7	442
Preschool immigrants (age at migration 0-5)	26.0	36.5	322
Recent Immigrants (age at migration 5-13)	22.9	36.3	1,961

In Table 5, we run two logistic regression models to test if generational status is associated with educational aspiration, controlling for background characteristics. Statistically significant effects mainly concern short-term high school aspirations: after controlling for sex, socioeconomic status, number of siblings, zone of residence and parental education, generational status remains determinant in defining high school ambitions. Generation of migration has no effect on choice of university career, which may be due to the fact that the choice is distant and the children of immigrants may feel similar to natives, wishing to have academic career. Conversely, if we look at high school aspirations, differences appear to be more evident. The regression weights suggest that, relative to natives, second generation immigrant children are more likely than migrant children to want to attend high school, confirming for Italy the observations of previous studies (Portes and Rumbaut 2001; St. Hilaire 2002).

Gender is a key variable in both the long- and the short-term. Females have higher educational aspirations and the difference with males is particularly evident in short-term aspirations, as already indicated in previous international analyses (Feliciano and Rumbaut 2005). Territorial differences are highlighted if we compare children living in the north of Italy with those living in the south. Family resources also contribute to defining the educational aspirations of children. Both socioeconomic status and educational level of parents are associated with aspirations: having high educated parents enhances the chance of having high academic aspirations, in keeping with the literature on transfer of human capital with migration (Kao and Tienda 1998; Feliciano 2006). We can clearly notice from our results, that short-term ambitions are much lower for children whose parents are low skilled. Family size is associated with lower educational expectations. Having two or more than four siblings is associated with lower educational ambitions when compared to being an only child.

**Table 5.** Logistic regression models: educational aspirations of children of immigrants and Italians (data: ITAGEN)

	Which school will you choose after lower secondary school?	Do you think you will go to university?
	ref: Low aspirations	ref: Low aspirations
Migration status		
Ref. Natives		
Second Generations	0.80*	0.80
Pre-school migrants	0.55***	0.89
Recent migrants	0.45***	0.88
Sex		
Female	3.36***	1.98***
Zone of residence		
Ref. North		
Centre	1.08	1.08
South	1.66***	1.68***
Ses		
	1.04***	1.03***
Parents' education level		
Ref. High		
Medium	0.54***	0.47***
Low	0.30***	0.46***
Unknown	0.35***	0.22***
Number of siblings		
Ref. 0		
1	0.82*	0.81*
2	0.71***	0.67***
3	0.82	0.77
More than 4	0.54**	0.58***
N	6,262	6,262
Pseudo R-square	0.17	0.12

Notes: \*\*\*<0.01 \*\*<0.05 \*<0.1

Analyses are weighted and presented as odds ratios.

### 6.1 Differences in immigrants' children's aspirations considering migration status and country of origin

After looking at the difference between natives and children of immigrants, we now focus our attention on the second group. For this reason, the sample has been reduced to 2,725 cases, including only the children of immigrants.

We analyzed a model to understand if there are differences between children of immigrants when the country of origin of their parents is taken into account. Our descriptive analysis (Table 6) shows that children whose parents come from Macedonia have the lowest educational ambition. Moreover, children with ethnic background from Morocco and China show low desire to attend high school. On the other hand, immigrant children from developed countries (European countries, U.S. and Japan) have high educational aspirations, higher than those of natives.

**Table 6.** Upper secondary school and university aspirations by country of origin (data: ITAGEN)

	Short-term educational aspirations	Long-term educational aspirations	
	High aspirations (%) <i>Licei</i>	High aspirations (%) University	N
Developed countries	57.3	63.0	69
Philippines	37.8	40.4	108
Other African countries	34.4	45.2	236
Romania	33.6	43.4	226
South America	30.9	55.5	243
Other Asian countries	28.0	37.8	183
Tunisia	25.1	41.0	99
Albania	25.1	37.1	471
East and Balkans	22.3	34.1	254
India	17.1	24.2	140
China	16.7	20.7	292
Morocco	14.3	28.3	283
Macedonia	14.3	20.1	121
Natives	48.6	49.9	4,093

Reducing the sample to children of immigrants, and controlling for the country of origin, we can still observe differentials between second generation and migrants determined by their time of arrival (logistic regression, Table 7, next page). In this case, we can observe that recent immigrants tend, more than the others, to reject future involvement in academic life.

Identifying the impact of ethnic differences on educational aspirations has been the aim of several recent studies (e.g. Bohon, Johnson, and Gorman 2006; Louie 2006). But, although literature confirms the existence of significant variation, its direction is uncertain and differences are related not only to the country of origin but also to the host country. Chinese children have been defined as less ambitious than Dominicans in an American study by Louie (2006). The author asserts that their low aspirations are due to their tendency to compare themselves with natives. As a consequence, they become more pessimistic about their real educational future. We will propose some interpretations about Italian results in the final discussion, but our results confirm low level of educational ambitions among Chinese students. We observe a great heterogeneity among ethnic groups if we take into account country of origin. In particular, children with Indian, Moroccan, Macedonian or Chinese family backgrounds exhibit lower odds of having high short- and long-term educational aspirations.

**Table 7.** Logistic regression models: educational aspirations of children of immigrants (data: ITAGEN) Ref. Low aspirations

	Short-term aspirations	Long-term aspirations
Migration status		
Ref. Second generation		
Pre-school migrants	0.68**	1.15
Recent migrants	0.50***	1.03
Sex		
Female	2.73***	1.98***
Zone of residence		
Ref. North		
Centre	1.18	1.21*
South	2.66***	2.00***
Socioeconomic status		
	1.03***	1.01***
Parents' education level		
Ref. High		
Medium	0.84	0.63***
Low	0.64***	0.43***
Unknown	0.50***	0.37***
Number of siblings		
Ref. 0		
1	0.74	0.63***
2	0.67**	0.62**
3	0.48***	0.58**
More than 4	0.51***	0.44***
Country of origin		
Ref. Developed countries		
Philippines	0.48**	0.43**
Other African countries	0.56*	0.64
Romania	0.47**	0.46**
South America	0.44**	0.90
Other Asian countries	0.55*	0.52**
Tunisia	0.21***	0.47**
Albania	0.33***	0.39***
East and Balkans	0.29***	0.32***
India	0.22***	0.21***
China	0.19***	0.20***
Morocco	0.15***	0.33***
Macedonia	0.19***	0.23***
N	2,438	2,438
Pseudo R-square	0.13	0.10

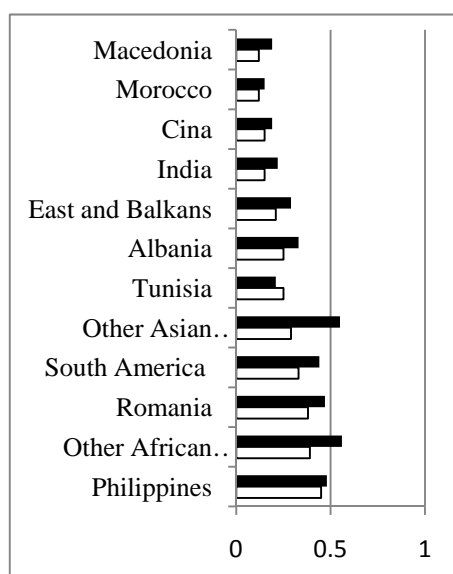
Notes: Analyses are weighted and presented as odds ratios. Significance: \*\*\*<0.01 \*\*<0.05 \*<0.1

In the case of immigrants' children, each sibling reduces the propensity to pursue academic life and having non-cohabiting siblings also drastically reduces educational ambitions. Other covariates confirm the direction of the coefficients shown in the previous models, providing evidence for association between gender and ambition, with girls more ambitious than boys. Cultural and social background are significant: the chance of declaring high aspirations declines with lower parental levels of education. Immigrants' children living in the south of

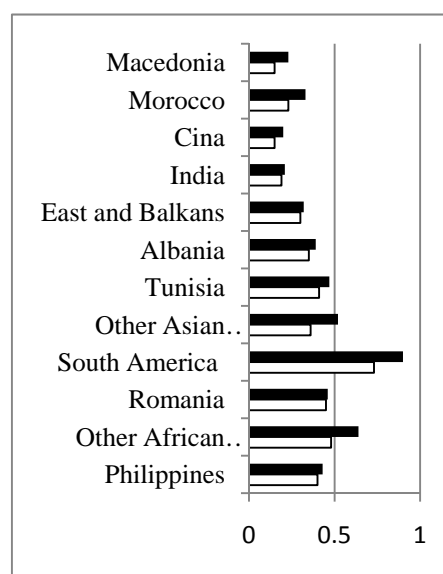


Italy have lower academic aspirations than those living in the north and the odds are extremely high if we introduce ethnicity and if we look at short-term ambitions.

Looking at ethnic origin, we decided to perform and compare two models: the one presented above (Table 7) and another one which only includes the covariate related to the country of origin of parents. In this way, we aim to understand the role of ethnic origin in determining educational ambitions. Figure 2 and Figure 3 compare the marginal effect of country of origin under the two models. In the first model, we estimate the effect solely of country of origin; in the second, we examine if the inclusion of other covariates (migration status, sex, etc.) explains part of the difference between countries. Our results indicate that the country of origin has a significant effect after controlling for other observable characteristics. This is confirmed both for short- and long-term ambitions.



Ref. Developed country=1



■ Country of origin + other covariates  
□ Only country of origin

**Figure 2.** Short-term ambitions: comparison between odds ratios of the variable Ethnic origin comparing models with and without other covariates

**Figure 3.** Long-term ambitions: comparison between odds ratios of the variable Ethnic origin comparing models with and without other covariates

## 6.2 Association between self-assessment regarding friendships and educational aspirations of the children of immigrants

Several studies focus on the effect of peers on aspirations, without underlining the impact of friendship *per se* on this process. This is an extremely challenging issue if we refer to immigrants' children. Our research question is: to what extent does friendship influence the educational aspirations of migrants? Friendship ties can be relevant in defining educational aspiration because perceiving friendship as relevant, and often meeting friends, could be a good indicator of social capital. Therefore, we hypothesize an association between this indicator and educational ambitions.

The basic idea of our analysis is first to demonstrate the relevance of the perceived peer ties on aspirations, then to look at the influence of peers (schoolmates) on educational ambitions. This is the reason why our first step is to understand if declaring strong friendship ties or good relationships with Italian or foreign children enhance the educational ambitions of children of immigrants. Friendship ties measured through self-assessment are strictly related to the concept of social capital and especially to so-called *network social capital*. Network social capital is a resource attributed to people by the fact that they are members of social groups and networks (Mouw 2006), since not only the characteristics but importantly the relevance of friends, acquaintances, or groups has an impact on individual outcomes.

Table 8 summarizes results from logit models (full details in Table A and Table B in the Appendix) which, controlling for the same variables used in the previous model (sex, migration status, socio-economic status, education level of parents, zone of residence and number of siblings), introduce aspects of network social capital.

The results show that scholastic friendship ties are associated with high aspirations: immigrants' children who think that schoolmates are really important tend to declare their wish both to attend high school and university. Moreover, while immigrants' children with Italian friends declare higher ambitions (especially long-term aspirations), having and meeting more immigrant friends is associated with a reduction in short-term educational aspirations.

**Table 8.** Effects of different friendship ties on short- and long-term aspirations

	Short-term aspirations	Long-term aspirations
	ref: Low aspirations	ref: Low aspirations
	High aspirations	High aspirations
Classmates are really important	1.18***	1.20***
Having Italian friends	1.37	1.54**
Having immigrant friends	0.83	1.26
Having more Italian friends	1.19	1.21*
Having more immigrant friends	0.82	0.97
Meeting Italian friends out of school often	1.05	1.03
Meeting immigrant friends out of school often	0.88**	0.98

Notes: Models control for sex, migration status, socio-economic status, education level of parents, zone of residence and number of siblings. Analyses are weighted and presented as odds ratios. Significance: \*\*\*<0.01 \*\*<0.05 \*<0.1

It is not our aim to demonstrate a causal relationship between friendship ties and educational aspirations, first because even if we had detailed information on friendship ties, we would need to manage the problem of homophily, second because we only have general self-assessment regarding friendship ties. Homophily refers to the observation that people are inclined to prefer spending time and sharing experiences with individuals who are similar, and they choose friends starting from their own characteristics. If this is the case, we have to consider that observed effects of social capital may simply reflect “selection effects based on the myriad of nonrandom ways in which people become friends” (Mouw 2006). In our case we could express this problem with this question: are children with high aspirations more used to meet friends with high educational ambitions or is educational ambition enhanced by the fact of having friends with high aspirations? Unfortunately, we cannot solve this problem, and it is not possible with our data to exclude the intervention of endogenous factors, such as individual abilities, to determine educational aspirations. Endogeneity also implies the possibility that the sorts of students that attend specific schools could be based on factors

unobserved by the researcher. In our case, although this risk is reduced because we deal with children attending compulsory schooling which does not permit a choice in terms of attendance (that could be affected by endogenous aspects), we decided to control for other variables able to capture at least part of this endogeneity.

Starting from the confirmed significance of the association between network social capital and educational ambitions, we can now look at the link between individual ambition and schoolmates' aspirations.

### **6.3. The relevance of school context in educational aspirations**

We aim to understand the influence of school context on the educational aspirations of children of immigrants. We identified pupils as nested in schools. Therefore we created a variable that measures the percentage of Italian students that desire to go to high school in each school of the sample

The main idea we refer to is that “predictions of the overall effect of schooling systems seem to depend on the social interaction between high- and low-ability students and resulting peers effect” (Entorf and Lauk 2008). For instance, as mentioned in the literature review, educational attainment may be different on the basis of the mean level of achievement of the students composing the reference peer group (Cebolla-Boado 2007). We try to test this statement referring to educational aspirations, looking at the association between individual and schoolmates' ambitions.

As in the previous hypothesis, it is difficult to establish a causal relationship between aspirations and our core variable, but we can investigate if there is an association between educational aspirations and context characteristics.

The research question in our case is: to what extent immigrants' children's aspirations are influenced by the educational expectations of their Italian schoolmates? We exclude from our sample schools with less than 10 Italians. As a result, the sample was composed of 2,228 children of immigrants divided into 186 schools.

We performed multilevel logit regression where the dependent variables were re-coded into two categories representing those who aspire/do not aspire to attend high school and those who aspire/do not aspire to attend university. We controlled for variables already mentioned in the previous models. Table 9 reports the estimates. First we present null models, then models without introducing individual level variables, and then we introduced in the model our main dependent variable.

Starting from the null models, we calculated the intraclass correlation (ICC) to estimate the proportion of variance explained by the school context. The ICC is 0.08 if we consider short-term aspirations and 0.06 if we consider long-term aspirations. The ICC represents the proportion of variability of educational expectations explained by different schools. The results are significantly different from 0, indicating that the macro-level influences the micro-level. Schools affect the individual aspirations of immigrants' children.

**Table 9.** Multilevel logit regression models: short and long-term aspirations of children of immigrants in Italy (data: ITAGEN)

Short-term aspirations				Long-term aspirations			
	Model 1 (empty)	Model 2 (I level variables)	Model 3 (II level variable)		Model 1 (empty)	Model 2 (I level variables)	Model 3 (II level variable)
Migration status				Migration status			
Ref. Second generation				Ref. Second generation			
Preschool migrants		0.81**	0.81**	Preschool migrants		0.98	0.98
Recent migrants		0.82***	0.83***	Recent migrants		0.96	0.97
Sex				Sex			
Female		2.45***	2.46***	Female		1.85***	1.83***
Parents' education level				Parents' education level			
Ref. High				Ref. High			
Medium		0.93**	0.93**	Medium		0.83***	0.83***
Low		0.54***	0.54***	Low		0.32***	0.32***
Unknown		0.86***	0.86***	Unknown		0.81***	0.81***
Socioeconomic status		1.02***	1.02***	Socioeconomic status		1.01***	1.01***
Number of siblings				Number of siblings			
Ref. 0				Ref. 0			
1		0.63***	0.64**	1		0.65***	0.66***
2		0.74***	0.74***	2		0.77***	0.77***
3		0.74***	0.74***	3		0.84**	0.84**
More than 4		0.78***	0.78***	More than 4		0.78***	0.78***
Italians with high aspirations				Italians with high aspirations			
Ref. Less than 35%				Ref. Less than 65%			
More than 35%			1.36**	More than 65%			1.43**
II level variance	0.261 (.081)	0.164(.075)	.143 (.072)	II level variance	0.208 (0.064)	0.173 (.066)	0.158 (.063)
Number of observations	2228	1973	1973	Number of observations	2228	1973	1973
Number of groups	186	186	186	Number of groups	186	186	186
LR test	24.99***	8.27***	6.49***	LR test	25.02***	13.62***	12.10***

Note: Results are presented as odds ratios. Significance: \*\*\*<0.01 \*\*<0.05 \*<0.1

While the other control variables have a similar effect to the previous models, we observe the presence of a threshold which is important to determine immigrants' children ambitions. We identified the threshold in terms of percentage of native students with high aspirations. Our results show that attending a lower secondary school where more than 35% of the Italians have high educational ambitions enhances the chance of having high short-run educational ambitions among children of immigrants at the school. If we look at long-term aspirations, the threshold is higher, at 65%.

## 7. Summary and discussion

The results obtained in our analyses give us some information about the level of integration of the children of immigrants living in Italy. First, our results show that migration status and country of origin are associated with different short-term scholastic expectations. We do not observe, however, significant differences between the university aspirations of the children of natives and immigrants.

Specifically, our results partially confirm Hypotheses H1a and H1b. Recent immigrants have lower ambitions than pre-school immigrants and second generation children. Our outcomes corroborate recent literature, pointing out that children of immigrants have lower educational aspirations than natives. Moreover, our results are confirmed by official data on educational choices of migrants living in Italy. If we look at the population of students enrolled in the 9th grade during the school year 2006/2007 (the year after our survey) we can find that 2.5% of the whole population of students attending *licei* were students with non Italian citizenship, while immigrants were 10.6% of the population attending vocational institutes and 6.1% attending technical institutes (Istat Report 2006-2007). These official data on the one hand corroborate the strong link between aspirations and educational choice; on the other hand they confirm our evaluation related to the weak level of aspirations of children with foreign parents.

However, our data show that migration status has an impact especially on short-term ambition: second generation children are more similar to natives in term of educational aspirations than recent immigrants. This first result suggests that second generation children are going to be more and more integrated and that these pupils allow themselves to have the same ambitions as their Italian peers. Unfortunately, there are no official data confirming this result, which is, nevertheless, established in other national contexts by all the recent literature on the theme (St-Hilaire 2002; Portes and Rumbaut 2001).

Our results indicate a certain degree of heterogeneity among ethnic groups in terms of educational ambition. In particular pupils with Chinese, Moroccan, Macedonian or Indian background demonstrate lower academic aspirations than all the others, while children whose parents come from developed countries have higher aspirations than natives. Previous studies show that Chinese, Macedonian and Morocco children attending Italian schools obtain better results than children belonging to the other ethnic groups (Barban and White 2011). One possible explanation would be that families from these ethnic groups are more selective when they invest in education for their children. In other words, the family decides to invest only on the children that are expected to obtain high scholastic results. This can be linked to those theories that highlight migration as a way to improve family status, through investment in those children who are particularly strong in terms of personal abilities. However, our results indicate that country of origin is determinant in defining educational aspirations, even when

we control for other covariates. Ethnic ties, and consequently ethnic social capital, seem to have a great influence in determining children's expectations.

Differences in long-term aspirations, however, are not associated with migration background. Differences between children are almost completely explained by personal and family characteristics. As a matter of fact, if we look at migration status, there seems to be no association with long-term educational ambitions. We can hypothesize that, on the one hand, the choice of upper secondary school is really close for children attending 8th grade, and hence they express expectations more than aspirations and children of immigrants clearly perceive the disparity with the educational chance of their Italian peers while, on the other hand, since the choice of university is so distant, they tend to be less realistic and more free to express their own dreams instead of referring to real expectations.

Second, we highlighted an association between relevance of friendship and educational aspirations (Hypothesis H2). Looking at the relevance of schoolmates, we found that, if immigrants' children think that schoolmates are important, they tend to have higher educational aspirations. Moreover, if on the one hand having Italian friends is associated with higher long-term aspirations, on the other hand having more foreign friends is associated with a lowering of educational ambitions. Also the relevance of friends may be seen as an indicator of integration. If a child thinks that friends are important, we can suppose he shares his time with friends and this could be determinant in terms of integration. In this case, our results confirm for Italy evidence from previous international literature: personal "network social capital" is a determinant of educational aspirations.

In the last part of the paper, we investigate if the scholastic context contributes to definition of the educational ambitions of immigrants' children (Hypothesis H3). We calculated the percentage of Italian students with high educational aspirations for each school, and we looked at the association between this percentage and the individual aspirations of immigrants' children. Our results show that an immigrant child attending a lower secondary school where 35% of the Italians have high short-term educational ambitions, is more likely to have high short-term educational ambitions. If we look at long-term aspirations, in the change in aspirations happens when more than 65% of Italians have high aspirations. Being part of a challenging context is, hence, clearly relevant for children of immigrants. This is perhaps our most relevant result and it is in some ways another validation of the relevance of social capital and the influence of peers in shaping educational aspirations.

The analyses presented in this paper have mainly a descriptive aim, since we estimate statistical associations without a specific causal interpretation. Nevertheless, this study represents one of the first attempts in studying the educational expectation of the children of immigrants in Italy. Also, to our knowledge, this is one of the first descriptions of immigrants' children's educational aspirations at a national level. Moreover, the results provide some evidence that the educational ambitions of immigrants' children living in Italy and attending 8th grade are associated with social capital and school context, which have been found in recent international literature to be relevant in influencing the educational aspirations of children (Portes et al. 2010).

We can, therefore, conclude our paper with a general remark, first on the relevance of aspirations, than on the policy implications of our study. If Italians aim to enhance educational (and, consequently, occupational) outcomes of migrants, they should start to enhance children's aspirations and to enable children to think about their future as the Italians

do. Considering the relevance of the context, on the one hand, it is important to avoid ghetto classes, where there is no integration between natives and migrants; on the other hand, it could be useful to propose extra-scholastic activities (free sport activities for example) that encourage children to socialize. Starting from this new evidence, it could be interesting to develop policies concerning integration of children not only improving their scholastic outputs, but also empowering their involvement in social activities able to create strong ties with their Italian peers.

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## Appendix

**Table A.** Logit regression models: short-term educational aspirations of children of immigrants (data: ITAGEN)  
Ref. Low aspirations

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Migration status						
Ref. Second Generation						
Preschool migrants	0.65**	0.65	0.66**	0.65**	0.66**	0.65**
Recent migrants	0.54***	0.53***	0.56***	0.54***	0.54***	0.55***
Sex						
Ref. male						
Female	2.70***	2.70***	2.76***	2.72***	2.64***	2.71***
Zone of residence						
Ref. North						
Centre	1.11	1.10	1.10	1.09	1.09	1.08
South	2.11***	2.09***	2.11***	2.09***	2.17***	2.07***
Socioeconomic status						
Ref. High						
Medium	0.76**	0.76**	0.76**	0.76**	0.75**	0.76**
Low	0.47***	0.47***	0.47***	0.47***	0.46***	0.48***
Unknown	0.44***	0.44***	0.45***	0.44***	0.44***	0.45***
Number of siblings						
Ref. 0						
1	0.66**	0.66**	0.65**	0.66**	0.65**	0.65**
2	0.58***	0.58***	0.58***	0.59***	0.58***	0.57***
3	0.40***	0.40***	0.40***	0.40***	0.40***	0.40***
More than 3	0.45***	0.45***	0.45***	0.45***	0.45***	0.45***
Having Italian friends						
Yes	1.37					
Having immigrant friends						
Yes		0.83				
Having Italian and immigrant friends						
Ref. same number						
More Italians			1.19			
More immigrants			0.82			
Meeting Italian friends out of school						
Ref. rarely/never						
Often/Always				1.05		
Meeting migrant friends out of school						
Ref. rarely/never						
Often/Always					0.88**	
Importance of friends						
Ref. friends are not important						
Friends are important						1.18***

Notes: Analyses are weighted and presented as odds ratios. Significance: \*\*\*<0.01 \*\*<0.05 \*<0.1

**Table B.** Logit regression models: long-term educational aspirations of children of immigrants (data: ITAGEN)  
Ref. Low aspirations

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Migration status						
Ref. Second generation						
Preschool migrants	1.07	1.07	1.08	1.07	1.07	1.09
Recent migrants	1.06	1.03	1.07	1.05	1.04	1.08
Sex						
Ref. male						
Female	1.91***	1.90***	1.93***	1.92***	1.89***	1.92***
Zone of residence						
Ref. North						
Centre	1.10	1.07	1.07	1.07	1.07	1.05
South	1.78***	1.78***	1.76***	1.76***	1.77***	1.73***
Socioeconomic status						
	1.02***	1.02***	1.02***	1.02***	1.02***	1.02***
Parents' education level						
Ref. High						
Medium	0.57***	0.56***	0.57***	0.57***	0.57***	0.57***
Low	0.33***	0.33***	0.33***	0.33***	0.33***	0.34***
Unknown	0.34***	0.33***	0.34***	0.34***	0.34***	0.34***
Number of siblings						
Ref. 0						
1	0.57***	0.56***	0.56***	0.57***	0.57***	0.56***
2	0.59***	0.58***	0.59***	0.59***	0.59***	0.57***
3	0.56***	0.57***	0.57***	0.57***	0.57***	0.55***
More than 3	0.47***	0.46***	0.47***	0.47***	0.47***	0.47***
Having Italian friends						
Yes	1.54**					
Having immigrant friends						
Yes		1.26				
Having Italian and immigrant friends						
Ref. same number						
More Italians			1.21*			
More immigrants			0.97			
Meeting Italian friends out of school						
Ref. rarely/never						
Often/Always				1.03		
Meeting migrant friends out of school						
Ref. rarely/never						
Often/Always					0.98	
Importance of friends						
Ref. friends are not important						
Friends are important						1.20***

Note: Analyses are weighted and presented as odds ratios. Significance: \*\*\*<0.01 \*\*<0.05 \*<0.1