
Immigrants' Children's Transition to Secondary School in Italy

Author(s): Nicola Barban and Michael J. White

Source: *The International Migration Review*, Vol. 45, No. 3 (Fall 2011), pp. 702-726

Published by: Sage Publications, Inc. on behalf of the Center for Migration Studies of New York, Inc.

Stable URL: <http://www.jstor.org/stable/23016209>

Accessed: 23-01-2018 17:13 UTC

REFERENCES

Linked references are available on JSTOR for this article:

http://www.jstor.org/stable/23016209?seq=1&cid=pdf-reference#references_tab_contents

You may need to log in to JSTOR to access the linked references.

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://about.jstor.org/terms>



JSTOR

Center for Migration Studies of New York, Inc., Sage Publications, Inc. are collaborating with JSTOR to digitize, preserve and extend access to The International Migration Review

Immigrants' Children's Transition to Secondary School in Italy

Nicola Barban

*Università Bocconi, Carlo F. Dondena Centre for Research on Social Dynamics,
Milan, Italy*

Michael J. White

*Department of Sociology and Population Studies and Training Center,
Brown University, Providence, USA*

Choosing a secondary school represents an important step in the lives of students in Italy, in that it has a strong bearing on their ultimate educational achievement and labor force trajectory. In this article, we analyze the effect of generational status and length of residence on the transition to secondary school among immigrants living in Italy. Using data from the ITAGEN2 follow-up, we analyze scholastic results from the middle school final exam and the choice of secondary school among the adolescents in Italy. Children of immigrants are more likely to have inferior outcomes on the middle school exam and to enroll in vocational and polytechnic schools. Our multivariate results indicate that, after controlling for the family's human capital and other key background factors, immigrant students show greater propensity to choose a vocational path. Differences between immigrants and natives in secondary school tracks are also manifested when previous scholastic results are taken into account.

INTRODUCTION

In the mid-1980s, the number of immigrants living in Italy began to steadily increase. Initially, the flow of immigrants was moderate, and consisted mostly of movement from North Africa, several Sub-Saharan countries, and the Philippines. With the fall of the Berlin Wall in 1989, migration into Italy reached significant levels, due in large part to the arrival of numerous individuals from ex-communist European countries (especially Albania and Romania). In early 2008, the number of foreigners (including illegal immigrants without residence permits) living within the nation's borders was estimated at 4 million, that is 7 percent of the total population (Cesareo, 2007).

© 2011 by the Center for Migration Studies of New York. All rights reserved.
DOI: 10.1111/j.1747-7379.2011.00863.x

In addition, during the 15-year period of 1993–2007, foreigners grew at least 250,000 in number annually (including the number of births from foreign couples). During the same period, 500,000 children were born each year to couples with at least one foreign parent; meaning that one-third of Italy's demographic renewal occurred. Thanks to immigrants who have contributed significantly to slowing the aging of the population, (Billari and Dalla Zuanna, 2008).

Rapid growth in the number of immigrant youth has brought about profound modifications in the educational system. In fact, the population in school of non-Italian nationality rose from 60,000 in 1997 to over 600,000 in 2009; these numbers do not include universities. During the same period, the percentage of foreigners in school increased from 0.7 percent to 7.0 percent. According to data from the Italian Ministry of Education, non-Italian students appear to be more vulnerable than natives in the educational system. They are, in other words, more likely to achieve lower scholastic outcomes, and to have higher dropout rates and lower levels of school attainment, (Ministry of Education, 2009).

School is the first important formal organization that children encounter on their own and, of course, a major conduit to social integration. In comparison with other major European countries, Italy is characterized by lower educational attainment and lower intergenerational mobility (Brunello and Checchi, 2005). Due to the recency of immigration into Italy, there is a lack of extensive studies which document the educational attainment and social mobility of second generation immigrants. Study of the educational choices of immigrants' children is thus an important step in formulating appropriate integration policies.

The Italian educational system – beginning with its earliest stages – is organized as follows: Kindergarten starts at the age of 3 years and ends at the age of 6 years, and attendance is optional; it is organized and financed either by the central government or by local councils. Compulsory education spans the ages of 6–15 years of age and includes: primary school (from 6 to 11 years, called *scuola primaria*), middle school (from 11 to 14 years, called *scuola secondaria del primo ciclo*), and the initial year of upper secondary school (from 14 to 17 years or 19 years, depending on the chosen track, called *scuola secondaria del secondo ciclo*). Different options are available for upper secondary school, and can be described as tripartite (we also use this classification in the empirical analysis): (1) a generalist academic orientation provided by high schools (5 years, called *licei*, with further distinction made between schools oriented towards the

humanities, scientific activities, languages, and pedagogical sciences); (2) a technical oriented education provided by polytechnic schools (5 years, called *istituti tecnici*, with further differentiations by specialization); and (3) a vocational training offered by local schools organized at the regional level (3 years, called *istituti di formazione professionale*). Until 1969, only one track granted the possibility of college admission, whereas another track granted admission only in a limited number of disciplines. The remaining track prepared individuals for specific jobs (such as primary school teachers or construction site supervisors). The current system is still characterized by a number of options, but now all grant eligibility for college admission, condition on completing 5 years of secondary schooling (*i.e.*, students from vocational schools may enroll if they attend two integrative years). However, each of these tracks still predicts very different outcomes in terms of any additional schooling acquired and labor market performance. More than 88 percent of students who graduate from *licei* enroll in a university as opposed to 17.8 percent of students coming from the vocational track. The choice of the type of secondary school to attend is typically made at the age of 13 years, during the final year of middle school. There is no admission exam to enter any secondary school. The educational system is dominated by public schools. The proportion of students attending a private school during the 2007–2008 scholastic year was 5.1 percent for middle schools and 7.0 percent for secondary schools. Students and their families receive counseling from teachers, in some cases supported by psychologists, who use students scores achieved during compulsory schooling as one of the principal guidelines for orientation.

In this article, we focus on a specific moment during the educational career of a student: the transition from primary school to secondary school. Official statistics show that immigrant youths have a higher risk of enrolling in vocational schools compared with natives. In fact, the percentage of foreign students enrolled in the first year of secondary school (9th grade) is 10.6 percent in vocational schools compared with 2.5 percent in high schools. For example, in the Veneto region during the 2007–2008 scholastic year, among newly enrolled students in Enaip-Acli courses (the major institution in the region offering training courses), almost a third were immigrants' children and half of them arrived in Italy after their 14th birthday (Dalla Zuanna, Farina, and Strozza, 2009a). The importance of focusing on the typology of secondary school is thus motivated by two reasons: first, the choice of school influences future educational attainments and, in the case of the vocational track, it can prevent access to a college

education; second, the higher incidence of foreign students in vocational schools may be a signal of segregation in the school system.

As a result of the early age of track differentiation across schools, the Italian system tends to privilege parents' choice more than ability of students, leading to low intergenerational mobility (Checchi and Flabbi, 2007). In such a context, immigrant families might be disadvantaged if they lack country-specific human capital and appropriate knowledge of the Italian educational system.

The aim of this article is to provide a greater understanding of how immigrants and second-generation youths progress through the education system, to highlight possible obstacles to successful integration. In particular, we ask: are immigrants' children able to progress through the educational system on par with other Italian children, *ceteris paribus*? Does the school system provide them with the necessary instruments to overcome initial differences between immigrants and natives?

To shed light on the transition to secondary school, our study takes into account the scholastic trajectory of students from the end of middle school (8th grade) to the first year of secondary school (9th grade). Using individual data for both Italians and immigrant adolescents, we are able to examine the determinants of school results at the end of middle school and to follow the same student's choice of secondary school. The use of longitudinal data allows us to disentangle the process of adaptation to the school system and the educational career of the student (Glick and White, 2003; Portes and Rumbaut, 2005; White and Glick, 2009).

Literature on the assimilation and integration of second generation immigrants is extensive, but much attention has focused on the United States. Scholars have proposed different theoretical models to explain the position of second generation immigrants in society. According to a straight-line assimilation perspective, differences between natives and second generation immigrants may attenuate monotonically with time across generations (Neidert and Farley, 1985). A monotonic process is attributed to the migration-adaptation process itself, and does not depend on the country of origin, once socioeconomic background has been controlled for. Other scholars have suggested that integration paths may diverge for different immigrant groups (Rumbaut and Portes, 2001; Zhou, 1997). In this alternative perspective, adaptation to the host society varies among different ethnic groups, even when controlling for compositional characteristics. The process of assimilation is therefore linked to the receptivity of the host society that may favor the upward mobility of some ethnic

groups, but fail to support that of others, especially those from historically disadvantaged ethnic subgroups. This disadvantage may persist across generations, causing what has been defined as “downward assimilation”, where the gap between immigrants and natives increases with the second generation, independently of whether they were born in the host country.

The number of European studies on the adaptation of second generation immigrants has recently increased, often drawing on analogous studies conducted in the U.S. (Thomson and Crul, 2007). Although the theoretical framework is the same, second generation immigrant groups in Europe are, on the whole, ethnically very different compared with those in the U.S. Within the American literature on second generation immigrants, U.S.-born children of Mexican and Asian immigrants play a key role, whereas in Europe, the composition of second-generation groups is more heterogeneous and varies among countries. The parents of the largest groups of second generation immigrants in Europe either come from ex-colonies or were recruited, as in the case of Italy, as labor migrants. The study of second generation immigrants in Europe often emphasizes the importance of the host society and context for integration pathways (Crul and Vermeulen, 2003; Doornik, 1998). In particular, national variations in institutional arrangements play a key role in defining distinct patterns of integration across Europe. Differences in educational systems and the ways in which the transition to the labor market is formalized (Crul and Vermeulen, 2006) play an important part in the successful integration of second generation immigrants. In this article, we attempt to describe the process of assimilation of immigrants’ children within the Italian educational system.

The article is organized as follows. In the next section we present our research question and our identification strategy. In section 3 we describe our data, methods, and empirical analysis. After the descriptive analysis (section 4), we present our results in section 5. Section 6 concludes the article. We discuss selection problems and the consequent strategy adopted to reduce eventual sources of bias in the appendix.

THE ROLE OF GENERATIONAL STATUS AND COUNTRY OF ORIGIN IN THE TRANSITION TO SECONDARY SCHOOL

Immigrants in school often differ from native children in terms of performance and attainment. It is not clear, however, whether such differences necessarily persist in the presence of statistical controls for compositional

effects. Characteristics such as socioeconomic status, educational achievements and family composition are closely tied to immigration status (Glick and White, 2003). In our analyses we are interested in distinguishing between the effects of these factors. Our first aim is to test whether the disadvantage of being an immigrant remains after controlling for family characteristics. Traits such as family structure and family socioeconomic status have been shown to influence academic performance (Bankston and Caldas, 1997; Caldas and Bankston, 1997). Once we have described the determinants of scholastic outcomes, we endeavor to investigate their role in the educational trajectories of students. From a meritocratic perspective, school should nullify any initial differences between immigrants, second generation immigrants, and natives. According to this hypothesis, access to secondary school would be influenced only by previous outcomes achieved during the scholastic career. In our analysis, we examine whether generational status plays a role in the choice of secondary school, controlling for outcomes at the end of middle school. We also investigate the role of compositional characteristics. The effect of family structure and socioeconomic status may, in fact, influence not only the outcome but also intentions of educational attainment existent within families (Checchi and Flabbi, 2007). Moreover, we explore whether there are significant variations in either the outcome or the trajectories of immigrants from different countries. There is some evidence that immigrants from different groups have access to specific resources in term of “social capital”, related to their country of origin (Bauer and Riphahn, 2007; Borjas, 1992; Fekjaer, 2007). Differentials in the educational outcomes of children from different immigrant groups (after controlling for generational status and socioeconomic background), may highlight critical situations among disadvantaged communities or point to successful situations of adaptation to the host society. The heterogeneity in terms of country of origin does not necessarily indicate segmented assimilation, but may emphasize different strategies of educational investment among immigrant groups.

DATA AND METHODS

Data were drawn from the ITAGEN2, a survey of students living in Italy and attending middle school 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. Wave I includes a sample of 6,368 foreigners and 10,537 natives

(Barban and Dalla Zuanna, 2010; Dalla Zuanna, Mencarini, and Baldoni, 2009b). The subjects live in 44 provinces and attend 228 different middle schools. The schools were randomly chosen among those with a foreign student body consisting of +10 percent of the total (in five of the Central and Northern regions: Lombardy, Veneto, Tuscany, Marches, and Lazio) and +3 percent of the total (in four of the Southern regions: Campania, Apulia, Calabria, and Sicily). In each school, three entire classes were interviewed (one from each level of middle school) as were all of the immigrants in attendance. In schools with more than 60 foreign students, data for a greater number of classes were collected to improve the sample of natives. For each school, a mean of 64 Italians and 51 immigrants was interviewed. The Wave I interview focused primarily on the characteristics of the family, the migratory process, the children's use of time, and their opinions and aspirations for the future. Information on scholastic achievement was not collected during the in-school Wave I interview.

The 2008 wave was the first follow-up. Data were collected by means of a CATI interview among an ITAGEN2 subsample in five regions: Veneto, Marches, Apulia, Calabria, and Sicily. The target population includes 1,389 immigrants' children¹ and 1,589 Italians. The follow-up survey took place 2 years after the first interview. Almost two-thirds of the initial sample of the students had therefore completed middle school. The follow-up questionnaire included a set of questions concerning scholastic attainment and achievement. The response rate was 70 percent among Italians and 47 percent among foreigners. The great majority of the non-responses is attributable to discontinued telephonic contacts rather than to refusals. To gain supplementary data on scholastic outcomes, we performed (in the Veneto and Apulia only) an additional survey in the schools. We also collected data on the final middle school exam for 364 students. Data from the baseline survey, linked to the follow-up data and the supplementary survey, allowed us to trace the educational career of students who attended the 7th or 8th grade during the 2005–2006 scholastic year. Table 1 shows the pattern of available final exam outcomes and the choice of secondary school; data refer only to students attending 7th and 8th grade during the baseline survey.

To compensate for the unequal selection in the follow-up interview, we adopted a weighting strategy. In the appendix, we discuss in detail the different sources of selection and the correction adopted.

¹Children with at least one parent born outside of Italy

TABLE 1
PATTERN OF AVAILABILITY OF DATA FOR MIDDLE SCHOOL EXAM AND SECONDARY SCHOOL. BASELINE SURVEY AND FOLLOW-UP ITAGEN2. DATA RESTRICTED TO THE TARGET POPULATION OF THE FOLLOW-UP SURVEY

Pattern of availability	Natives		Immigrants		Total	
	<i>n</i>	Percentage	<i>n</i>	Percentage	<i>n</i>	Percentage
Baseline data	1,589	100	1,389	100	2,978	100
Final exam available	1,137	64	830	53	1,967	58
Of which from register data	177		187		364	
Secondary school available	1,116	70	659	47	1,775	60

Source: ITAGEN2 survey.

Variables

Dependent Variables: Scholastic Outcome. As a measure of scholastic performance, we collected the results of the final exam taken by pupils at the end of their third year of middle school. The middle school final exam is a compulsory ministerial exam and it is required to enroll in secondary school. The exam consists of both written and oral components. The customary age at which the exam is taken, without previous grade retention or delay in admission, is between 13 and 14. The exam has six possible outcomes: Not Admitted, Failure, Sufficient, Good, Very Good, and Excellent. In the case of a “Not Admitted” or “Failure” result, students must repeat the last grade, after which they may take the exam the following year.

Secondary School. In the Italian school system, at the end of middle school (8th grade) students must choose between a number of different secondary school options. This choice is one of the most important factors influencing the level of education that they ultimately attain. Secondary schools can be divided in three groups: vocational schools, polytechnic schools, and high schools. Although secondary schools are not compulsory, the minimum age at which a student may drop out the school system is 15. In our analysis, we collected data for secondary school attendance at the moment of the follow-up survey. For those who dropped out before the interview, we collected information on the last secondary school attended.

Independent Variables. Generational Status. Generational status was categorized by the parents’ birthplace and by length of residency in Italy. We identified second generation immigrants as those youth born in Italy to at least one foreign-born parent. We separated “recent immigrants” (in Italy less than 5 years at the time of the baseline survey) from “pre-school

immigrants” (in Italy at least 5 years at the time of the first survey; *i.e.*, arrived in Italy before school age or at early elementary school age). We defined natives as those respondents born in Italy of both Italian parents.

Country of Origin. We included measures of ethnicity in our models to control for the possibility that the country of origin, not migration status per se, results in differential academic achievement and educational pattern. The country of origin was recorded, for both immigrants and second generation immigrants, as the mother’s birthplace. We identified respondents as belonging to the six largest communities present in the sample: Italy, Albania, Yugoslavia, Morocco, Tunisia, Macedonia, and China. For respondents not included in the previous categories, we distinguished between “Others from developed countries” (*i.e.*, European Union (12 countries), United States, Canada, Japan, and Israel) and “Others”.

Other covariates. Other measures included in the analysis represent students’ demographic characteristics, access to human capital, family environment, and college aspirations. In place of a standardized measure of socio-economic status (SES), we utilized the education level of the parents, homeownership, and family size. With specific regard to parents’ level of education, we constructed a series of dummy variables indicating the highest education level between the two parents. In the “low education” category we included parents who finished school before the age of 14; “medium education”, those who finished school between the ages of 15 and 19; and “high education”, those who finished when they were 20 or older; the last category includes cases for which information about the education of both parents is missing. Homeownership is indicated with a dummy variable equal to one when the family of the respondent owns the house where she/he is living. Number of siblings is also represented by a series of dummy variables: (1) no siblings; (2) one or two siblings (reference group); and (3) three or more siblings (*e.g.*, Vernez, Abrahamse, and Quigley, 1996). Our measure of the respondent’s aspirations for college is a dummy variable equal to one where she/he expresses, at the moment of the baseline survey, willingness to attend college.

Methods

To investigate the transition to secondary school we ran two different sets of regression models. First, we modeled the outcome of the final exam

taken by students at the end of middle school. As the outcome is expressed in four different categories, we utilized an ordinal regression model (Agresti, 2002). In this model, the outcome variable is expressed in ordered categories (Four categories, from *Sufficient* to *Excellent*). The assumption underlying this approach is that there is a specific ranking of the different categories. We designated the lowest grade as the reference category. The estimates express a measure of how much a covariate increases the probability of achieving a higher grade. In the second set of models, we ran a *multinomial logit regression* (MLN) to describe the choice of secondary school. In this case we did not assume a specific rank in the categories of the outcome variable. We obtained different estimates for the effect of the same covariate on the probability of attending a typology of secondary schools compared with the reference category, “vocational school”. Estimates can be expressed in terms of relative risks. In both models we utilized the same set of covariates. We constructed “nested models” to test different specifications using the log-likelihood ratio test. The geographical heterogeneity of outcomes is taken into account including a “province fixed effect” in the models.

DESCRIPTIVE ANALYSIS

We begin our analysis by providing some descriptive statistics of the baseline sample. In Table 2 we show a summary of the differences according to generational status. Immigrant children are slightly older than other groups at the end of middle school. This is due to school administrators who may opt to enroll immigrants in lower grades if language proficiency is not satisfactory. We do not observe strong differences based on parents' level of education. As pointed by Reyneri (2004), immigrant families are quite similar to Italians in terms of years of schooling. Homeownership rates vary significantly among groups. The proportion of homeowners increases considerably with the amount of time spent in Italy by the children, likely due to gradual stability in the family's migratory experience (Barban and Dalla Zuanna, 2010). Nevertheless, we observe a notable gap in homeownership between immigrants' children born in Italy and their native counterparts. Immigrants' children are also more likely to live in larger size families. The average number of siblings decreases with the length of the children's migratory experience. Recent immigrants live with an average of 2.03 siblings, pre-school immigrants with 1.90 and second generation immigrants with 1.85. In comparison, native children live with

TABLE 2
CHARACTERISTICS OF THE SAMPLE FOR BASELINE SAMPLE BY GENERATIONAL STATUS

Variable	Recent immigrants	Pre-school immigrants	Second generation	Natives
Sex (%)				
Male	53.4	53.0	51.0	48.9
Female	46.6	47.0	49.0	1
Age at the exam (mean)	15.1	14.7	14.2	14.0
Mother's country of origin (%)				
Italy	7.2	7.7	17.2	100.0
Albania	16.0	31.4	6.9	—
Yugoslavia	3.9	6.1	2.2	—
Morocco	3.9	9.3	4.2	—
Tunisia	7.4	3.9	3.4	—
Macedonia	11.9	12.8	9.8	—
China	7.0	5.1	18.1	—
Others from developed countries	1.9	1.4	12.0	—
Others	40.9	22.5	26.2	—
Parent's education (%)				
Low	25.7	23.3	23.8	29.9
Medium	32.9	36.0	34.3	35.8
High	23.4	19.6	27.2	23.2
Unknown	18.1	21.1	14.7	11.2
Household possession (%)				
Rentals	81.3	71.5	57.4	18.0
Owners	18.7	28.5	42.7	82.0
Siblings (%)				
No siblings	12.1	8.5	9.3	11.1
1–2 siblings	58.2	66.8	65.7	78.3
3 or more siblings	29.4	24.7	25.0	10.6
College's aspiration (%)				
Yes	48.1	43.5	55.6	52.2
No	19.3	22.5	14.5	18.7
Don't know	32.7	34.0	29.9	29.1
Number of cases	487	494	408	1,589

Source: ITAGEN2 baseline survey.

Note: Only the respondents of the target population of the follow-up.

1.45 siblings on average. Similar to other studies (Dalla Zuanna, Farina, and Strozza, 2009a; Rumbaut, 1996; St-Hilaire, 2002), we do not find considerable differences between the ambitions and the aspirations of immigrant children and those of Italians. Also, the proportion of children who think they will go on to college is similar across groups. Data on scholastic results and secondary school enrollment (Tables 3 and 4) show significant differences among groups. All immigrants' children are more likely to achieve lower results on the final exam. In particular, over half (52%) of recent immigrants received the lowest grade; we find a similar the result among pre-school immigrants (46%), even if the latter experienced the entire schooling process in Italy. Scholastic achievement is also

TABLE 3
OUTCOMES OF THE MIDDLE SCHOOL FINAL EXAM. UNWEIGHTED AND WEIGHTED FREQUENCIES

Variable	Recent immigrants	Pre-school immigrants	Second generation	Natives
Unweighted frequencies				
Outcome middle school's final exam (%)				
Sufficient	56.2	47.9	39.1	22.2
Good	24.4	26.2	24.7	31.3
Very good	9.7	15.0	20.5	23.9
Excellent	9.7	10.9	15.8	22.6
Total	100.0	100.0	100.0	100.0
Number of cases	258	267	215	1,084
Weighted frequencies				
Outcome middle school's final exam (%)				
Sufficient	52.4	46.0	38.5	22.0
Good	27.1	27.1	26.5	31.6
Very good	10.0	15.6	20.1	23.9
Excellent	10.5	11.4	14.6	22.5
Total	100.0	100.0	100.0	100.0

Source: ITAGEN2 follow-up survey.

TABLE 4
SECONDARY SCHOOL. ATTAINMENT BY NATIVITY. UNWEIGHTED AND WEIGHTED FREQUENCIES

Variable	Recent immigrants	Pre-school immigrants	Second generation	Natives
Unweighted frequencies				
Secondary school (%)				
Vocational	53.2	38.3	23.4	15.5
Polytechnic	29.8	33.3	38.0	34.1
High school	17.0	28.4	38.6	50.4
Total	100.0	100.0	100.0	100.0
Number of Cases	141	162	158	833
Weighted frequencies				
Secondary school (%)				
Vocational	52.7	35.7	23.5	14.3
Polytechnic	31.1	37.0	39.8	35.7
High school	16.2	27.3	36.7	49.9
Total	100.0	100.0	100.0	100.0

Source: ITAGEN2 follow-up survey.

lower (38.5% Sufficient) among those who were born in Italy compared with the Italian children (22% Sufficient).

Similar trends are observed in terms of the choice of a secondary school. Although almost half of Italians' children are going on to high school, this proportion decreases among immigrants' children, who instead privilege polytechnic and vocational schools. Vocational school is the most frequent choice among recent immigrants, only a small fraction of who enroll in high school.

RESULTS

The Middle School Exam Score

To investigate scholastic achievement at the end of middle school, we ran three ordinal logit regression models. The outcome variable is the result of the middle school exam, taken at the end of the 8th grade. The lowest grade (Sufficient) is the reference category (Table 5).

The first model includes gender and generational status as the sole variables. The results indicate that second-generation immigrants and immigrants have inferior results to those of natives. In particular, lower performances are associated with shorter lengths of stay in Italy. Model 2 adds the country of origin, indicated by the mother's birthplace, to the analysis. Respondents originally from Yugoslavia, Macedonia, Morocco, and Tunisia are significantly more likely to have lower outcomes compared with Italians. The addition of country of origin as a covariate weakens the effects of generational status. In this model specification, in fact, second generation immigrants do not differ significantly from natives. In the final model (Model 3), we included the socioeconomic status of the family. As indicators we utilized the education level of the parents, the size of the family, and a dummy variable indicating homeownership. These variables are generally good predictors of scholastic achievement, as demonstrated by numerous studies on education (Haveman and Wolfe, 1995). We find that the scholastic achievement of children with less educated parents, who live in a rented house, and have more than three siblings, is significantly lower. The introduction of compositional variables softens the relation with generational status, providing evidence that only recent immigrants have lower results compared with native Italians. The coefficients associated with second generation immigrants and pre-school immigrants attenuate with the inclusion of the socioeconomic status variables. The inclusion of the last block of variables underscores the negative pattern among children with parents from Yugoslavia, Morocco, Tunisia, and Macedonia, but also indicates a positive coefficient for students originally from China. Controlling for the other variables, Chinese students seem to have higher levels of achievement than natives.

With the inclusion of socioeconomic status and background characteristics, only recent immigrants differ from natives. This could mean that what really matters is the unobservable experience acquired with length of residence in Italy (*e.g.*, linguistic proficiency or assimilation into the

TABLE 5
PARAMETER ESTIMATES PREDICTING THE OUTCOME OF FINAL MIDDLE SCHOOL EXAM. ORDINAL LOGISTIC REGRESSION MODEL

	Model 1	Model 2	Model 3
Gender (versus male)			
Female	0.594 ^a	0.609 ^a	0.665 ^a
Generational status (versus native)			
Second generation	-0.654 ^a	-0.349	-0.250
Pre-school immigrant	-0.960 ^a	-0.615 ^a	-0.388
Recent immigrants	-1.220 ^a	-1.108 ^a	-0.677 ^a
Country of origin (versus Italy)			
Albania		-0.258	-0.256
Yugoslavia		-0.631 ^a	-0.721 ^a
Macedonia		-1.477 ^a	-0.956 ^a
China		0.899 ^a	1.308 ^a
Morocco		-1.147 ^a	-0.708 ^a
Tunisia		-0.019 ^a	-0.584 ^a
Other developed countries		-0.156	-0.395
Others		0.097	-0.115
Parents' education (versus low)			
High			1.044 ^a
Medium			0.618 ^a
Unkown			-0.201
Household possession (versus rentals)			
Homeowners			0.618 ^a
Siblings (versus 1-2 siblings)			
No siblings			0.341 ^a
3 or more siblings			-0.369 ^a
μ_1	-0.255 ^a	-1.869 ^a	-0.891
μ_2	1.050 ^a	0.454	1.617
μ_3	2.129 ^a	0.725	1.858 ^a
Province fixed effect	Yes	Yes	Yes
Observations	1,967	1,967	1,967
Wald χ^2 ^b	262.34 ^a	334.47 ^a	514.33 ^a

Source: ITAGEN2 follow-up survey.

Notes: ^a5 percent significance level.

^bLog-likelihood test with the previous model (2) (3); or the null model in (1).

Italian school system), more than place of birth. On the other hand, the results indicating country of origin suggest different ethnic groups enact diverse strategies. The negative effect of the students from Macedonia, Yugoslavia, Morocco, and Tunisia do not point to a relation with the duration of residence in Italy of the ethnic community. For example, if forms of discrimination are related to the history of a particular ethnic community, we might expect a lower coefficient for communities that came to Italy recently, in particular the Asians. On the contrary, however, among the Asiatic communities we observe a strong positive effect of China. Controlling for other variables, in particular immigration status and socioeconomic status, children of Chinese origin have higher outcomes than Italians. This result is consistent with studies conducted in

other countries (Chiswick, 2004; Glick and White, 2004; Louie, 2001; Portes and Hao, 2004).

The Transition to Secondary School

After investigating the determinants of scholastic achievement at the end of middle school, we explored the transition to secondary school. The choice of secondary school is one of the most critical steps in youths' educational paths, as it is strongly associated with post-secondary school attainment. Our principal aim is to determine whether generational status and ethnicity have an effect on the transition to secondary school. According to our hypothesis, in the absence of other effects, academic achievement is the only predictor. We used a multinomial logit regression (MLN) to predict the probability of enrolling in a polytechnic school or a high school as opposed to a vocational school. Using a multinomial model, we did not make assumptions about the ordering of the different categories, and we estimated different coefficients for each category. In the first model (Model 1, Table 6) the sole predictor is the final exam taken at the end of middle school. Under the hypothesis of complete meritocracy, previous scholastic achievement should be the only predictor for the choice of scholastic track. In this perspective, families would decide the appropriate scholastic path for their children by considering only their prior performance. The estimates show that previous outcomes are strong predictors of secondary school choice: the higher the previous outcome the greater the propensity to enroll in high school rather than a polytechnic or vocational school. In the second model, we added the same individual and background characteristics used in the previous analysis. As shown in Table 6 (Model 2), gender, parental education level and homeownership have a further effect on the choice of secondary school. Girls are more likely to avoid polytechnics in favor of either high school and or vocational school. Consistent with recent results (Flabbi, 2001), parental level of education influences the choice of school net of previous achievements.

In the final model (Model 3) we added generational status to the covariates to test the effect of the latter on the choice of educational path. Our results indicate that immigrants have a significantly lower probability of enrolling in polytechnic and high schools compared with natives and second generation students. Adding country of origin to the regression model (Model 4) does not significantly improve the explanation of sec-

TABLE 6
PARAMETER ESTIMATES PREDICTING SECONDARY SCHOOL CHOICE. MULTINOMIAL LOGIT
REGRESSION MODEL

	Model 1		Model 2		Model 3		Model 4	
	P	HS	P	HS	P	HS	P	HS
Outcome (versus sufficient)								
Good	1.30	1.83 ^a	1.16 ^a	1.47 ^a	1.14 ^a	1.39 ^a	1.13 ^a	1.38 ^a
Very good	2.01 ^a	3.72 ^a	1.78 ^a	3.16 ^a	1.76 ^a	3.10 ^a	1.73 ^a	3.11 ^a
Excellent	4.57 ^a	7.10	4.43 ^a	6.55 ^a	4.61 ^a	6.84 ^a	4.71 ^a	6.91 ^a
Gender (versus male)								
Female			-0.19	0.73 ^a	-0.24	0.69 ^a	-0.26	0.67 ^a
Parents' education (versus low)								
High			0.56 ^a	1.66 ^a	0.74 ^a	1.91 ^a	0.75 ^a	1.88 ^a
Medium			0.85 ^a	0.78 ^a	0.98 ^a	0.95 ^a	1.00 ^a	0.91 ^a
Unknown			0.50 ^a	0.47 ^a	0.65	0.72	0.64 ^a	0.69
Household possession (versus rentals)								
Home owners			0.71 ^a	1.31 ^a	0.35	0.63 ^a	0.35 ^a	0.67 ^a
Siblings (versus 1-2 siblings)								
No siblings			0.27	0.47 ^a	0.31	0.61 ^a	0.33	0.69 ^a
3 or more siblings			-0.04	-0.37	0.20	-0.06	0.22	0.00
Generational status (versus native)								
Second generation					-0.06	-0.26	0.02	-0.58
Pre-school immigrant					-0.77 ^a	-1.24 ^a	-0.68 ^a	-1.88 ^a
Recent immigrants					-1.19 ^a	-2.22 ^a	-1.19 ^a	-2.61 ^a
Country of origin (versus Italy)								
Albania							-0.14	1.08 ^a
Yugoslavia							-0.22	0.26
Macedonia							-0.10	0.46
China							0.09	0.00
Morocco							-0.54	0.51
Tunisia							0.23	0.52
Other developed countries							-0.48	0.47
Others							0.00	0.24
Constant	-0.80	-1.75	-0.92	-3.24 ^a	0.04	-1.91	-1.70	0.28
Province fixed effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,775
Wald χ^2 ^b	772.54 ^a		1027.66 ^a		1124.66 ^a		1145.98	

Source: ITAGEN2 follow-up survey.

Notes: Reference category – Vocational school; P, Polytechnic; HS, High School.

^a5% significance level.

^bLog-likelihood test with the previous model (2) (3) (4); or the null model in (1).

ondary school choice. The likelihood ratio test, where we compare the performance of the regression model with the previous one, suggests using the model without country of origin.

DISCUSSION

Italian Constitutional Law declares that the state should remove any obstacle of social or economic nature that impedes social mobility and

TABLE 7
PROBABILITIES OF SECONDARY SCHOOL CHOICE GIVEN THE RESULT "VERY GOOD" AT THE END OF
MIDDLE SCHOOL. SIMULATIONS FROM ESTIMATES OF MLN REGRESSION MODEL

Immigrant generation	Vocational school	Polytechnic school	High school
Natives	0.05 (0.04)	0.31(0.12)	0.63(0.14)
Second generation immigrants	0.06 (0.05)	0.35(0.15)	0.59(0.18)
Pre-school immigrants	0.12 (0.06)	0.39(0.13)	0.49(0.16)
Recent immigrants	0.28 (0.12)	0.39(0.08)	0.33(0.14)

Notes: Standard error in parentheses.

Estimated probability from Model 3, Table 6.

that the highest degrees of education should be attained on the basis of merit.² Our results suggest that the goals of this law are not always met. The highest degrees of education are partially determined by family background and country of origin. Immigrants' children are more likely to achieve lower scholastic results and pursue shorter educational career paths with respect to their native counterparts. We simulated the probabilities of attending different typologies of secondary school for students who achieved a score of "Very good" at the end of middle school using an MLN regression model (Table 7). Recent immigrants have about half the probability of enrolling in high school compared with their native counterparts. Analogously, among students with lower grades, the probability of attending vocational school is 0.72 among recent immigrants and only 0.39 among natives.

There appears to be an imbalance in educational opportunities to the disadvantage of immigrants' children, even if they have spent their entire educational career in the host country. The Italian education system may be leaving behind potentially superior students of different origins while continuing to favor native Italians. From a meritocratic perspective, access to secondary school would be influenced only by previous outcomes achieved during the scholastic year. However, our results show that this does not always happen in Italy. After controlling for previous scholastic results, Italian families seem to encourage their children to pursue higher educations.

On the contrary, immigrant families' children choose shorter educational paths that will likely exclude attending college.

²Article 34 of the Italian Constitution states that school is open to everyone and the first 8 years of schooling are free and compulsory. Students who excel in school – even if they lack the economic means – are entitled to reach the highest level of education. The Italian Republic enforces this right through the provision of scholarships, household subsidies, and other form of grants designated through public competition.

The Italian school system is characterized by universal access and, as the majority of the schools are public, promotes relationships between social classes. In the majority of elementary and middle schools, pupils come from different social classes and share the same teachers. Despite this, our analyses show that differences in school attainment and achievements persist after the completion of compulsory schooling. In addition, we observe a further disadvantage on those students who have an immigrant background. One possible reason could be that children attend school for relatively few hours each day compared with other countries. As – with some exceptions – all educational activity is carried out during the morning, the rest of the day is the family's responsibility.³ Children who come from families with low levels of education may be at more of a disadvantage if they receive less support or encouragement from their families to keep up with homework. In addition, children of immigrant parents may have less support if their parents are not proficient in Italian. Even if many immigrants' children are born in Italy, a considerable number also arrive at young age and some of them have already attended school in their country of origin. Immigrant students need to quickly learn Italian as a second language. Generally, schools do not provide extra classes in which foreign students can learn the new language.

In this article, we examine the transition to secondary school. Our results suggest that, in addition to social class, immigrant status plays a role in the scholastic attainment of students. One possible explanation could be that young immigrants and their families have different preferences in terms of investing in education. They may prefer to start working earlier, or may be less interested in acquiring country-specific skills. Especially in the case of those returning to their country of origin (or departing for another country), an investment in higher education may be considered too country-specific and therefore not profitable. Another possible explanation may be that the choice of a secondary school is affected by poor counseling received during the last year of middle school. Immigrants may be discriminated against and teachers may suggest that they enroll in a vocational or polytechnic school even if they have the same scholastic results of natives. Unfortunately, we do not have enough information to test these hypotheses. Our analysis is therefore not able to give a complete explanation of the differences in scholastic track among immi-

³In middle school pupils spend 32 h per week in school. In 2009, the Minister of Education proposed a reduction to 29 h.

grants. We also cannot claim a causal effect of generational status on the choice of educational track as immigrant groups might be selected based on unobservable variables that we are unable to take into consideration in our regression models. Despite these challenges, our results are among the first to show differences in the acquisition of human capital on the part of immigrants and their descendants living in Italy.

APPENDIX: SAMPLE SELECTION

A common problem in studies of education is the selection of the sample and the presence of missing values due to attrition. In our case, we face three main sources of possible selection bias. First, we may not observe the outcomes of students who failed a grade and thus had not completed middle school at the time of the follow-up. Second, students who took the exam might have left school or changed the kind of school they were enrolled in after middle school. In other words, students attending secondary school might, in fact, have changed typology between the first and the second year. Third, some students were not interviewed in the follow-up. This last source of selection is the most sizable and troublesome. Table 1 shows that attrition is particularly significant among immigrants and second generation immigrants.

In response to the first two sources of selection, we restricted our analysis to students who passed the exam and enrolled in a secondary school. Moreover, we excluded from the sample students who never enrolled in a secondary school. The number of these cases is very limited, given that school is compulsory up to age 15 years in Italy, and the middle school exam is usually taken at the age of 13 years. As we do not have the complete history of secondary school attendance, we classified students by the last school attended. These restrictions to the sample mean that our analysis is valid only for the subsample of students who completed middle school and enrolled in a secondary school.

Dealing with the attrition presents more of a challenge. To control for bias induced by the loss of data during the follow-up, we adopted a weighting strategy. First, we investigated whether the probability of being included in the follow-up varies according to several characteristics of the sample. In particular, we were interested in testing whether attrition is attributable to observable variables linked to the stability of the migratory process. To this end, we ran a probit model using inclusion in the follow-up as the dependent variable. As covariates we considered: generational

status, gender, region of residence, number of siblings, indicators of scholastic proficiency, indicators of support and distance from relatives, homeownership. If the subsample of the follow-up was a completely random selection of the target population, we expected that the effect of the covariates would not differ significantly from zero. This condition, called MCAR "Missing Completely At Random" (Little and Rubin, 2002), was not empirically supported. In fact, immigrants and those living in rented homes in the south of the country in families with less support from relatives are less likely to respond to the follow-up interview.

To compensate for unequal selection probabilities and response rates, it is common in most public-use surveys to weight the response cases. "Inverse probability weighting" is an extension of inverse weighting methods used in survey sampling and in missing data problems (Hogan and Lancaster, 2004). If the sample used to draw inferences is not a simple random sample (SRS), but rather one in which members of subpopulations are over- or under-sampled (*e.g.*, recent immigrants or pre-school immigrants), the inverse probability weights are computed by assigning to each unit its inverse probability of being sampled. In an SRS of n size, the sampling probability is $1/n$, such that the relative weights are equal to 1. The weights themselves can be interpreted as quantifying the number of non-sampled members of the population represented by the sampled unit. For example, if the weight of an observed unit is $1/4$, then this unit represents information from four members of the target population. In our analysis we utilized as weights the inverse of the predicted probability obtained by the probit selection model mentioned above. All the response units obtained in the supplementary survey were weighted 1. Table 2 and 3 illustrate the weighted and unweighted frequencies of the final exam and the choice of secondary school. Descriptive statistics give an indication that selection overestimates the proportion of students attending high school, particularly for immigrants. The comparison between weighted and unweighted frequencies suggests that students with lower scholastic achievements are more likely to be excluded in the follow-up sample.

The use of an inverse probability weighting method helped in obtaining approximate unbiased estimates of population means and totals (see *e.g.*, Winship and Radbill, 1994). Although this is a standard practice, it is not without problems. As pointed out by DuMouchel and Duncan (1983), while weighting may be appropriate for estimating population means and totals, relying only on weighted estimates may be dangerous in regression problems.

One condition for unbiased estimates in regression models is that observations are “missing at random” (MAR). Under this condition, attrition is independent of missing responses, conditionally on observed responses and model covariates. This assumption is a component of the ignorability condition, which allows valid inference procedures to be based on the likelihood function only for the observed values. In other words, if attrition depends on a set of covariates, and we include in our regression model those covariates, the inference procedures are valid for the entire population. In the regression models presented in the following paragraphs, we assumed the MAR condition. To check the sensitivity of our models, we used a Heckman selection model to describe the exam outcomes. The Heckman selection approach is designed to help adjust for this non-random exclusion from the sample under a non-ignorable condition as well (Heckmann, 1974; Winship and Mare, 1992). We compared estimates from the Heckman selection model and a simple linear regression model. Given that substantial differences between the estimates did not occur, we argue that the ignorability condition is satisfied and the missing process is captured by the inclusion of covariates.

Selection Model

To compensate for the unequal selection in the follow-up interview, we adopted a weighting strategy. Using a probit regression, we modeled the probability of being included in the follow-up interview. Our model specification uses as independent variables several individual and background characteristics collected during the baseline survey. A description of the variables not presented in the previous sections follows. Table 8 shows the estimated coefficients utilized to construct the sample weights.

Distances from the relatives. As a measure of family ties, we collected information on the distance that grandparents and uncles/aunts live from the respondent. The categories were collapsed into two cases: a distance of less than 1 km if the closest grandparent or uncle/aunt lives within that distance; a distance of over 1 km if they live farther or in case that none of the grandparents or uncles/aunts is alive.

Support from relatives. Respondents were asked about support that the family receives from relatives. The question was expressed as follows: “If they need something, who do the adults you live with usually turn to?”

TABLE 8
PARAMETER ESTIMATES PREDICTING SELECTION IN THE FOLLOW-UP SAMPLE. PROBIT REGRESSION MODEL

Variable	Coefficient	Std. Error
Gender (versus male)		
Female	0.095	0.059
Generational Status (versus native)		
Second generation	-0.141	0.094
Pre-school immigrant	-0.278 ^b	0.091
Recent immigrants	-0.398 ^b	0.096
Geographic region (versus Veneto)		
Marches	-0.019	0.082
Apulia	-0.217 ^b	0.081
Calabria	-0.294 ^a	0.131
Sicily	-0.414 ^b	0.096
Distances from relatives		
Less than 1 km	0.000	0.064
Support from relatives (versus grandparents)		
Uncles	-0.019	0.081
Other relatives	-0.240 ^a	0.095
Non relatives	-0.069	0.113
Nobody	-0.183 ^a	0.080
How are you doing in school? (versus I'm among the best in my class)		
I'm doing pretty well	-0.155	0.085
I'm doing ok	-0.286 ^b	0.093
I'm not doing so well	-0.369 ^b	0.118
Secondary school aspiration (versus no school)		
High school or polytechnic	0.560 ^b	0.197
Vocational	0.637 ^b	0.197
Don't know	0.457 ^a	0.200
Household possession (versus rentals)		
Home owners	0.325 ^b	0.071
Siblings (versus 1–2 siblings)		
No siblings	0.093	0.094
3 or more siblings	-0.264 ^a	0.113
Does the family you live with own 50 books? (versus no)		
Yes	-0.136 ^a	0.061
Intercept	0.063	0.271

Source: ITAGEN2 follow-up survey.

Notes: ^a5 percent significance levels.

^b1 percent significance levels.

Possible choices include: grandparents, uncle(s) or aunt(s), other relatives, someone who is not relative, no one.

How are you doing in school? To collect respondents' perception of their own scholastic achievements, children were asked how they are doing in school. Possible answers include: I'm among the best in my class, I'm doing pretty well, I'm doing Ok, or I'm not doing so well.

Secondary school intentions. Respondents were asked if they think they will go on to secondary school and which school they think they will attend.

Does the family you live with owns 50 books? . As measure of education and consumption of cultural goods, respondents were asked whether the family they live with owns at least 50 books (non-scholastic texts).

REFERENCES

- Agresti, A.
2002 *Categorical Data Analysis*, 2nd edn. New York: Wiley.
- Bankston, C., and S. Caldas
1997 The American school dilemma: race and scholastic performance. *The Sociological Quarterly* 38(3):423–429.
- Barban, N., and G. Dalla Zuanna
2010 A portrait of immigrant children's housing experiences in Italy. *Housing Studies* 25(4): 559–584.
- Bauer, P., and R. Riphahn
2007 Heterogeneity in the intergenerational transmission of educational attainment: evidence from Switzerland on natives and second-generation immigrants. *Journal of Population Economics* 20:121–148.
- Billari, F., and G. Dalla Zuanna
2008 *La rivoluzione nella culla*. Milan: Università Bocconi.
- Borjas, G.
1992 Ethnic capital and intergenerational mobility. *Quarterly Journal* 107(1):123–150.
- Brunello, G., and D. Checchi
2005 School quality and family background in Italy. *Economics of Education Review* 24(5):563–577.
- Caldas, S., and C. Bankston
1997 Effect of school population socioeconomic status on individual academic achievement. *The Journal of Educational Research* 90(5):296–277.
- Cesareo, V.
2007 *The Twelfth Italian Report on Migrations 2006*. Milano: Polimetria.
- Checchi, D., and L. Flabbi
2007 Intergenerational mobility and schooling decisions in Germany and Italy: the impact of secondary school tracks. IZA Discussion Papers No. 2876.
- Chiswick, B.
2004 Educational attainment: analysis by immigrant generation. *Economics of Education Review* 23:361–379.
- Crul, M., and H. Vermeulen
2003 The second generation in Europe. *International Migration Review* 37(4):965–986.
- , and ———
2006 “Immigration, education, and the Turkish second generation in five European nations: A comparative study.” In: *Immigration and the Transformation of Europe*. Ed. C. A. Parsons and T. M. Smeeding. Cambridge: Cambridge University Press. Pp. 236–250.

- Dalla Zuanna, G., P. Farina, and S. Strozza
 2009a *Nuovi italiani I giovani immigrati cambieranno il nostro paese?* Bologna: Il Mulino.
- , L. Mencarini, and E. Baldoni
 2009b The situation of children in immigrant families in Italy: changes and challenges. Innocenti Working Paper, No. 2009–15, Florence: UNICEF Innocenti Research Centre.
- Doomernik, J.
 1998 *The effectiveness of integration policies towards immigrants and their descendants in France, Germany and the Netherlands*. Technical Report. Geneva: International Labour Organisation.
- DuMouchel, W., and G. Duncan
 1983 Using sample survey weights in multiple regression analyses of stratified samples *Journal of the American Statistical Association* 78(383):535–542.
- Fekjaer, S.
 2007 Ethnic groups in Norway be explained by social background? New differences, old explanations: can educational differences between ethnic groups in Norway be explained by social background? *Ethnicities* 7(3):367–389.
- Flabbi, L.
 2001 La scelta della scuola secondaria in Italia. *Rivista di Politica Economica* 91(6):85–114.
- Glick, J. E., and M. J. White
 2003 The academic trajectories of immigrant youths: analysis within and across cohorts. *Demography* 40(4):759–783.
- , and ———
 2004 Post-secondary school participation of immigrant and native youth: the role of familial resources and educational expectations. *Social Science Research* 33:272–299.
- Haveman, R., and B. Wolfe
 1995 The determinants of children's attainments: a review of methods and findings. *Journal of Economic Literature* 33(4):1829–1878.
- Heckmann, J.
 1974 Effects of child-care programs on women's work effort. *The Journal of Political Economy* 82(2):136–163.
- Hogan, J., and T. Lancaster
 2004 Instrumental variables and inverse probability weighting for causal inference from longitudinal observational studies. *Statistical Methods in Medical Research* 13(1):17–48.
- Little, R., and D. Rubin
 2002 *Statistical Analysis with Missing Data*, 2nd edn. New York: Wiley.
- Louie, V.
 2001 Parents' aspirations and investments: the role of social class in the educational experience of 1.5 and second-generation Chinese Americans. *Harvard Educational Review* 71(3):438–474.
- Ministry of Education
 2009 *Gli alunni stranieri nel sistema scolastico italiano. Anno scolastico 2008–2009*. Rome: Ministero dell'Istruzione.

- Neidert, L., and R. Farley
1985 Assimilation in the United States: an analysis of ethnic and generation differences in status and achievement. *American Sociological Review* 50(6):840–850.
- Portes, A., and L. Hao
2004 The schooling of children of immigrants: contextual effects on the educational attainment of the second generation. *Proceedings of the National Academy of Sciences of the United States of America* 101(33):11920–11927.
- , and R. Rumbaut
2005 The second generation and the children of immigrants longitudinal study. *Ethnic and Racial Studies* 28(6):983–999.
- Reyneri, E.
2004 Education and the occupational pathways of migrants in Italy. *Journal of Ethnic and Migration Studies* 30(6):1145–1162.
- Rumbaut, R.
1996. The Crucible Within: Ethnic Identity, Self-Esteem, and Segmented Assimilation Among Children of Immigrants. In *The New Second Generation*. Ed. A. Portes. New York: Russell Sage Foundation. Pp. 119–170.
- , and A. Portes
2001 *Legacies: The Story of the Immigrant Second Generation*. Berkeley: University of California Press.
- St-Hilaire, A.
2002 The social adaptation of children of Mexican immigrants: educational aspirations beyond junior high school. *Social Science Quarterly* 83(4):1026–1043.
- Thomson, M., and M. Crul
2007 The second generation in Europe and the United States: how is the transatlantic debate relevant for further research on the European second generation? *Journal of Ethnic and Migration Studies* 33(7):1025–1041.
- Vernez, G., A. Abrahamse, and D. Quigley
1996 *How immigrants fare in U.S. education*. Technical Report, Santa Monica, CA: RAND.
- White, M. J., and J. Glick
2009 *Achieving Anew*. New York: Russel Sage Foundation.
- Winship, C., and R. Mare
1992 Models for sample selection bias. *Annual Reviews in Sociology* 18(1):327–350.
- , and L. Radbill
1994. Sampling weights and regression analysis. *Sociological Methods and Research* 23(2):230–257.
- Zhou, M.
1997 Growing up American: the challenge confronting immigrant children and children of immigrants. *Annual Review of Sociology* 23:63–95.