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Moving Ahead in Madrid: Aspirations and Expectations in the Spanish Second Generation¹

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Abstract

This paper examines determinants of aspirations and expectations among children of immigrants based on a statistically representative sample of 3,375 second generation youths interviewed in 101 public and private secondary schools in metropolitan Madrid. We review the past literature on status attainment in general and aspirations and expectations, in particular, and draw from it a set of six hypotheses to guide the analysis. Most theoretical statements in this field have been developed on the basis of U.S. data; studies in other immigrant-receiving countries, especially outside the Anglophone world, have been scarce. The study thus provides an opportunity to test and refine existing hypotheses in a different national context. We present breakdowns of educational and occupational aspirations and expectations by gender, parental education and type of school attended. This is followed by multivariate regressions of all four dependent variables on these three plus other predictors suggested by the research literature. This analysis ends with structural equation models – recursive and non-recursive – that provide an integrated theoretical statement of the causal structure of ambition in the Spanish context. Implications of our findings for theory and policy are examined. Suggestions for future research in this field are discussed.

Keywords

aspirations; expectations; children of immigrants; adaptation; Spain

For a long time now, the literature on educational and occupational achievement has singled out the role of adolescent aspirations as a key factor in the causal sequence leading to subsequent attainment. Models to that effect have been regularly published in sociological and educational journals, beginning with the classic “Wisconsin model” of educational and occupational achievement in the 1960s and 70s (Sewell et al. 1969; Sewell and Hauser 1972; Portes et al. 1978).

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Results demonstrating the causal link between aspirations and achievement have been based on longitudinal studies tracing educational and personality development from adolescence to early adulthood (Haller 1982; Haller and Portes 1973; Marjoribanks 2003). It could hardly be otherwise: Cross-sectional studies of aspirations leave open the question of what real effects such plans can have on subsequent behavior; conversely, cross-sectional studies of adult achievement cannot reliably establish the role of earlier plans and ambition since questions to that effect are subject to retroactive recall bias. Only longitudinal research can establish unambiguously the effects of earlier social psychological variables, such as aspirations and expectations, on subsequent achievement (Haller 1982; Feliciano and Rumbaut 2005).

Similar evidence for immigrant youths has been limited by the dearth of longitudinal studies focused on this population. In the United States, only one such study of the immigrant second generation has been completed – the Children of Immigrants Longitudinal Study (CILS). This project was based on representative samples of children of immigrants in South Florida and Southern California interviewed at average age 14 and followed over a decade into early adulthood. Detailed results of this study will be reviewed in the following section. For the time being, it suffices to note that they confirmed the strong positive association between early aspirations and expectations and subsequent achievements; as well as the net effect of these social psychological variables on objective indicators of education and occupation, controlling for other factors (Portes et al. 2005, 2008; Feliciano and Rumbaut 2005).

Confirmatory evidence of these results come from other large longitudinal samples of U.S. high school students that, while not focused specifically on children of immigrants, contain sufficient cases from this universe to arrive at comparable reliable conclusions (Kao and Tienda 1998; Hao and Pong 2008). So far, research on this topic in other countries has been limited, thus restricting the empirical base of theoretical models of status attainment to U.S. data. In particular, there are few studies of immigrant youth aspirations in other major receiving countries, in particular those of Western Europe. This paper aims at partially correcting this gap by presenting results from the first phase of a large, statistically representative sample of second generation students in a major European city. Characteristics of this sample, and the study in general, are described below after reviewing the literature on educational and occupational aspirations and their determinants.

Review of the Literature and Hypotheses

As noted above, the past research literature is nearly unanimous in confirming the role of aspirations and expectations as a major factor in the status attainment process. Assuming this, many studies have focused on determinants of adolescent aspirations and on ethnic/racial and gender differences among them. A strong and consistent finding is that parental human capital and, in particular, the educational levels brought from the home country play a decisive role in molding children's aspirations (Inoue 1999; Kao and Tienda 1998; Feliciano 2006). Additional research indicates that educational aspirations change minimally after high school graduation (Andres *et. al.* 2007), although other studies argue that their stability varies across ethnic groups. In the United States, Black and Hispanic students have less stable educational aspirations than non-Hispanic whites, a result attributed to their significantly lower parental socio-economic status (Kao and Tienda 1998; Menjivar 2008).

A great deal of work has actually been devoted to ethnic differences in educational and occupational aspirations and their determinants. The balance of these studies indicates that significant variation exists, although its direction continues to be uncertain. One study comparing differences among Hispanic students in the United States finds significantly

higher levels of college aspirations and expectations among Cuban youths than among those of Mexican and Puerto Rican origin. The latter are below the level of non-Hispanic whites although this low level is directly attributable to lower parental SES; the higher-than-average Cuban levels of ambition remain even after controls for parental status were introduced (Bohon *et. al.* 2006). Louie (2006) compared Dominican and Chinese adolescents, finding that their differential optimism and pessimism toward the future depend largely on the reference group with whom they compare themselves: Dominicans feel that they are doing better than both native minorities in the U.S. and their counterparts in the home country, while the Chinese are more pessimistic because they compare themselves against highly successful compatriots.

The influence of families on children's aspirations has also been subjected to intense scrutiny. Comparing youths from four immigrant and three native-born groups in the United States, Hao and Bruns (1998) found that higher levels of parent-child interaction increased children's expectations and that similar expectations by parents and children significantly increased achievement. In one of the very few cross-national studies in this field, Buchmann and Dalton (2002) compared the effects of peers and parents' attitudes on student aspirations in twelve countries. Findings supported the Wisconsin status attainment model's prediction of significant parent and peer influences on aspirations in countries with "relatively undifferentiated" secondary school systems. In those with strong tracking systems, however, parents and peers made much less difference, as the decisive event became the type of school that children attended in early adolescence. These comparative findings point to the potentially significant influence of school type, a factor generally neglected in studies based on U.S. samples. A partial exception to this is the attention bestowed on differences between students attending public and Catholic private schools that consistently favor the latter in terms of both aspirations and subsequent achievement (Coleman 1993; Portes and MacLeod 1996).

Studies of immigrant youths in other countries have been rare. Those that exist have consistently supported the influence of pre-migration parental status on children's aspirations and expectations, and of these on academic achievement. Overwhelmingly, these studies have been conducted in the Anglophone world and in Israel, with relatively less attention paid to other countries of immigration (Strand and Winston 2008; Andres *et. al.* 2007; Bodovski and Benavot 2006). Based on a large longitudinal study of Australian youths, for example, Marjoribanks (2003) found that family background had large effects on adolescents' aspirations, while the latter had the strongest relationship with young adults' eventual educational achievement. Significant differences were observed in this study among respondents of different ethnic backgrounds, both in levels of ambition and in academic attainment, even after controlling for family traits.

Findings from this Australian study coincide, in all their essentials, with those reported by the Children of Immigrants Longitudinal Study (CILS) in the United States. The latter confirmed the strong effect of parental human capital on adolescent aspirations. Employing as dependent variables educational and occupational attainment in early adulthood plus a "downward assimilation index," a recent study using CILS data found: 1) strong effects of aspirations and expectations in promoting achievement and in preventing downward assimilation; 2) resilient differences in aspirations, expectations, and achievements among different second generation nationalities, even after controlling for family socio-economic status and other predictors; 3) no significant differences in the net effects of aspirations and expectations, both being essentially interchangeable as predictors of subsequent achievements (Haller, et al. 2009).

The CILS data also identified two other important causal factors. First, family composition, as children growing up with both biological parents had significantly higher educational and occupational attainment, even after controlling for other factors. Second, gender differences, with girls having superior aspirations and expectations and being better able to translate them into subsequent educational attainment (Fernández-Kelly and Konczal 2005; Rumbaut and Feliciano 2005). Both effects were attributed by researchers to the power of family social capital. Social capital tends to be higher in stable two-parent families, while girls are also more apt to be supervised and be less independent than boys, thus being more influenced by high parental aspirations (Portes and Rumbaut 2001: Ch. 9). These two effects have been replicated by other studies based on U.S. data (*i.e.* Hao and Pong 2008), but not in other countries.

Efforts to test the “segmented assimilation” model derived from the CILS project have come up with additional factors potentially influencing the process. Based on his study of second generation Mexicans, St.-Hilaire (2002) identified length of U.S. residence as having a significant *negative* effect on aspirations and expectations, while fluency in English increased both. Menjivar (2008) focused her attention on the legal status of Salvadoran families, finding that children of unauthorized parents or those in an insecure legal situation had significantly lower and less stable educational expectations. Portes and Rumbaut (2001: 228) also reported that native-born children of immigrants had significantly higher expectations than those born abroad.

Based on this diverse array of results, it is possible to advance several hypotheses concerning determinants of aspirations and expectations among immigrant youths. Drawing on the principal studies conducted so far, it can be predicted that: 1) parental education and occupation will have strong positive effects on ambition; 2) family composition (two-parent families) will have a similar significant role; 3) birthplace will also affect ambition to the advantage of the native-born; 4) there will be sizable ethnic/national differences, although the direction of these effects is uncertain; 5) female students will have higher aspirations and expectations than boys; 6) type of school will have a significant effect, with private school students displaying a significant advantage; 7) knowledge of the host country language will also be associated with higher ambition.

In addition to these causal hypotheses, it is important to consider other social psychological correlates of aspirations such as levels of self-esteem and a familistic orientation. Although the direction of causality is uncertain in the case of both variables, it is possible to predict a positive association between them and adolescent aspirations. Higher self-esteem has been found in the past to correlate positively and significantly with both aspirations and expectations (Rumbaut and Feliciano 2005; Harris et al. 2008). Greater familism should also correlate positively with both variables because of the greater and more intense parent-child interactions that it should foster (Hao and Bruns 1998). We examine the relevant results after describing the national context of the study and its methodology in the following sections.

Immigration to Spain

Traditionally, Spain has been a country of out-migration, sending millions of migrant workers first to Latin America and, in the post-World War II period, to Northern Europe. Since joining the European Common Market and, subsequently, the European Union, the country experienced a sustained process of economic growth that brought it into the ranks of the developed world. As a result labor out-migration not only ceased, but reversed course leading to the return of millions of former emigrants (Cachon 2009; Calavita 2005). Since the early 1990s, Spain has found itself in the role of recipient of major migration flows, first

from nearby Morocco, and subsequently from Latin American countries, Eastern Europe, and even Asia (Carvajal Gomez 2006). As a result, the foreign-born population grew by leaps and bounds and, by 2008, it had reached 5.6 million, or close to 12 percent of the population (Observatorio Permanente de la Inmigración 2009; Cachón 2009). The figure is very close to the proportion of foreign-born in the American population (12.5 percent), despite the much shorter period of Spain-bound migration -- scarcely twenty years.

Inevitably, first generation immigrants spawned a second generation that currently represents the fastest growing component of Spain's population, aged 18 and younger (Aparicio 2006). Not being traditionally a country of immigration, Spain was ill-prepared to guide the process of incorporation of its new immigrants and, especially, of their offspring. The arrival of this young population into the schools and in the streets has been accompanied by much uncertainty and considerable anxiety among the native-born about what the phenomenon portends for the nation as a whole (Pajares 2009; Aparicio and Tornos 2008). Journalistic articles about the growth of Latin American youth gangs or the danger of Islamic fundamentalism among young Moroccans and other second-generation Muslims have proliferated, while the national government and those of the country's autonomous regions (*comunidades*) have rehearsed numerous policies seeking to integrate second-generation youths into the schools and avoid early, but disturbing signs of downward assimilation (Sotelo 2005; Diez Nicolas 2004).

So far, however, few empirical studies of the Spanish second generation have been conducted and those that exist are based on convenience or local samples (see Aparicio 2006; Aparicio and Tornos 2008; Gualda 2008). By all counts, this is still a young population, the great majority of whom are still in the primary and early secondary school years. At this age, a key consideration in addition to demographic characteristics is the orientation of these youths toward the future and, in particular, their aspirations. If, as seen previously, aspirations and expectations are major predictors of the life course followed by a new generation, it makes a great deal of difference how children of immigrants see their future in their new country and how they perceive their chances of moving upwards in its hierarchies of wealth and status.

A study of second generation goals and their determinants in Spain offers a chance of casting light on a so-far unknown population, while simultaneously testing existing theories in a different national context. As seen previously, theoretical propositions about the origins of adolescent aspirations and expectations derive primarily from U.S. empirical research, with limited contributions from other English-speaking countries. Applying them in a new social and cultural setting provides an opportunity not only to establish the generalizability of these theories, but also to extend and refine them.

Methodology

The data on which the following analysis are based is the product of a collaborative venture between university-based research centers in the United States and Spain with the aim of interviewing representative samples of second generation youths in their principal areas of concentration in Spain and following them over time. The study aimed at replicating the research design of the Children of Immigrants Longitudinal Study (CILS), discussed previously. To this end, researchers sought the approval and support of education authorities in Madrid and Barcelona – the two largest immigrant-receiving cities in Spain (Observatorio Permanente de la Inmigración 2009). Having obtained it, we proceeded to draw random samples of secondary schools in each metropolitan area, stratified by type of school (public vs. private) and by geographical location. Complete lists of schools were made available for that purpose by the respective education superintendencies (*consejerías*). The stratified

sample design maintained the same sampling fraction by school type and by region within each metropolitan area, thus making the sample self-weighting (Kish 1967; Firebaugh 2007).

Within each school, all eligible students were included. Following CILS, “second generation” was defined as children with at least one foreign-born parent, whether born in Spain or brought to the country before age 12. By convention, those born in the receiving country are known as the second generation “proper,” while those brought at an early age from abroad are defined as the “1.5 generation” (Rumbaut 2004). It is well-known that most immigrant-origin youths in Spain attend public schools, but a significant minority has found its way into state-supported private schools, mostly Catholic affiliated.² As seen previously, Catholic school students have repeatedly been found to have higher aspirations and achievements in the United States; the present data allow us to test their relationship in a very different national context. Geographically, the sample was also stratified by region to insure that all schools in the metropolitan area were included. Because of the concentration of schools in the central cities, a simple random sample would have excluded those in many outlying areas. In total, 101 schools took part in the study; 68 public and 33 private. The present analysis is limited to the Madrid sample because data from Barcelona are still in the editing stage.

Basic secondary education in Spain is compulsory and its students are, overwhelmingly, in the early adolescent years. These two features are methodologically convenient because they guarantee that a school-drawn sample will be representative of the respective age cohort, as almost all of its members are still in school. Significant school abandonment in later years gradually reduces the correspondence between enrolled students and the respective age cohort. The study targeted the second and third years of basic secondary school (ESO in its Spanish acronym)³ because they include the population of average age 14 that was the target universe. Exceptionally, first-year students were admitted into the sample if they exceeded 13 years of age. This facilitated reaching the target sample size because of a concentration of older immigrant-origin youths in the earlier school years.

In addition to support from the Madrid educational authorities, it was necessary to obtain the consent of school principals and parents. To minimize non-response, the project team offered several incentives, including sharing data for the individual school on an anonymous basis with principals, and providing respondents with a modest incentive for questionnaire completion. Both school authorities and parents were assured of the anonymity of student responses. These procedures helped reduced refusals to less than 25 percent of contacted schools. The procedure employed to fill the questionnaire – assembling all eligible students in a classroom at the designated time under the supervision of project staff – insured that practically all eligible respondents in selected schools took part in the study. The total Madrid sample numbers 3,375 cases. Table 1 presents descriptive characteristics of the survey, labeled ILSEG in its Spanish acronym.⁴

Figures in the table show that the sample is composed, overwhelmingly, of members of the 1.5 generation. Children of foreign parentage actually born in Spain represent only 13 percent of the total. This result reflects the recency of immigration to the country and, hence,

²Private schools included in the sample are known in Spain as “concerted schools” (*colegios concertados*). These are private schools that receive state support and are expected to abide by state educational policies. The vast majority of these institutions are affiliated with the Catholic Church. A second type of private school that does not receive state support was not included in the sample because, due to their high tuitions, attendance is limited to children from high income families. The number of immigrant-origin students in these schools is known to be minimal.

³Enseñanza Secundaria Obligatoria.

⁴Investigación Longitudinal de la Segunda Generación.

the very young age of most of its offspring (Aparicio 2006; Cachón 2009). As seen in the table, the average length of residence for those born abroad is 6 years, indicating that they arrived in Spain at average age 8. Despite their foreign birth and recency of arrival, the overwhelming majority is already fluent in Spanish. This reflects the national origins of Spain-bound immigration that, as will be seen shortly, is composed mostly of flows from Latin America. Items indicating ability to speak, understand, read, and write the language are presented in Table 1. They are the standard components of indices of language ability in comparable research and have been aggregated, accordingly, into a Knowledge of Spanish Index (KSI) to be used in the following analysis.⁵

Table 1 also shows that most immigrant children live in conventional households with their two biological parents present. A significant minority, however, lives with the mothers or in other arrangements. Most of the variables used for testing these hypotheses are self-measured and, hence, drawn directly from questionnaire items. Exceptions are three composite measures that include the Knowledge of Spanish Index, previously mentioned, plus indices of Self-esteem and Familism. The first is Rosenberg's Self-esteem Scale, translated and adapted. Prior analyses (not shown) indicate that the Spanish version possesses a unidimensional factorial structure and a satisfactory level of internal consistency ($\alpha = .741$). The Familism Scale consists of three items, used previously in CILS and translated for the ILSEG survey; each item indicates a strong preference and loyalty for family members over outside relationships. Construct validity and internal consistency of this index are also satisfactory ($\alpha = .52$). Descriptive statistics for these and all other predictors used in the following analyses are presented in the Appendix.

Preliminary Findings

Table 2 presents preliminary frequencies for aspirations and expectations, broken down by three of the main predictors discussed previously: gender, parental education, and type of school attended. The survey instrument measured educational aspirations and expectations and occupational aspirations in closed ordinal categories. Occupational expectations were measured by an open question asking respondents what occupation they realistically expected to achieve as adults. This question was subsequently recoded into occupational prestige scores using the PRESCA-2 prestige scale developed by a team of Spanish researchers and previously validated with Spanish census and survey data (Carabaña and Gomez Bueno 1997). The PRESCA scale ranges in value from 65 to 240 in the Madrid sample; scores above 180 indicate professional-managerial or other high-level expectations. The table presents means and medians as well as percentage of scores above 180 for each predictor. It also includes the corresponding chi square and t- and F-tests of significance.

Educational aspirations – the level of education that respondents would ideally like to achieve – are fairly high, with more than half of the sample aiming at a college education. This level of aspirations is actually higher than that found in representative samples of Spanish adolescents. While in our sample those aspiring to a university degree or higher reach 53 percent, the comparable figure among Spaniards aged 15–17 is 42.5 percent (Lopez Blasco 2008: 109).⁶ Occupational aspirations follow a parallel course with 40 percent of our respondents targeting a professional-level career. Expectations – the educational and occupational levels that children of immigrants realistically expect to achieve – are a different story. Those who realistically expect a university or post-graduate degree drop to

⁵Past studies indicate that self-reported ability to speak, understand, read, and write a language is a reliable measure. Self-reports have been used repeatedly in past research as indicators of actual knowledge (see Hakuta 1986; Fernández and Nielsen 1986; Portes and Hao 2002).

⁶This figure comes from a representative sample of 5000 young persons in Spain, aged 15–29. The survey asked about aspirations only and no further details are provided about their determinants.

less than one-third of the sample, while occupational expectations fall to the low- middling range of the PRESCA-2 scale. The number expecting to achieve high-level professional occupations (scores above 180) is exactly the same as those expecting a university degree – 30 percent. Expectations do not represent “dreams,” but the goals that adolescents actually believe are within their reach. From that perspective, it is significant that 70 percent of immigrant adolescents disqualify themselves at an early age from a university-level education or professional career.

Within this general picture, there are major differences by gender, parental education, and school type. Whether aspirations or expectations are considered, girls exceed those of boys by a sizable and statistically significant margin. The difference in university and post-university career plans is about 10 percentage points in favor of females, increasing to 13 percent in professional-level aspirations, and a notable 26-point gap in median expected occupational status. All of these differences are highly significant. This pattern of consistent female advantage in educational and occupational plans reproduces that repeatedly found in samples of American adolescents, including second generation youths.

As in the United States, parental human capital is also strongly related to children’s ambition. At the bivariate level, both father’s and mother’s education have significant effects on educational plans. The major gap is between parents with a secondary education or less and those with university training. While slightly over half of children of parents in the first category aspired to a university degree, among children of the university-trained, the figure rose to over 70 percent. Similarly, a gap of 20 points or more in university-level expectations separates the two categories of parents. Occupational aspirations and expectations are significantly influenced by father’s human capital but much less so by mother’s. The latter’s effect on professional-level aspirations is actually insignificant.

Private-school students display a consistent advantage over their public school peers in both aspirations and expectations. All these differences are statistically significant and include 10-point gaps in educational aspirations and expectations and a similar difference in those expecting high-level professional careers (PRESCA scores above 180). As seen previously, most private schools in Spain are Catholic-affiliated. Hence, there is a close parallel between these findings and those reported in the United States where Catholic school students also display a consistent advantage in aspirations and achievement. It remains to be seen whether these preliminary effects hold when other variables enter the analysis.

Multivariate Results

a. Place of Birth and Nationality—Tables 3a and 3b present the distribution of the sample by national origins plus multivariate regression results of educational and occupational aspirations and expectations by nationality. The purpose of these tables is to illustrate the wide diversity of national origins in the Spanish second generation and to examine differences between the foreign-born of different nationalities and the native-born second generation.. Coefficients presented herein are net effects, controlling for the array of predictors mentioned previously and whose own effects will be examined in the next section. Over sixty different foreign-born groups were identified in the survey. The tables present the largest nationalities individually and combine the rest by world regions. As was mentioned previously, and is made evident in the tables, Latin American groups dominate this population.

Because educational aspirations and expectations were coded as four-step ordinal variables, ordered multinomial logistic regression was used for the analysis of their determinants. Figures in Table 3 are net effects from these regressions with listwise deletion of missing data. Alternative models (not shown), including binomial logistic regression with

dichotomized dependent variables and various imputation routines for missing values produced essentially the same results as reported herein. Listwise deletion is preferable methodologically because it yields, in most instances, unbiased regression coefficients and conservative standard errors. Imputation routines tend to inflate the *N*s and, hence, overestimate levels of statistical significance (Firebaugh 2007; Singleton and Straits 2005: Ch. 14). Logistic coefficients can be readily transformed into relative odds by exponentiation. We do this and present results in the second column of each model.

The main story in Table 3a is that, with some exceptions, foreign-born groups have lower educational aspirations and expectations than the native-born. This result corresponds to that reported for the U.S on the basis of CILS data (Portes and Rumbaut, 2001: Ch. 8) Since these are net effects, results cannot be attributed to varying levels of parental education, years of residence, or other factors controlled by the model. Within this general picture, we also find major contrasts. Children of Bolivian, Ecuadoran, Peruvian, Dominican, Moroccan, and Rumanian origins have educational plans significantly inferior, on average, to the native-born. At the opposite end, Argentines, West Europeans, and others from the rest of Latin America are not significantly different from the Spain-born group. Overall, children born in relatively more developed or wealthier countries tend to have higher aspirations and expectations, although there are exceptions like youths from Equatorial Guinea.

As seen in Table 2, occupational aspirations and expectations were measured differently – the first by dichotomizing a closed item listing various occupational options into “Professional-Executive” vs. “Other”; the second by coding open-ended response into prestige scores using the PRESCA-2 scale. Accordingly, determinants of occupational aspirations were estimated using a binomial logistic regression routine and those of occupational expectations with OLS. Least square coefficients in Table 3b are unstandardized effects. As before, missing data were handled by listwise deletion and both models control for all other factors.

The principal result in Table 3b is that nationality differences in occupational plans are quite limited and vary significantly from those in educational aspirations. Most foreign-born groups do not differ much from the native-born, and those who do are not the same as identified previously. In this case, Argentine, Polish, and Rumanian youths display the lowest occupational aspirations. Occupational expectations do not vary much either. Coefficients, both positive and negative, are quite close to the native-born; only Colombians differ significantly and, unexpectedly, in a positive direction. Barring these minor variations, we conclude that the hypothesized effects of ethnicity and nationality on ambition are erratic, holding for education but not for occupation. Youths from different national origins have similar career goals, especially at the realistic level of expectations. Apparently, in Spain, optimism is easier to sustain with regard to the educational system than to the labor market. The “flatter” profile of career goals across all nationalities probably reflects a common understanding of the restricted access to elite positions for immigrant-origin youths, foreign- and native-born alike.

b. Other Effects—Having examined place of birth effects, we now consider the influence of other hypothesized determinants and correlates of ambition. Results come from regressions similar to those described previously, except that in lieu of individual nationalities, we substitute a dummy variable for place of birth (Spain, coded 1); the resulting coefficients estimate the net effect of belonging to the second generation proper. Although the ILSEG survey contains measures of father’s and mother’s occupation, we omit them from the following models because of excessive missing data in these variables and high collinearity with the corresponding measures of education. Alternative specifications

(not shown) using both parental education and occupation do not increase explained variance because these measures are largely substitutes for each other.⁷

Table 4 presents results of ordered multinomial regressions of educational aspirations and expectations with listwise deletion of missing data. Alternative specifications using imputation routines do not change results in any significant way. Coefficients are exponentiated for ease of interpretation. The first finding of note is how similar the pattern of effects is for aspirations and expectations. While as seen previously, there is a significant gap in the absolute levels of both variables, their determinants and correlates are basically the same. Findings are both complex and revealing and it will prove helpful to summarize them briefly before commenting on how they bear on the hypotheses:

- Gender has a strong net effect on both dependent variables in favor of females.
- The effect of age is still stronger, exceeding ten times its standard error. Older students have significantly lower educational goals.
- Year in school has a strong positive effect indicating that students in more advanced grades (controlling for age) have a more optimistic outlook toward the future.
- Spanish birth has a positive, albeit moderate influence. On the other hand, years of residence in Spain yield a comparable *negative* effect, significantly reducing aspirations and expectations.
- Public school students are at a disadvantage, although the net effect on both dependent variables is modest.
- Family composition has *no* effect on ambition. Students growing up with their two natural parents are no different from others in terms of ambition.
- Father's and mother's education have moderately positive effects. These are only observable, however, when parents have a university degree. The effects of father's education approximately double in size and strength those of mother's.
- Knowledge of Spanish has a moderate positive influence on both dependent variables.
- Having friends who plan to go to the university has an extraordinarily strong positive effect. The odds of having high aspirations or expectations are almost 3-to-1 in favor of those whose friends have similar levels of ambition.
- Self-esteem and familism have opposite relationships with the dependent variables. Self-esteem associates strongly with higher aspirations and, especially expectations, but the familism coefficients are negative on both variables.

Several of these effects, including those of gender, parental human capital, and language ability were expected. Others, however, were not or run contrary to expectations. Noteworthy is the absence of effects of family composition that fails to replicate results based on American data. In Spain, living with both natural parents has no apparent influence on ambition. The negative influence of age has also been observed in past studies, but not with this strength. This means that older students who are still confined to basic secondary school give up on lofty plans and settle instead for much lower educational goals.

The opposite effects of native birth and length of residence in Spain are puzzling and deserve additional investigation. We considered the possibility that these results could be

⁷This feature will prove useful in the construction of a joint parental socio-economic status index in the subsequent analysis.

due to high collinearity between both variables ($r = .70$) since Spanish-born youths are those with the longest residence in the country. However, additional regressions (not shown) restricted to foreign-born respondents replicate the negative and significant effect of length of Spanish residence. These coefficients confirm the previously noted advantage of the second over the 1.5 generation but indicate, that, among the foreign-born, more years in the country do not help in catching up. This result replicates that found by St.-Hilaire (2002) among Mexican-Americans in the U.S. and suggests that greater knowledge of host society can lead to greater pessimism concerning opportunities for advancement in it.⁸

The very strong influence of friends' college plans is in line with the emphasis of status attainment models in the United States on peer influence on aspirations (Haller and Portes 1973; Sewell and Hauser 1972; Hao and Pong 2008). Clearly, however, the causal direction of these effects is ambiguous. With cross-sectional data, it is difficult to establish how much of the effect is due to self-selection into friendships with like-minded peers. We consider this problem and estimate models taking this reciprocal influence into account in the final section.

A similar causal ambiguity exists in the observed relationships with the two social psychological scales. It is as likely, for example, that self-esteem leads to higher ambition that the latter raises self-images. The strong association between both variables supports findings from prior U.S. studies, including CILS, where similar associations were observed (Portes and Rumbaut 2001: Ch. 8; Rumbaut and Feliciano 2008). On the other hand, the negative net coefficient of familism on educational plans contradicts the original hypothesis that tighter family bonds and sentiments should lead to loftier goals. Contrary to that hypothesis, it is students with "looser" psychological connections to parents and kin who appear better equipped to aspire and expect higher education. Tighter family bonds may have, in this case, the unexpected consequence of constraining the exploration of opportunities outside the home.⁹

Regressions of occupational aspirations and expectations on the same set of predictors bear similarities to those just presented, but also show some important differences. They also differ somewhat from one another, in part, because the estimating models are not the same. For this reason, they are discussed separately. Determinants and correlates of occupational aspirations are estimated by binomial logistic regression with listwise deletion. Relative odds are again included for ease of interpretation. Results are presented in the first columns of Table 5. Once again, gender has a strong effect: girls are almost 2-to-1 more likely than boys to harbor professional-level aspirations. The influence of age is also negative and very strong, with the corresponding coefficient exceeding seven times its standard error. Attending a public school again puts students at a disadvantage, although this effect is only moderate.

Knowledge of Spanish and parental human capital continue to display positive effects although, in the case of the latter, it is only father's education that makes a difference; mother's education has no effect. Relative to sex and age, none of these coefficients is particularly strong. On the other hand, friends' educational plans again have a strong positive influence, quadrupling its standard error. The two social psychological variables have the same opposite associations with occupational aspirations observed previously, although their strength is relatively lower. Relative to educational aspirations, the principal

⁸For an analysis of similar patterns among Mexican-origin youths, see Lopez and Szanton-Salazar (2001) and Telles and Ortiz (2008).

⁹Certain low-achieving immigrant groups in the United States have also been found to be highly familistic. See Stanton-Salazar (2001) and Rumbaut (2005).

difference in these results is the absence of effects of either place of birth or length of Spanish residence. The second-generation proper derives *no* advantage in occupational aspirations and years in the country do not reduce them among the 1.5 generation. These results are in line with those already noted in Table 3b.

Determinants of occupational expectations are estimated, as before, with OLS. Figures in Table 5 are unstandardized regression coefficients indicating the net change in PRESCA prestige scores per unit change in each predictor. For brevity's sake, we do not discuss these results in detail since they closely mirror those observed for occupational aspirations. Again Spanish birth does not confer an advantage in expected labor market position, nor does length of residence in the country bring it down. Taking these results in conjunction with those for education, they restate the previous conclusion that disparities between the second and 1.5 generations in schooling plans and ambition do not carry over to the labor market where both groups aim at and expect the same (mostly modest) outcomes. The relative uniformity in occupational goals among children of immigrants in Spain contrasts with the wide differences by national origins observed in the United States (Portes, Fernández-Kelly, and Haller 2009; Rumbaut 2005; Feliciano 2006). They suggest a perception of the educational system in Spain as more open than the labor market, where elite positions are seen as off-limits to most immigrant-origin youths.

As in the case of education, family structure makes no difference in occupational plans. This contradicts again the strong effect of two-parent families in prior American studies. In the Spanish case, age, sex, and parental human capital play key roles as exogenous variables with linguistic ability, school type, and friends' educational plans serving as important intervening factors. We seek to bring these disparate results together into a unified framework below.

c. Nationality and Interaction Effects—Before bringing results of the analysis together, it is important to address two other considerations. First, in Tables 3a and 3b, we examined the influence of place of birth by comparing the Spanish-born with the foreign-born of all major nationalities. However, the native-born are also diverse in terms of the national origins of their parents. It is possible that specific national origins have significant effects on the dependent variables, regardless of the child's birthplace. A second, subsidiary question is what factors may account for the influence of birthplace or national origins on aspirations and expectations. In other words, to what extent are the effects due to the interactions of these variables with other key predictors.

We address the first question by constructing a new variable – National Origin – defined as follows: a) for the foreign-born, national origin is their country of birth; b) for the Spanish-born, it is the country of birth of the parents, if both are present and foreign-born; c) for native-born children of mixed parentage (one Spanish-born parent), national origin is the country of birth of the foreign parent; d) for those living with only one parent, it is the country of birth of that parent. We then constructed dummy variables for all nationalities numbering at least one hundred cases, grouping the rest into several world regions. These dummies were then added to the array of predictors in Tables 4 and 5. Results of this exercise contradict, without exception, the hypothesis of significant national origins effects independent of birthplace. Results are omitted for brevity and because not a single one of the 15 such variables added to each model (a total of 60 new coefficients) proved statistically reliable. Hence, we conclude that the important difference is not by national origin, but by birthplace, that is, between the 1.5 and the second generation proper. As seen previously, this difference is quite sizable for educational aspirations and expectations, but does not extend to occupations.

To address the second question, we interacted birthplace with all other major predictors identified in the previous analysis. These include age, sex, knowledge of Spanish, family structure, and parental education. None of these interactions had a significant effect on occupational aspirations or expectations, confirming the irrelevance of place of birth for these variables. The analysis uncovered, however, one noteworthy interaction effect affecting educational plans: the joint influence of birthplace and family structure. With other variables controlled, children born in Spain and living with both natural parents had significantly higher educational goals. This interaction effect is statistically significant for both aspirations (Wald= 8.745 $p<.01$) and expectations (Wald:=9.256, $p<.002$).

With this interaction controlled, the main effect of birthplace ceases to be significant. This indicates that the native-born advantage in educational goals derives primarily from growing up in families with both parents present. As seen previously, this variable does not replicate its strong main effect on aspirations found in the United States; instead, in the Spanish case, it does so in only in conjunction with native birth. For the foreign-born, it has no effect.

Structural Equation Models

The preceding findings test the original hypotheses, but do not provide a tight theoretical statement of interrelationships between variables. For this purpose, we turn to structural equation modeling (SEM). All theory implies simplification and, for this reason, we do not include all the variables in the preceding models and combine others into single indices. A key exogenous variable, parental human capital, will be indexed by the unit-weighted sum of standardized scores of father's and mother's education and occupational status; only valid scores are used and the sum is divided by them, yielding an index standardized to mean 0 and standard deviation 1. In the following models, this index is labeled Parental SES. Its range and other characteristics are presented in the Appendix.

The final outcome of the model is a latent variable -- "Ambition" -- posited to affect all measured indicators of aspirations and expectations directly. Correlated errors between the educational indicators and the occupational ones indicate their common dependence on factors other than Ambition. For the models to converge, the effect of Ambition on Occupational Expectations is fixed at 1. The variable School Year is dropped, given its ambiguous theoretical meaning and a range of variation (1st to 3rd) that is an artifact of the research design. The model does retain Type of School (public vs. private) as a meaningful endogenous variable, comparable in its effects to those observed in the United States and elsewhere.

To avoid clutter, the model does not include individual national origins. We know from the prior analysis that most 1.5 groups have lower educational plans than the native-born; we also know that national origins have no effect, apart from birthplace. Place of birth and length of Spanish residence appear as reasonable candidates for inclusion, except that the high collinearity between them lead, when inserted into the same model, to nonsensical results. We retain length of Spanish residence as the best predictor because of its interval metric and coverage of the full sample; for the native-born, this variable equals their chronological age.

The latent variable, Ambition, represents the theoretical end-point of our analysis. The SEM methodology provides us with statistical guidance for constructing a "best fitting" model (Bollen 1989; Maruyama 1998). However, we opted for theoretical considerations in the selection of both predictors and causal paths. Figure 1 presents the best-fitting recursive model based on these criteria. The four exogenous variables are easily defensible as causally prior to all endogenous ones. While additional causal paths could be added, the ones posited are both theoretically justifiable and parsimonious. The model's fit to the data is good: NFI

= .920; TLI = .851; RMSEA = .057; PRATIO = .500 (Maruyama 1998). R^2 for the key dependent variable, Ambition, is a substantial .241 and all posited direct effects are significant at the .001 level.

Particularly strong are the paths from Age, negative and over ten times its standard error, and Friends' College Plans – positive and about twelve times its S. E. The model's good fit owes to the small size of omitted direct paths. For example, the *total* standardized effects of Length of Spanish Residence and School Type on Ambition are less than a fourth of those of Parental SES and Friends' Plans (.051 and .026 to .201 and .248, respectively). Hence, the negative net influence of Length of Residence, observed in the preceding regressions, largely disappears when other variables are taken into account. The elimination of such direct effects contributes to the model's parsimony.

Figure 1 offers a readily interpretable theory of the determinants of educational and occupational Ambition in the Spanish context. It is a function of age, sex, and parental human capital, along with the influence of endogenous factors also accounted for by the model – Knowledge of Spanish and Friends' Plans to attend college. The principal shortcoming of the model is the patently untenable assumption that the causal path from Friends' Plans to Ambition is recursive. Not only are adolescents with specific levels of aspirations prone to select like-minded peers as friends, but their aspirations are likely to influence friends, as well as vice versa. The real process is more likely to resemble a causal loop, rather than a one-way causal effect. The ILSEG data lacks the necessary information to independently estimate these reciprocal peer influences on ambition since Friends' Plans are self-reported. In an attempt to approach the probable mutual influence between these variables, we added a new causal path to the original model and examine how it affects its overall fit. This revised model is presented in Figure 2.

After 25 iterations, this model converged with $\chi^2 = 215.561$ and 31 degrees of freedom: $\chi^2/d.f. = 6.92$. This is not ideal, but it is not bad either. Other indicators of model fit are equal or better to those in Figure 1: NFI = .956, TLI = .920; RMSEA = .042; and PRATIO = .470. The R^2 for Ambition increases to a substantial .385 and that for Friends' Plans triples to .062. The estimated reciprocal effects of the two variables are positive and highly significant, which makes sense theoretically. The principal result of allowing for this non-recursive effect is to substantially reduce the direct positive influence of Parental SES on Ambition and to render the Gender effect insignificant. In essence, the estimation routine significantly reduces the effects of exogenous variables in order to accommodate the strong reciprocal interplay between self and friends' levels of ambition.

Another reversal is the influence of Knowledge of Spanish on Friends' College Plans which becomes negative and significant. While seemingly nonsensical, this coefficient recaptures the earlier theme of a net negative influence of Length of Residence on aspirations. In the model, Length of Residence does not have a direct path to Friends' Plans, but influences the latter indirectly through its effect on language knowledge. Despite this reversal, the overall total effect of Knowledge of Spanish on respondent's Ambition is highly positive (.174) and its indirect effect on Friends' Plans is also positive (.101). This indicates that only *after* reciprocal peer influences on ambition are controlled can the negative influence of length of residence through language knowledge emerge. The better statistical fit of Model 2 and its theoretical plausibility, as it incorporates the reciprocal causal loop between ego and friends' plans, would recommend it as the preferred final synthesis. However, the data limitations noted previously and anomalies with model estimation due to them lead us to revert to the recursive model as the best summary statement of results at the present stage. Future longitudinal data will allow us to estimate non-recursive models more reliably.

Conclusion

The strong relationship between aspirations and achievement is arguably one of the best established facts in social science. The rationale is obvious: if a young person aims at some lofty goal, she may not achieve it; but if she does not aim high in the first place, she will surely not get there. Stated in this form, ambition becomes a prerequisite – a necessary condition – for achievement. Although this logic is clear, it does not suffice to establish the fact. It could have been that so many factors intervene between adolescent aspirations and final outcomes as to make the relationship uncertain, or have it disappear once these factors are controlled. The empirical finding that it does not, that is that early ambition remains a resilient predictor of later attainment, is the golden nugget established by many years of research on the topic.

This is the finding that has encouraged so many investigators to focus on adolescent aspirations and expectations as a subject worth studying. Were they simply self-contained attitudes, they would not be worth all the attention. In the present study, we have examined how these goals manifest themselves in a new, important, and so far understudied population. The Spanish second generation is “new” both in its historical origins and in the absence of detailed empirical analysis of its goals for the future. It is important because of its size, rate of growth, and, hence, future influence on Spanish society. Guided by the past literature on the topic, we have investigated a series of hypotheses concerning correlates and determinants of adolescent ambition with mixed results. Several of the relationships uncovered elsewhere are also present among children of immigrants in Spain, but others are not. We will not summarize what these are since they have been repeatedly noted in the preceding sections. Instead, we will focus on comparable evidence from the United States and the major theoretical and practical implications of the final model.

The main point of note concerning differences between present results and those obtained by prior studies in the United States is the notable gap in both aspirations and expectations. In the CILS surveys, 66.5 percent of second generation adolescents in the U.S. aspired to a post-graduate degree and 44 percent expected to achieve it (Portes and Rumbaut 2001: 217). The comparable figures in our Madrid sample are 9.3 and 5.1 percent. Even if we added those aiming at a basic university degree (see Table 2), the second generation goals in Spain would still fall short – 52.8 percent aspired to a college degree and only 32.6 expected to achieve it. Combining these differences with the “flat” occupational goals found among all immigrant-origin youths in Madrid, we can conclude that ambition levels in this population are relatively low, with obvious negative repercussions for future achievement. While the existing literature on native-parentage youth in Spain does not distinguish between aspirations and expectations, the reported aspirational levels are also modest, with less than half of young Spaniards aiming at a college education (Lopez Blasco 2008). In that respect, immigrant-origin youths in Spain may not be too different from the surrounding native-parentage population

Turning to the final model, results are important as much for what they say as for what they omit. The model indicates that it is possible to synthesize the diverse influences of father’s and mother’s education and occupation into a single powerful causal factor. While the preceding regressions show that father’s and mother’s human capital have different effects, the possibility of integrating them into a unitary index is important both for theoretical parsimony and for future policy. Similarly, it is possible to integrate the outcomes of interest into a single latent variable—ambition. While empirical results show that there are differences in aspirations and expectations, dealing with all of them in detail would hopelessly clutter a single model and obscure major causal trends. The model’s good fit to

the data supports the notion that it is possible to abstract these basic trends from the evidence.

The superior ambition of females is also captured by the model, confirming results obtained in the U.S. and elsewhere. The recursive model indicates that this gender effect operates directly and also through peers' educational plans. Age has a strong negative effect, comparable to that found in CILS among second generation youths in America. It is worth stressing that this is the influence of age *relative* to the average age of the respective grade cohort (Portes and Rumbaut 2001: Ch. 6). In other words, it is not older age *per se* that lowers aspirations, but the situation of finding oneself in the same school year with younger peers. This seems to have a discouraging effect, leading to lower educational and occupational goals.

The two most important effects, from a policy viewpoint, are those of knowledge of Spanish and friends' plans. As in the United States, knowledge of the host country language encourages ambition. This is a useful finding for policy setters and institutions concerned with the successful integration of the second generation: the better they are taught the host language, the more likely they will aim at higher education and higher-status jobs. As found also in the United States, school peers play a decisive role. Whether this is an unidirectional effect, as portrayed in the earlier status attainment models (Sewell *et. al.* 1969), or a causal loop (Duncan *et. al.* 1968), peer influences on aspirations represent a powerful, often decisive, influence.

This finding is useful in guiding policy interventions aimed at disadvantaged students: their social context, social relationships, and the extent to which they can identify "role models" in their midst can be expected to strongly mold their orientations and ambitions toward the future. While the existing literature on native-parentage youth in Spain does not distinguish between aspirations and expectations, the reported aspirational levels are also modest, with less than half of young Spaniards aiming at a college education (Lopez Blasco 2008). In that respect, immigrant-origin youths in Spain may not be too different from the surrounding native-parentage population.

While actual levels of aspirations and expectations in Spain differ notably from those registered in the United States, the causal process leading to them is similar. Demographic factors, parental SES, language skills, and what used to be called "significant other influences" (Haller and Portes 1973) emerge again as key determinants, fostering early upward mobility and better chances for adult achievement in the second generation. Knowledge of these determinants has theoretical as well as practical implications as it can re-focus efforts to raise the generally modest levels of aspirations found among immigrant-origin, as well as native-parentage, young people in Spain.

BIBLIOGRAPHY

- Andres, Lesley; Adamuti-Trache, Maria; Yoon, Ee-Seul; Pidgeon, Michelle; Thomsen, Jens Peter. Educational Expectations, Parental Social Class, Gender, and Postsecondary Attainment: A 10-Year Perspective. *Youth Society*. 2007; 39:135–163.
- Aparicio, Rosa; Tornos, Andres. Final report of the project Diagnostics of Juvenile Immigrant Groups in Madrid. Institute of Migration Studies, University of Comillas; 2008. Aproximación al Estudio de las Bandas Latinas en Madrid.
- Aparicio, Rosa. Hijos de Inmigrantes se Hacen Adultos. Madrid: Observatorio Permanente de la Inmigración, Ministerio de Trabajo e Inmigración; 2006.
- Bodovski, Katerina; Benavot, Aaron. Unequal Educational Outcomes among First-Generation Immigrants: The Case of Youth from the Former Soviet Union in Israel. *Research in Comparative and International Education*. 2006; 1:253–270.

- Bohon, Stephanie A.; Johnson, Monica Kirkpatrick; Gorman, Bridget K. College Aspirations and Expectations among Latino Adolescents in the United States. *Social Problems*. 2006; 53:207–225.
- Bollen, Kenneth A. *Structural Equation Models with Latent Variables*. New York: John Wiley and Sons; 1989.
- Buchmann, Claudia; Dalton, Ben. Interpersonal Influences and Educational Aspirations in 12 Countries: The Importance of Institutional Context. *Sociology of Education*. 2002; 75:99–122.
- Cachon, Lorenzo. *La España Inmigrante*. Barcelona: Anthropos; 2009.
- Calavita, Kitty. *Immigrants at the Margins: Law, Race, and Exclusion in Southern Europe*. Cambridge, UK: Cambridge University Press; 2005.
- Carabaña, Julio; Bueno, Carmuca Gomez. *Escalas de Prestigio Profesional*. Madrid: Centro de Investigaciones Sociológicas; 1997.
- Carvajal, Gomez; Isabel, Maria. Evolución de las Cifras de Extranjeros con Tarjeta de Autorización en Vigor. In: Aja, E.; Arango, J., editors. *Veinte Años de Inmigración en España: Perspectivas Jurídicas*. Barcelona: Fundación CIDOB; 2006. p. 85-112.
- Coleman, James S. Social Capital in the Creation of Human Capital. *American Journal of Sociology*. 1988; 94(Supplement):S95–S121.
- Coleman, James S. The Rational Reconstruction of Society. *American Sociological Review*. 1993; 58:1–15.
- Diez Nicolas, Juan. *Las Dos Caras de la Inmigración*. Madrid: Observatorio Permanente de la Inmigración, Ministerio de Trabajo e Inmigración; 2006.
- Duncan, Otis; Haller, Archibald O.; Portes, Alejandro. Peer Influences on Aspirations: A Re-interpretation. *American Journal of Sociology*. 1968 Sep.74:119–137.
- Feliciano, Cynthia; Rumbaut, Rubén. Gendered Paths: Educational and Occupational Expectations and Outcomes among Adult Children of Immigrants. *Ethnic and Racial Studies*. 2005; 28:1087–1118.
- Feliciano, Cynthia. Beyond the Family: The Influence of Premigration Group Status on the Educational Expectations of Immigrants' Children. *Sociology of Education*. 2006; 79:281–303.
- Fernández, Roberto; Nielsen, François. Bilingualism and Hispanic Scholastic Achievement: Some Baseline Results. *Social Science Research*. 1986; 15:43–70.
- Fernández-Kelly, Patricia; Konczal, Lisa. 'Murdering the Alphabet': Identity and Entrepreneurship among Second Generation Cubans, West Indians, and Central Americans. *Ethnic and Racial Studies*. 2005 Nov.28:1153–1181.
- Firebaugh, Glenn. *Seven Rules for Social Research*. Princeton, NJ: Princeton University Press; 2008.
- Gualda, Estrella. Aspiraciones y Expectativas Educativas y Laborales de Jovenes Inmigrantes e Hijos de Inmigrantes Escolarizados. Paper presented at the VI Congress of Migration to Spain; La Coruña, Galicia. 2009 Sep.
- Hakuta, Kenji. *Mirror of Language: The Debate on Bilingualism*. New York: Basic Books; 1986.
- Haller, Archibald O.; Portes, Alejandro. Status Attainment Processes. *Sociology of Education*. 1973; 46:51–91.
- Haller, Archibald O. Reflections on the Social Psychology of Status Attainment. In: Hauser, RM.; Mechanic, D.; Haller, AO.; Hauser, TS., editors. *Social Structure and Behavior: Essays in Honor of William H. Sewell*. New York: Academic Press; 1982. p. 3-27.
- Haller, William; Portes, Alejandro; Scott, Lynch. Dreams Fulfilled, Dreams Shattered: Determinants of Segmented Assimilation in the Second Generation. *Social Forces*. 2010 (forthcoming).
- Hao, Lingxin; Bonstead-Bruns, Melissa. Parent-Child Differences in Educational Expectations and the Academic Achievement of Immigrant and Native Students. *Sociology of Education*. 1998; 71:175–198.
- Hao, Lingxin; Pong, Suet-ling. The Role of Schools in the Upward Mobility of Disadvantaged Immigrant Children. *Annals of the American Academy of Political and Social Sciences*. 2008 Nov.620:62–89.
- Harris, Angel; Jamison, Kenneth M.; Trujillo, Monica H. Disparities in the Educational Success of Immigrants: An Assessment of the Immigrant Effect for Asians and Latinos. *Annals of the American Academy of Political and Social Sciences*. 2008 Nov.620:90–114.

- Inoue, Yukiko. *The Educational and Occupational Attainment Process: The Role of Adolescent Status Aspirations*. Washington, D.C.: University Press of America; 1999.
- Kao, Grace; Tienda, Marta. Educational Aspirations of Minority Youth. *American Journal of Education*. 1998; 106:349–384.
- Kerckhoff, Alan C. *The Status Attainment Process: Socialization or Allocation*. Miami, FL: Presidential Address, Southern Sociological Association; 1976.
- Kish, Leslie. *Survey Sampling*. New York: Wiley; 1967.
- Lopez, David E.; Stanton-Salazar, Ricardo D. Mexican-Americans: A Second Generation at Risk. In: Rumbaut, RG.; Portes, A., editors. *Ethnicities: Children of Immigrants in America*. Berkeley, CA: University of California Press and Russell Sage Foundation; 2001. p. 57-90.
- Lopez Blasco, Antonio. *Jovenes en una Sociedad Cambiante: Demografía y Transiciones a la Vida Adulta*. Madrid: Instituto de la Juventud; 2008.
- Louie, Vivian. Second-Generation Pessimism and Optimism: How Chinese and Dominicans Understand Education and Mobility through Ethnic and Transnational Orientations. *International Migration Review*. 2006; 40:537–572.
- Marjoribanks, Kevin. Learning Environments, Family Contexts, Educational Aspirations and Attainment: A Moderation-Mediation Model Extended. *Learning Environments Research*. 2003; 6:247–265.
- Maruyama, Geoffrey M. *Basics of Structural Equation Modeling*. Thousand Oaks, CA: Sage; 1998.
- Menjívar, Cecilia. Educational Hopes, Documented Dreams: Guatemalan and Salvadoran Immigrants' Legality and Educational Prospects. *The ANNALS of the American Academy of Political and Social Science*. 2008; 620:177–193.
- Observatorio Permanente de la Inmigración. *Statistical Bulletin on Foreigners and Immigration to Spain #19*. Madrid: Ministerio de Trabajo e Inmigración; 2009. <http://extranjeros.mtin.es>
- Pajares, Miguel. La Inmigración en España: Sus Causas y las Políticas con las que se Gestiona. In: Checa Olmos, F.; Checa, C.; Arjona, A., editors. *Las Migraciones en el Mundo*. Barcelona: Icoria Antrazyt; 2009. p. 175-192.
- Portes, Alejandro; Hao, Lingxin. The Price of Uniformity: Language, Family, and Personality Adjustment in the Immigrant Second Generation. *Ethnic and Racial Studies*. 2002 Nov.25:889–912.
- Portes, Alejandro; MacLeod, Dag. Educational Progress of Children of Immigrants: The Roles of Class, Ethnicity, and School Context. *Sociology of Education*. 1996; 69:255–275.
- Portes, Alejandro; Rumbaut, Ruben G. *Legacies: The Story of the Immigrant Second Generation*. Berkeley, CA: University of California Press and Russell Sage Foundation; 2001.
- Portes, Alejandro; Fernández-Kelly, Patricia; Haller, William. The Adaptation of the Immigrant Second Generation in America: A Theoretical Overview and Recent Evidence. *Journal of Ethnic and Migration Studies*. 2009 Aug.35:1077–1104.
- Portes, Alejandro; McLeod, Samuel A.; Parker, Robert N. Immigrant Aspirations. *Sociology of Education*. 1978 Oct.51:241–260.
- Rumbaut, Rubén G. Ages, Life Stages, and Generational Cohorts: Decomposing the Immigrant First and Second Generations in the United States. *International Migration Review*. 2004 Fall;38:1160–1205.
- Rumbaut, Rubén G. Turning Points in the Transition to Adulthood: Determinants of Educational Attainment, Incarceration, and Early Childbearing among Children of Immigrants. *Ethnic and Racial Studies*. 2005 Nov.28:1041–1086.
- Sewell, William; Hauser, Robert M. Causes and Consequences of Higher Education: Models of the Status Attainment Process. *American Journal of Agricultural Economics*. 1972 Dec.54:851–861.
- Sewell, William H.; Haller, Archibald O.; Portes, Alejandro. The Educational and Early Occupational Attainment Process. *American Sociological Review*. 1969; 34:82–92.
- Singleton, Royce A.; Straits, Bruce C. *Approaches to Social Research*. Fourth Edition. New York: Oxford University Press; 2005.
- Sotelo, Ignacio. La Gran Contradicción Europea. *El País (Madrid)*. 2005 Oct 30.:15.

- St-Hilaire, Aonghas. The Social Adaptation of Children of Mexican Immigrants: Educational Aspirations beyond Junior High School. *Social Science Quarterly*. 2002; 83:1026–1043.
- Strand, Steve; Winston, Joe. Educational Aspirations in Inner City Schools. *Educational Studies*. 2008; 34:249.
- Telles, Edward E.; Ortiz, Vilma. *Generations of Exclusion: Mexican-Americans, Assimilation, and Race*. New York: Russell Sage Foundation; 2008.

Appendix

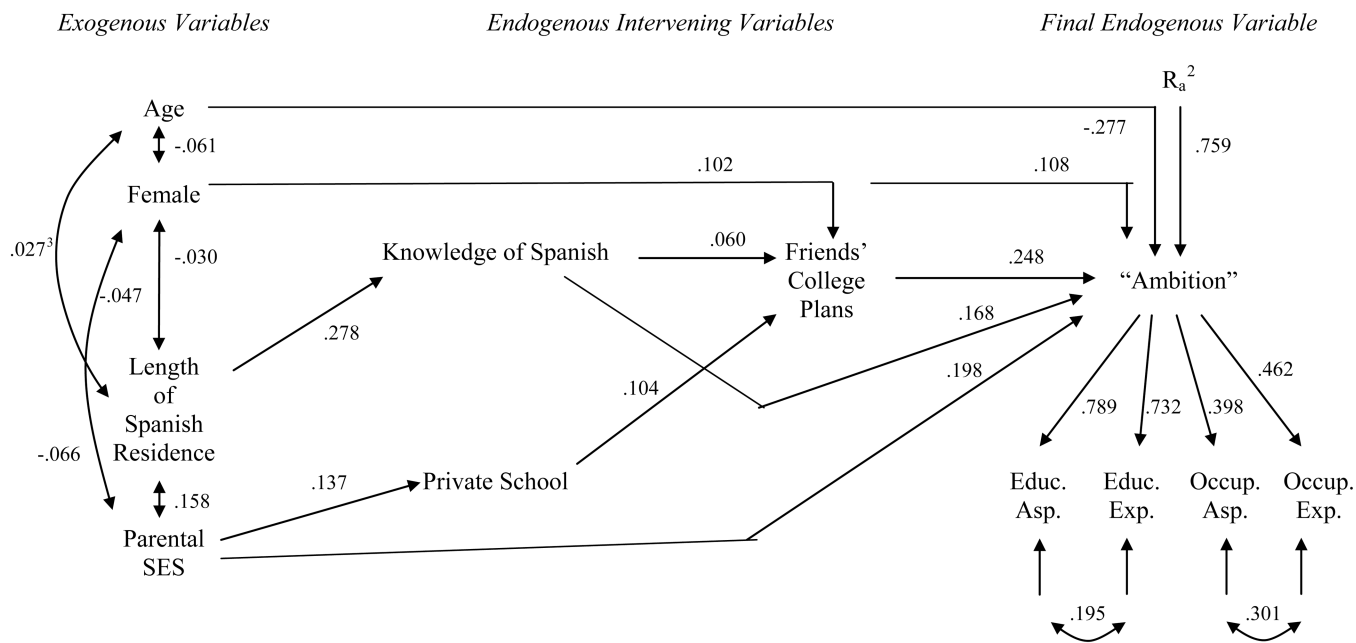
Variables Used in the Analysis:

	Mean	Median	Standard Deviation	Range
Endogenous:				
Knowledge of Spanish Index (KSI)	3.65	4.00	0.52	1.00 – 4.00
Unit-weighted sum of ability to speak, understand, read, and write Spanish				
Friends' College Plans	0.17	0	0.37	0 – 1
Most friends plan to attend college = 1				
All others = 0				
Year in School	2.28	2.00	0.62	1.00 – 4.00
First year of ESO = 1				
Second year of ESO = 2				
Third year of ESO = 3				
Fourth year of ESO = 4				
School Type	%			
Public	85.2			
Private	14.8			
Exogenous:				
<i>Sociodemographic</i>				
	Mean	Median	Standard Deviation	Range
Age (in years)	14.36	14.00	1.13	12.00 – 19.00
Sex	0.52	1.00	0.50	0 – 1
Female = 1				
Male = 0				
Birthplace	0.13	0	0.34	0 – 1
Spain = 1				
All others = 0				
Length of Residence in Spain (in years)	6.69	6.00	3.90	0 – 17.00
<i>Family Characteristics</i>				
Family Structure	0.67	1.0	0.47	0 – 1
Both biological parents present = 1				
All other family types = 0				
Father's Education				
Secondary = 1; Others = 0				
	0.30	0	0.46	0 – 1
University = 1; Others = 0				
	0.10	0	0.30	0 – 1
Mother's Education				

Variables Used in the Analysis:				
	Mean	Median	Standard Deviation	Range
Secondary = 1; Others = 0	0.34	0	0.47	0 – 1
University = 1; Others = 0	0.12	0	0.32	0 – 1
Parental Socioeconomic Status	-0.004	-.102	0.743	-1.62 – 4.75
Standardized sum of father's and mother's education and occupation				
<i>Social Psychological Variables</i>				
Familism Index	2.38	2.33	0.65	1.00 – 4.00
Self Esteem Index	3.01	3.00	0.45	1.00 – 4.00
Dependent:				
Educational Aspirations (four categories) ⁱ	3.10	4.00	1.11	1.00 – 4.00
ESO completa/don't know = 1				
Bachillerato = 2				
Formacion profesional = 3				
Titulo universitario = 4				
Educational Expectations (four categories) ¹	2.59	3.00	1.18	1.00 – 4.00
ESO completa/don't know = 1				
Bachillerato = 2				
Formacion profesional = 3				
Titulo universitario = 4				
Educational Aspirations (seven categories) ⁱⁱ	4.27	5.00	1.97	1.00 – 7.00
ESO completa = 1				
Bachillerato = 2				
Formacion profesional de grado medio = 3				
Formacion profesional de grado superior = 4				
Titulo universitario (diplomado) = 5				
Titulo universitario (licenciatura) = 6				
Titulo de postgrado universitario = 5				
Educational Expectations (seven categories) ²	3.32	3.00	1.97	1.00 – 7.00
ESO completa = 1				
Bachillerato = 2				
Formacion profesional de grado medio = 3				
Formacion profesional de grado superior = 4				
Titulo universitario (diplomado) = 5				
Titulo universitario (licenciatura) = 6				
Titulo de postgrado universitario = 5				
Occupational Aspirations	0.40	0	0.49	0 – 1
Professional/Executive vs. Other				
Occupational Expectations	153.92	152.38	44.45	64.56 – 234.42
PRESCA scale				

ⁱUsed in multivariate regressions (see tables 3a and 4)

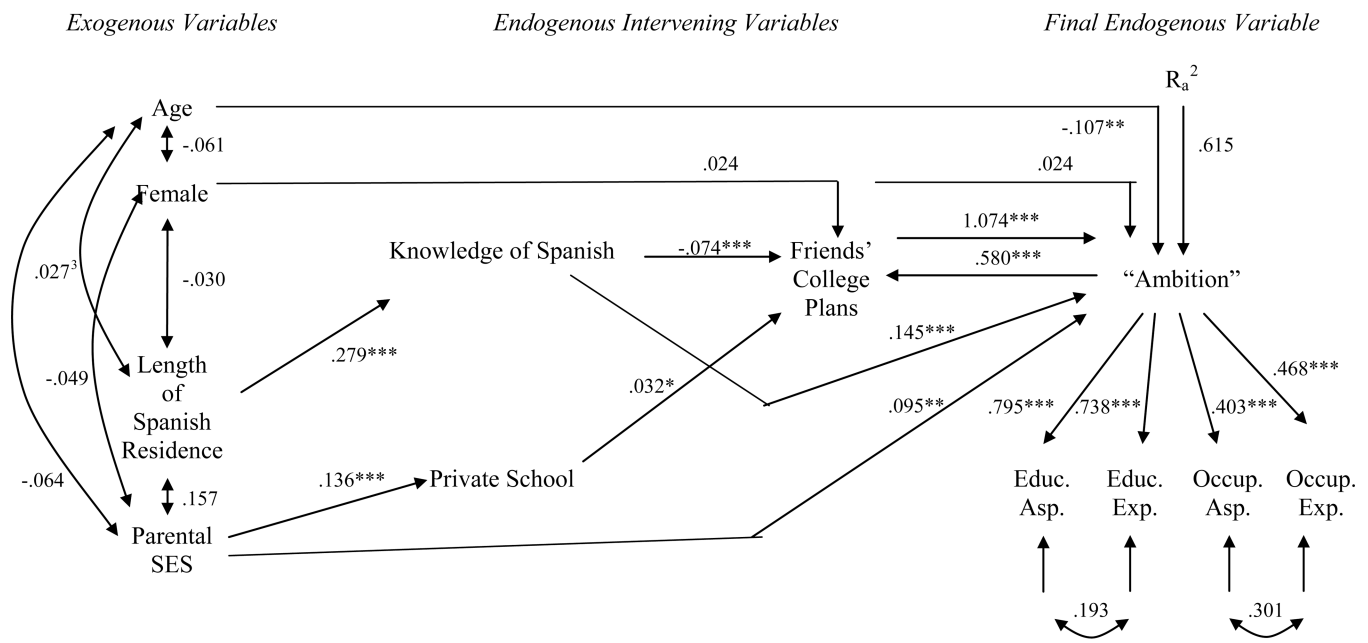
ⁱⁱUsed in structural equation models (see figures 1 and 2)



¹ Direct causal paths are standardized regression weights; all are significant at the .001 level.
² Residual effects on final endogenous variable (1-R²).
³ Double-headed paths are correlations.

$\chi^2 = 394.267$ D.F.s = 33 $\chi^2/d.f. = 11.947$
 NFI = .922 TLI = .851 RMSEA = .057 PRATIO = .500

Figure 1. Recursive Model of Determinants of Ambition in the Spanish Second Generation, 2008¹



¹ Direct causal paths are standardized regression weights; significance levels indicated.

² Residual effects on final endogenous variable ($1-R^2$).

³ Double-headed paths are correlations.

$\chi^2 = 214.561$ D.F.s = 31 $\chi^2/d.f. = 6.921$
 NFI = .956 TLI = .920 RMSEA = .042 PRATIO = .470

* $p < .05$; ** $p < .01$; *** $p < .001$

Figure 2. Non-Recursive Model of Determinants of Ambition in the Spanish Second Generation, 2008¹

Table 1

The Second Generation in Madrid 2008: Demographic Characteristics

Variable	Values	Public Schools	Private Schools	Total
Schools	Number	68	33	101
	%	67.0	33.0	100.0
Sample	Number	2875	500	3375
	%	85.2	14.8	100.0
Gender	Male, %	49.0	45.7	48.5
	Female, %	51.0	54.3	51.5
Year in Secondary School	1 st , %	9.7	3.6	8.8
	2 nd , %	54.9	51.8	54.4
	3 rd , %	35.4	44.6	36.8
Age	Mean	14.4	14.4	14.4
	Median	14.0	14.0	14.0
Place of Birth	Spain, %	12.2	15.4	13.0
	Abroad, %	87.8	84.6	87.0
Year of Arrival (Foreign-born only)	Mean	2002.3	2002.4	2002.3
	Median	2002	2002	2002
Years of Residence (Foreign-born only)	Mean	6.2	5.9	6.1
	Median	6.0	6.0	6.0
Family Structure	Father and Mother, %	67.1	65.3	66.9
	Mother, Alone or Accompanied, %	25.8	26.9	26.0
	Other, %	7.1	7.8	7.1
Persons Living at Home (Excluding Parents)	Mean	6.2	5.9	6.1
	Median	6.0	6.0	6.0
Knowledge of Spanish: Speaks	Poorly, %	4.2	6.2	4.4
	Well, %	22.8	23.5	22.9
	Perfectly, %	73.0	70.3	72.7
Understands	Poorly, %	5.8	7.0	6.0
	Well, %	26.7	28.5	27.0
	Perfectly, %	67.5	64.5	67.0

Variable	Values			Total
	Public Schools	Private Schools	Total	
Reads	Poorly, %	5.8	7.0	6.0
	Well, %	26.7	28.5	27.0
	Perfectly, %	67.5	64.5	67.0
Writes	Poorly, %	5.7	7.0	6.0
	Well, %	29.9	31.7	30.2
	Perfectly, %	64.4	61.3	63.8

Source: ILSEG Madrid survey, 2008.

Table 2
Educational and Occupational Aspirations and Expectations among Second Generation Students in Madrid, 2008 (ILSEG Sample)

Variable	Sex		Father's Education			Mother's Education			School Type			Totals
	Male %	Female %	Less than Secondary %	Secondary or Some University %	University Degree %	Less than Secondary %	Secondary or Some University %	University Degree %	Public %	Private %		
<u>Educational Aspirations:</u>												
Basic Secondary	16.9	11.1	14.6	12.4	5.1	14.2	12.0	5.6	14.5	10.3	13.9	
Secondary Complete/Vo-Tech	36.3	30.5	39.8	34.6	17.4	40.0	33.9	22.6	34.7	26.2	33.3	
University Degree	37.8	48.6	38.0	44.4	60.4	39.6	44.2	58.3	42.2	49.7	43.3	
Post-Graduate Degree	9.0	9.8	7.6	8.6	17.1	6.2	9.9	13.5	8.6	13.8	9.5	
	$\chi^2 = 51.51^{***}$		$\chi^2 = 95.20^{***}$			$\chi^2 = 68.20^{***}$			$\chi^2 = 33.55^{***}$			
<u>Educational Expectations:</u>												
Basic Secondary	27.7	21.3	30.6	20.5	11.4	30.1	20.7	14.5	25.3	18.7	24.3	
Secondary Complete/Vo-Tech	43.0	43.0	43.8	46.9	30.6	45.8	46.5	33.3	43.5	40.8	43.1	
University Degree	24.6	30.2	21.7	28.0	48.0	21.0	27.4	44.0	26.3	34.5	27.5	
Post-Graduate Degree	4.7	5.5	3.9	4.6	10.0	3.1	5.4	8.2	4.9	6.0	5.1	
	$\chi^2 = 24.69^{***}$		$\chi^2 = 119.30^{***}$			$\chi^2 = 95.95^{***}$			$\chi^2 = 22.475^{***}$			
<u>Occupational Aspirations</u>												
Professional/Executive, %	32.1	45.7	37.8	43.8	48.6	42.5	41.7	43.5	39.6	48.7	40.9	
Others, %	67.9	54.3	62.2	56.2	51.4	57.5	58.3	56.5	60.4	51.3	59.1	
	$\chi^2 = 201.39^{***}$		$\chi^2 = 15.69^{**}$			$\chi^2 = 8.12$ n.s.			$\chi^2 = 16.50^{**}$			
<u>Occupational Expectations /</u>												
Mean	149.82	157.74	150.34	156.68	165.04	152.58	155.66	160.61	152.78	160.20	153.91	
Median	131.83	158.49	138.00	158.49	164.81	152.38	152.38	159.27	152.38	158.49	152.38	
Percent above 180	26.8	34.7	28.2	33.1	42.5	28.5	32.4	36.7	29.5	38.8	30.9	
	$\chi^2 = 22.29^{***}$		$\chi^2 = 18.04^{***}$			$\chi^2 = 6.62^*$			$\chi^2 = 16.24^{***}$			
/ PRESCA occupational prestige scores												
* p<.05												
** p<.01												

p<.001

n.s. = not significant

Source: ILSEG Madrid survey, 2008.

Table 3

a Educational Aspirations and Expectations of Foreign-born Secondary Students in Madrid, 2008 (ILSEG sample)

Nationality (Born in Spain is the reference category)	N	Educational Aspirations			Educational Expectations		
		Coeff.1	ExpB ²	Wald	Coeff.1	ExpB ²	Wald
Argentina	71	.000	1.00	.000	.023	1.02	.01
Bolivia	128	-.821	.44	-10.70***	-.933	.39	-15.94***
Bulgaria	76	-.757	.47	-6.87**	-.474	.62	-3.09
China	71	-.558	.57	-3.07	-.464	.63	-2.25
Colombia	317	-.543	.58	-8.20**	-.485	.62	-7.71**
Dominican Republic	155	-.924	.37	-16.37***	-.622	.54	-8.36***
Ecuador	1002	-.648	.52	-15.65***	-.631	.53	-17.78***
Equatorial Guinea	49	-.233	.79	.48	-.544	.56	-2.90
Morocco	183	-.887	.41	-17.23***	-.641	.53	-9.85**
Peru	193	-.800	.45	-12.80***	-.704	.50	-11.73***
Poland	34	-1.122	.32	-8.95**	-.721	.49	-3.78*
Rumania	280	-.986	.37	-23.25***	-.786	.46	-16.91***
Ukraine	45	-.341	.71	.87	-.693	.50	-4.48*
Venezuela	52	-.152	.86	.14	-.502	.33	-2.27
Other – Western Europe	51	-.299	.74	.82	-.036	.96	-.01
Other – Central/South America	81	-.052	.95	.03	-.341	.71	-1.48
Others	167	-.513	.6	4.55*	-.179	.84	-.66
Total	3375 ³						
	(3029) ⁴						

b Occupational Aspirations and Expectations of Foreign-born Secondary Students in Madrid, 2008 (ILSEG sample)

Nationality (Born in Spain is the reference category)	N	Occupational Aspirations			Occupational Expectations		
		Coeff.1	ExpB ²	Wald	Coeff.1	ExpB ²	t-value
Argentina	71	-.825	.44	-5.71*			.39
Bolivia	128	-.044	.96	-.03			.68

b Occupational Aspirations and Expectations of Foreign-born Secondary Students in Madrid, 2008 (ILSEG sample)

Nationality (Born in Spain is the reference category)	N	Occupational Aspirations			Occupational Expectations		
		Coeff. ¹	ExpB ²	Wald	Coeff. ³	t-value	t-value
Bulgaria	76	-.134	.87	-.19	-.9576	-1.52	
China	71	-.495	.61	-1.71	-10.199	-1.18	
Colombia	317	.096	1.10	.24	8.097	1.98*	
Dominican Republic	155	-.232	.79	-.88	-3.187	-.63	
Ecuador	1002	-.131	.88	-.60	.375	.11	
Equatorial Guinea	49	.046	1.04	.01	.373	.05	
Morocco	183	.268	1.30	1.34	-1.731	-.36	
Peru	193	.089	1.09	.15	5.457	1.15	
Poland	34	-1.521	.22	-6.98**	-3.981	-.44	
Rumania	280	-.450	.64	-4.14*	-8.088	-1.80	
Ukraine	45	.103	1.11	.08	5.902	.77	
Venezuela	52	.456	1.57	1.60	3.923	.54	
Other – Western Europe	51	-.069	.93	-.04	-6.799	-.95	
Other – Central/South America	81	-.142	.87	-.20	9.187	1.41	
Others	167	-.099	.90	.16	2.986	.59	
Total	3375 ⁴						
	(3029) ⁵						

¹ Ordered multinomial logistic net effects, controlling for all other predictors (see Table 4).

² Odds of high aspirations or expectations relative to the reference category.

³ Full sample.

⁴ Sample with listwise deletion of missing data.

*** p<.001

** p<.01

* p<.05

¹ Binomial logistic coefficients, controlling for all other predictors (see Table 4).

² Odds of high occupational aspirations relative to the reference category.

³ Unstandardized least squares coefficients, controlling for all other predictors.

⁴ Full sample.

⁵ Sample with listwise deletion of missing data.

Table 4
Determinants and Correlates of Educational Aspirations and Expectations of Second Generation Students in Madrid, 2008 (ILSEG Sample)

<i>Predictor</i>	<i>Educational Aspirations</i>			<i>Educational Expectations</i>		
	<i>Coeff.¹</i>	<i>ExpB²</i>	<i>Wald</i>	<i>Coeff.¹</i>	<i>ExpB²</i>	<i>Wald</i>
Female ³	.380	1.46	26.25***	.290	1.20	7.39**
Age	-.547	.58	-178.82***	-.494	.61	-160.98***
School Year	.532	1.70	51.79***	.555	1.74	63.21***
Public School ³	-.320	.72	-8.97**	-.222	.80	-5.24*
Born in Spain ³	.583	1.79	13.49***	.406	1.50	7.81**
Years of Spanish Residence	-.049	.95	-12.42***	-.057	.94	-19.34***
Both Parents Present ³	-.023	.98	-.09	.102	1.11	1.97
Father's Secondary Education ³	.077	1.08	.79	.209	1.23	6.54*
Father's University Education ³	.787	2.20	24.45***	.733	2.08	29.61***
Mother's Secondary Education ³	.042	1.04	.24	.043	1.04	.29
Mother's University Education ³	.476	1.60	11.24**	.390	1.48	10.00**
Friends' University Plans ³	1.062	2.89	75.81***	1.010	2.74	100.22***
Knowledge of Spanish Index	.305	1.36	15.99***	.394	1.48	37.43***
Familism Index	-.307	.73	28.75***	-.234	.79	-18.91***
Self-esteem Index	.433	1.54	25.98***	.866	2.38	114.63***
-2 Log Likelihood Chi Square			642.95***			763.71
Degrees of Freedom	15			15		
Nagelkerke R ²	.211			.231		
N	3029			3029		

¹ Ordered multinomial logistic coefficients.

² Odds of high aspirations or expectations per unit change in each predictor.

³ Dummy variables coded according to their labels.

Table 5
Determinants and Correlates of Occupational Aspirations and Expectations of Second Generation Students in Madrid, 2008 (ILSEG Sample)

<i>Predictor</i>	<i>Occupational Aspirations</i>		<i>Occupational Expectations</i>	
	<i>Coeff.¹</i>	<i>ExpB²</i>	<i>Wald</i>	<i>Wald</i>
Female ⁴	.629	1.88	62.07***	5.845***
Age	-.454	.64	-97.66***	-7.914***
School Year	.440	1.55	29.84***	10.633***
Public School ⁴	-.243	.78	-5.17*	-4.081
Born in Spain ⁴	.052	1.05	.10	.119
Years of Spanish Residence	-.018	.98	-1.51	-.351
Both Parents Present ⁴	.039	1.04	.22	.220
Father's Secondary Education ⁴	.219	1.24	5.38*	5.746**
Father's University Education ⁴	.354	1.42	6.01*	8.676**
Mother's Secondary Education ⁴	-.091	.91	-.96	-1.071
Mother's University Education ⁴	-.142	.87	-1.07	.651
Friends' University Plans ⁴	.446	1.56	17.73***	12.380***
Knowledge of Spanish Index	.134	1.14	2.33	5.565**
Familism Index	-.135	.87	-4.79*	-3.552**
Self-esteem Index	.228	1.25	6.35*	4.784*
Constant	4.069		29.81***	215.023***
Chi Square	286.99***			14.25***
F				16.054***
Degrees of Freedom	15			15
Nagelkerke R ²	.122			
Pearson R ²				.080
N	3029			3029

¹ Binomial logistic coefficients.

² Odds of higher occupational expectations per unit change in each predictor.

³ Unstandardized least squares coefficients.

⁴ Dummy variables coded according to their labels.

*** p<.001

** p<.01

* p<.05