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Fluent Bilingualism and Educational Ambitions of Immigrant Youths

Abstract

Using the University of Washington Beyond High School survey data, I explore whether fluent bilingualism—proficiency in both minority home language and English—provides an adaptation advantage to the children of the post-1960 immigrants compared to their English monolingual or limited bilingual peers. The results indicate that family social background is a strong predictor of educational ambitions and attainment. Korean- and Vietnamese-speaking seniors report higher educational ambitions than Spanish-, Khmer- and Russian-speaking seniors. Fluent bilingual youths hold higher educational aspirations and expectations than their English monolingual peers when family social background, family structure and generational status are controlled.

BACKGROUND

The formation of educational aspirations and expectations in adolescence as an important intervening social psychological process in future educational attainment emerged in the social status attainment theory and is known as status socialization theory (Sewell, Haller and Portes 1969). Status socialization theory is the "explicit modeling of future behavior as the outcome of one's own expectations and how they are conditioned by the expectations of others" (Morgan 2005: 45). According to this theory, educational aspirations are somewhat abstract idealistic status-specific value orientations toward education that affects students' motivation which influences the level of educational attainment (Sewell, Haller and Portes 1969). In other words, educational aspirations refer to students' desires to pursue or obtain additional education in the future (Campbell 1983). Further, the theory suggests that significant others involved in the adolescents' life transmit status-specific values and encouragement to them in the process of socialization. Adolescents may aspire to earn a professional degree even though they may lack resources to actually attain that level of education. Hence, aspirations are understood to reflect hopefulness for future achievement.

While aspirations are idealistic value orientations to education that are not limited by constraints or resources, expectations are considered to be more realistic educational plans subject to perceptions of opportunity structure and beliefs about labor market rewards (Morgan 1996; Morgan 2005). Educational expectations are a student's view and perception of his or her intention to pursue additional education in the future taking into consideration resource constraints such as costs and benefits. In this sense, there is cognitive difference between aspirations and expectations, and aspirations are expected to register higher than expectations. That is, an adolescent may *aspire* to earn a professional degree. However, after taking resource opportunity structure into account, he or she may *expect* to earn an associate degree only. Note that aspirations and expectations are both measurements of abstract educational orientation rather than of concrete educational attainment behavior. These are social psychological factors. Status socialization theory suggests that an adolescent's future concrete educational attainment is contingent on current beliefs that such outcome is desirable and possible. The theory further suggests that adolescents' educational aspirations, expectations and plans are determined by a combination of individual, family and demographic characteristics in the process of socialization. For adolescents growing up in immigrant families, the development of these social psychological

factors also depends on social context of immigration and reception, and on perceived and real experiences of discrimination (Portes and Rumbaut 2001).

Educational aspirations and expectations have been found to have significant impact in the educational attainment process (Duncan, Featherman and Duncan 1972). Occupational aspirations and expectations, not addressed in my dissertation, are also other key social psychological factors that influence eventual occupational attainment.

HYPOTHESES

Socioeconomic Status and Racial/Ethnic Differences in Educational Aspirations, Expectations and College Plans

Studies find that both educational aspirations and expectations have increased over time, and that most youth report very high educational aspirations. The 2008 National Center for Education Statistics reported that while half of high school seniors in 1972 expected to earn a bachelor's degree or higher, the proportion significantly increased to two thirds in 2004 (Ingels, Dalton and LoGerfo May 2008). The increase occurred for all races between 1972 and 2004, resulting in 86 percent Asian, 73 percent black, 65 percent Hispanic and 76 percent whites in 2004 expecting to earn at least a bachelor's degree. Even though educational expectations rose for all SES groups in this 32-year period, differences persisted by SES in 2004 (58 percent of the lowest SES quartile, 73 percent of the middle two SES quartiles and 81 percent of the highest SES quartile expected to finish college, graduate or professional school) and by race as just described. Morgan (1996), who used one of the datasets explored by Ingels et al. (2008), found that educational expectations increased among high schools students between 1980 and 1992 for both whites and blacks and females and males. Expectations increased more for blacks and females.

Hauser and Anderson (1991) found that both whites' and blacks' aspirations and expectations increased and that neither accounted for the relative decline in the entry of blacks to college during the period between mid-1970s to mid-1980s. Morgan (1996) suggests that labor market incentive is another explanation for the increase in aspirations and expectations among blacks and whites between the 1980s and 1990s.

Research on racial and ethnic differences in aspirations and expectations has largely attributed the differences to family social background. However, evidence is mixed about the relative importance of SES on formation of educational ambitions among Asian and Hispanic. Kao and Tienda (1998) found that, despite lower family socioeconomic background, black and Hispanic youth reported high aspirations in eighth grade. According to the authors, Asian students held high educational aspirations because Asian immigrants frequently come from cultural orientations that emphasize formal education as a means for upward mobility whether in the country of origin or in the destination country. However, black and Hispanic students were less able than Asian and white students to maintain high aspiration throughout high school. The authors attribute this instability in aspirations among black and Hispanic adolescents to their lower SES background. Similarly, Goyette and Xie (1999) found that family SES was a significant predictor of high educational expectations of students from various Asian backgrounds. Parental expectation was also a strong predictor of the child's educational expectations. In particular, they found that family social background explained a lot of the educational expectation differences between whites and Filipinos, Japanese and South Asian students, while it did not explain the difference between whites and Chinese and Southeast Asian students.

Studies have shown that other factors besides family social background also influence adolescents' aspirations and expectations. Hao and Bonstead-Bruns (1998) found that immigrant Korean and Chinese parents and children have higher expectations than do immigrant Mexican parents and children and that differences in expectations remained after family SES was controlled. They discovered that lower levels of parent-child interaction and disagreement in expectations between parent and child led to lower levels of educational expectation among Mexican students. Bohon, Johnson and Gorman (2006) found lower aspirations and expectations among Mexican-origin and Puerto Rican-origin adolescents and higher aspirations and expectations among Cubans compared to non-Latino whites. Lower family SES was one of the reasons for lower aspirations and expectations among Mexicans and Puerto Ricans (others were academic skills and engagement in high school). Another study on young Latino children (followed from Kindergarten through sixth grade) found that parental aspirations remain high and stable through the primary grades and that Latino immigrant parents place high value on schooling (Goldenberg et al. 2001). Parental aspiration, however, did not have much effect on the student's achievement. Suarez-Orozco and Suarez-Orozco (1995) found that second-generation Mexican-origin students with

foreign-born parents have higher educational outcomes than Mexican-origin students with U.S.-born parents because the recent immigrants have higher achievement orientation.

Family background in these studies refers to differences in human, financial and social capital. Among high school seniors from the National Education Longitudinal Study (NELS) 1992 data, Quian and Blair (1999) found that different capital (human, financial and social) influenced educational aspirations of racial and ethnic groups differently. For instance, human and financial capital had significant positive effects among white high school seniors. Human capital had a lesser role and financial capital had no effects on educational aspirations of racial/ethnic minorities. However, parental involvement in school activities significantly affected educational aspirations among African Americans and Hispanics.

Past studies suggest the following hypotheses:

Hypothesis 1: Language group

Educational aspirations, expectations and college plans of high school seniors will vary by race and ethnicity. Since I use language spoken at home as a proxy for ethnicity and the mode of incorporation of immigrant national origin, I expect educational ambitions and plans to vary by language spoken at home net of other factors.

Hypothesis 2: Family background

Despite mixed evidence on the effects of SES on educational aspirations and expectations for Asian and Hispanic groups, the literature shows that SES is a key predictor of educational ambitions and plans for these groups as well as for blacks and whites. Therefore, I expect family background variables to have a strong independent effect on seniors' educational ambitions.

Language Proficiency and Educational Ambitions

Results of the effects of English or non-English language on educational expectations are mixed. Using NELS 1992 cohort data of high school students in their senior year, Qian and Blair (1999) found that having a non-English native language affected educational aspirations of white and Asian American students but not of black and Hispanic students. They found that Asian American students who do not speak English as a native language

have much higher educational aspirations than Asian American students who do. They attribute this finding to high educational hopes immigrant Asian parents hold for their children. According to the authors, many Asian immigrant parents come with college degrees obtained outside the United States which do not always translate into occupational or financial rewards that their white peers receive. Therefore, the immigrant parents hold high aspirations for their children so that the children can reach financial equity with their white peers. Thus, according to Qian and Blair (1999), the immigrant parents, realizing the importance of U.S. education credentials for social mobility in America, transmit high educational ambitions to their children, especially if English is not their native language.

In contrast, using NELS 1988 cohort data of eighth graders, Hao and Bonstead-Bruns (1998) found that, after controlling for other variables, proficiency in English and English as native language among immigrants was positively related to higher educational expectations, but proficiency in minority home language did not affect student or parental educational expectations. Even though knowledge of minority home language did not influence either parents' or students' educational expectations, it had a significant positive effect on math scores and GPA, but not on reading scores.

A different study using the Children of Immigrant Longitudinal Study (CILS) 1992 baseline and 1995-1996 follow-up data of eighth and ninth graders, Portes and Hao (2002) found that, after controlling for various demographic and SES factors, the children of immigrants who are fluently bilinguals (understand, speak, read and write both native language and English well) display higher levels of educational ambitions than English monolinguals. Their analysis further finds that this effect is not contingent on parental knowledge of English, as suggested by Mouw and Xie (1999). The authors argue that fluent bilingualism's positive effects on educational ambitions (others are social psychological adaptations such as self-esteem, family solidarity and conflict) are not so much due to the ability to communicate in English across generations, but rather that by preserving knowledge of their language of origin the second-generation children are "preserving a cultural anchor in the family's own past" (Portes and Hao 2002: 908). Such possibilities to appreciate one's cultural heritage, while acquiring English and learning American ways, nurture positive psycho-social adjustment such as educational ambitions. In a similar vein, fluently bilingual parents who speak both English and their native language are better able to help and guide their children by maintaining access to support and knowledge from the immigrant community, while also

being able to interact with other social institutions such as schools and colleges (Bankston and Zhou 1995; Hao and Bonstead-Bruns 1998).

Using the same CILS survey data, Portes and Rumbaut (2001) found that fluent bilingualism in early adolescence is also a significant predictor of future higher educational aspirations.

These discussions lead to the next hypothesis.

Hypothesis 3: Type of acculturation

Fluent bilingualism will positively influence college ambitions and plans of high school seniors, because fluent bilingualism not only is a means of communication between parents and children but is also a form of social capital.

Generational Status and Educational Ambitions

Studying various Asian groups in the United States, Hirschman and Wong (1986) suggested that long-distance migration, which costs the immigrants physically, financially and psychologically, facilitates breaking of past ties with the old country, which, in turn, creates high achievement in the immigrant generation in the new country. That, in addition to selectivity of immigrants in terms of optimism (Kao and Tienda 1995), would cause high educational aspirations among the children of immigrants more than in the children of native-born parents. One would expect this to be more likely among Asians than Hispanics because it costs the former group more than Hispanic groups to migrate to the United States. On the other hand, studies on transnationalism suggest that ties to the old countries may be beneficial to the second-generation children, especially if the family had strong social status previously in the home country (Kasinitz et al. 2008; Portes and Fernández-Kelly 2008). Using the CILS database, Feliciano (2006) found that an immigrant group's pre-migration status increases the educational expectations of youths in those immigrant families. Pre-migration status of immigrant groups is, however, usually not available in survey data, including the BHS survey.

Hypothesis 4: Length of acculturation

The length of residence in the United States will be negatively associated with high school seniors' educational ambitions and plans in that third or higher generations will have weaker

college aspirations than the second generation or the recent immigrants. Differences between the first and second generation may vary by language or ethnic group.

Other Covariates of Educational Ambitions and Plans

Besides family SES, other structural and group characteristics are also related to development and maintenance of educational ambitions of adolescents. Family structure (two-parent family) is another form of social capital, and one of the exogenous variables in the segmented assimilation theory. In families where related adults are available to provide support for children's homework and to supervise their activities, the adolescents may hold higher educational aspirations and expectation (Astone et al. 1999). Portes and Rumbaut (2001) attribute adolescents' high educational aspirations, expectations, achievement and persistence in high school to the presence of two parents and often other extended family members in immigrant families particularly from Asia.

Some immigrant parents get involved with schools, communicate with their children regarding school-related issues and hold high expectations of their children. These activities and supports create an environment that strongly encourages academic achievement in the children (Stanton-Salazar 1997). Others have found that consistent and frequent encouragement by parents helps development and maintenance of educational aspirations among high school students. For instance, Conklin and Dailey (1981) found that consistent parental assumptions about the adolescent's continued education are positively related to college attendance. The authors found that high school students who report consistent parental encouragement throughout high school are more likely to enter a four-year college, while students who report mixed parental support across the high school years are more likely to enter two-year institutions.

Planning for college is affected by many factors that interact in a complex manner. Higher SES parents are more likely to talk to their children about college (Stage and Hossler 1989). They are also more predisposed to make financial plans to pay for college (Flint 1992). They are more knowledgeable about financial aid programs (Olson and Rosenfeld 1984). Among the factors predicting students' early educational plans, parental encouragement was the strongest (Hossler, Schmit and Vesper 1999). High school seniors' postsecondary education expectations are a powerful predictor of eventual application to a four-year institution (Cabrera and Nasa 2001).

Finally, some scholars attribute differences in educational aspirations among ethnic groups to group-specific attributes. Ogbu (1991) suggests some minority groups such as blacks and Hispanics with involuntary migration heritage may have less attachment to schooling as a route to success. Other groups, such as Koreans, Chinese and Asian Indians with more recent voluntary migration histories and who come from cultural origins that emphasize formal education as a means for upward mobility, have persistent, high educational expectations (Kao and Tienda 1998). These immigrants also tend to have higher levels of educational attainment at the time of immigration. South Asian immigrants, in particular Laotian, Cambodia, Vietnamese and Hmong who came to the United States as refugees or asylees, have higher poverty rates and lower parental education rates than the other Asian immigrant groups (Kao and Tienda 1998).

DATA, MEASURES AND METHODS

I use survey data from the University of Washington Beyond High School (BHS) project, a study of the transition from high school to college. The BHS data were collected among five cohorts of graduating high school seniors in the spring of 2000, and 2002 through to 2005 in the Pacific Northwest. Each wave of graduating high school seniors was surveyed twice. The first round of surveys, the baseline senior surveys, took place in the spring of the senior year.

Key Independent Variables

Language proficiency of seniors from dual-language homes

The language questions in the BHS senior survey asked students who reported having a language other than English at home to self-rate competency in their language of origin and also in English. The survey limits the language proficiency questions to two languages; namely the primary minority home language and English. Self-reports are susceptible to reliability errors for the respondents may over-estimate or under-estimate their language proficiency with some reference in mind. Portes and Rumbaut (2001) found that self-assessment of language proficiency is moderately correlated with objective tests of language proficiency. However, objective assessment is costly. Therefore, survey researchers, including the U.S. Bureau of Census, rely on self-reports of language ability.

The BHS language proficiency questions asked seniors to report their ability to understand, speak, read and write both the minority home language and English. Appendix A lists the questions. Each of the language competency dimensions provided for responses: (1) not all, (2) not well, (3) well and (4) very well. These variables are ordinal, and there is some linear order to the categories. Cronbach's alpha is 0.860 for proficiency in four dimensions of minority home language and 0.984 for English. I examine the variance in the responses to determine the most intuitive yet robust measures of proficiency in the language of origin, English and bilingualism. After extensive analysis of the properties of each variable and seeing a clear bimodal pattern with a strong positive correlation between understanding and speaking minority home language (correlation coefficient of 0.737) and reading and writing minority home language (correlation coefficient of 0.908), I decided to create binary variables for dimensions of (a) oral, (b) literacy, and (c) overall proficiency in the language of origin and English: either proficient or not. I refer to understanding and speaking as the *"oral"* dimension of language competency and reading and writing as the *"literacy"* dimension. If respondents are proficient in both oral and literacy (as defined below), then they are considered to have *"overall"* proficiency in the language.

Proficiency in minority home language

To preserve the properties of the original raw variables as much as possible, for each dimension of minority home language, I combine the lower two categories, (1) not at all and (2) not well, into one group of "limited proficient" (denoted by 0) and the higher two categories, (3) well and (4) very well, into "proficient" (denoted by 1). Thus, seniors are classified as being either proficient (=1) in understanding, speaking, reading and writing minority home language or not (=0). This coding is clear and simple to understand and does not require too many assumptions about an underlying scale. The results did not differ when alternative coding with mean values was used[1]. For English-speaking monolinguals with absence of non-English use at home, I code them as not proficient in minority home language.

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[1] I also considered the mean values assuming an underlying continuous scale for these variables ranging from 1 to 4. The mean values for minority home language competencies are: 3.48 for understanding, 3.17 for speaking, 2.74 for reading and 2.58 for writing. Portes and Rumbaut (2001) use the mean values to construct home language proficiency scales whereas I construct dichotomous proficiency categories.

Using the information from four dimensions, I construct binary dependent variables that measure oral, literacy and overall proficiency in minority home language. That is, when responses were 1 for all four dimensions of minority home language proficiency, that senior would be classified as proficient in non-English language (coded 1). In other cases, the senior would be classified as not proficient (coded 0). This measurement of overall proficiency caused the Khmer language group to significantly shrink in proportion of overall proficient. Khmer speakers reported having very low levels of proficiency in the literacy dimensions (reading and writing). This probably reflects Khmer parental illiteracy generally.

Three-quarters of seniors with a language of origin other than English reported being proficient in *oral* dimensions of minority home language while less than half reported being proficient in *literacy* dimensions, indicating literacy in minority home language is far less common than oral proficiency. Correlation coefficients between oral and literacy components of minority home language are positive between 0.425 and 0.549. Researchers note that research on immigration and education should take into consideration home linguistic and literacy practices of the children of immigrants (Bankston and Zhou 1995; Gutiérrez, Morales and Martinez 2009; Orellana and Reynolds 2008). The children of immigrants' linguistic repertoires of practices, or linguistic toolkit, should be considered assets to successful learning. By separating home language dimensions into *oral* and *literacy*, and considering both home language and English proficiency, this paper aims to further our understanding of socio-cultural factors that affect how linguistic repertoires of practices vary across language groups among the children of immigrants.

A very small, three percent (3.3 percent) of the responses to *oral* home language proficiency and three percent (3.4 percent) to *literacy* home language proficiency were missing. I exclude the missing cases from analysis rather than impute values for missing cases since these are the outcomes that I am trying to explain.

Proficiency in English

For each dimension of English competency, I combine the lower three categories (1, 2 and 3) into one group of "limited proficient" (denoted by 0) and the highest category of 4 into "proficient" (denoted by 1)[2]. The reason the coding is different from that for minority

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[2] The mean responses for English proficiency are: 3.78 for understanding, 3.72 for speaking, 3.73 for reading and 3.67 for writing compared to 3.48, 3,17, 2.74 and 2.58 for the respective minority home language proficiencies. Thus, instead of the mean values, I construct binary categories of English proficiency. The mean

language is that the overwhelming majority of seniors self-rated as "4" (very well), so anything lower than that I consider being limited proficient in English. Portes and Rumbaut (2001) also find that children of immigrants self-assess their English skills quite highly. School going seniors (12th grade) are likely to have had a longer period of exposure to English than to the home language, unless they immigrated to the United States recently. Thus, I measure exposure to English language by calculating the number of years the immigrant children have lived in the United States. By the time they are in their senior year, immigrant students may have mastered English skills, gaining confidence in English competency. In addition, the English proficiency items in the BHS survey are listed *after* the minority home language proficiency items. It is likely that when students assess their English ability they do it relative to their self-assessment of home language ability. This cognitive mode of using home language proficiency to self-assess English language proficiency may inflate the students' sense of their English ability.

Almost three fourth of seniors with a language of origin other than English reported proficiency in *oral* dimensions of English, comparable to the proportion reporting proficiency in *oral* minority home language. While less than half reported proficiency in *literacy* in minority home language, two thirds reported proficiency in *literacy* in English (among seniors with a home language other than English).

In the review of literature on children of immigrants and educational achievement and attainment from multiple disciplines, Arzubiaga, Nogueron and Sullivan (2009) find that conceptualizations of immigrant families and children across disciplines have commonly used deficit models. For example, immigrant parents and families are generally perceived as in need of instruction as to how to get involved in their child's school or how to provide their child with appropriate education at home. Further, Guitierrez, Morales and Martinez (2009: 221) suggest that, "… in the field of literacy, deficit notions persist in the discourses, orienting frameworks, policies, and approaches that propose educational interventions supported by ideologies that depend on labeling and classifying students along a number of dimensions—principally by mental ability." I do not construct measures of limited proficiency because my research questions examine the determinants and consequences of fluent

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values reported above show that the seniors rate their proficiency very high across all four dimensions of English competency.

bilingualism. In the core of the dissertation, using the segmented assimilation theoretical perspective and accompanying measures of linguistic competency, I attempt to determine the positive effects of linguistic skills in both English and the minority native tongue.

Bilingual proficiency measure

Finally, I construct three measures of bilingualism. Seniors proficient in understanding and speaking both their home language and English are considered proficient in *oral* bilingualism. Almost half (47.9%) of the seniors from dual-language homes self-report as orally fluent in both English and their home language. Seniors proficient in reading and writing both English and their home language are considered proficient in *literacy* bilingualism. Only 27.8 percent of seniors report competency in this area. When seniors report proficiency in both oral and literacy dimensions of both minority home language and English, I refer to them as *fluently bilingual.* Nearly a quarter of the seniors with a language of origin other than English would be considered fluently bilingual for having proficient facility in all dimensions of both minority language and English. Portes and Rumbaut (2006) argue that children who maintain fluent bilingualism will do best academically. Thus it is this group of seniors that I hypothesize will perform better in measures of student educational outcomes. Finally, the fluent bilingualism rate varies between a low of 4.4 percent among Khmer speakers to a high of 41.1 percent among Spanish speakers. By considering the distribution of responses to language proficiency and in subsequent coding of proficiency variables, the measure of fluent bilingualism in this dissertation acknowledges that individuals from different home language groups do not develop identical strengths in both English and minority home languages.

Thus, to sum up, I construct three measures of minority home language competency (oral, literacy and overall), three measures of English competency (oral, literacy and overall), and three measures of fluent bilingualism (oral, literacy and overall) for analysis purposes. The key variables are overall self-reported proficiency in minority home language and overall self-reported proficiency in English among seniors who have a language other than English at home.

Language Groups

One of the contributions of this paper is in specifying minority language groups. Arzubiaga, Nogueron and Sullivan (2009: 263) in their review of the literature propose that, "although

prevalent in research paradigms, classifications by country, race, or ethnicity are not equal to language and to culture." Three linguistic characteristics are evident among the BHS high school seniors. First, over a fifth (22.5%) of the seniors report growing up in homes with a mother tongue other than English, while the rest (77.5%) report growing up in homes where it is assumed that English was the only language being used. Second, there is heterogeneity in the language backgrounds; a wide variety of languages are spoken such as Spanish, Korean, Khmer, Vietnamese, and Russian, among others. Third, mirroring the national trend, Spanish is the most commonly spoken minority home language among seniors in this sample (22.8 percent).

Even though Spanish is the single most predominant minority home language spoken, the majority of languages actually are of Asian origins such as Korean (14.7 percent), Vietnamese (12.6 percent), Khmer (12.9 percent), Filipino (5.8 percent) and a variety of Other Asian languages[3]. Russian and other East European languages comprise eight percent of students with home language other than English. In addition, another 325 seniors (15.1 percent) listed languages from other national origins. The number of speakers per these language groups was too small to create their own statistically robust language group categories. Therefore, all these different languages[4], are grouped together as "other non-English" languages. As expected, the composition of language groups in the BHS survey reflects the wider immigration patterns in the Northwest Pacific Region.

Generational Status Measure

As one of the interests of this dissertation is in the three-generational language shift, the major generations of interest are the first, the second and the third generations. I measure generational status based on the high school senior's self-reported place of birth, year of immigration and parents' birth place[5]. Rumbaut (2004) suggested that among the first-

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[3] Other Asian languages include Japanese, Chinese, Hindi, Urdu, Thai and others. The number of students per these languages groups was too small to create individual language categories. Therefore, I lump these together into one variable called "Other Asian languages."

[4] Other languages of origin include Western and Southern European languages such as German, Australian, Canadian, English, African languages such as Somali and Senegalese and languages spoken by the peoples from the U.S. territories, such as Guam, and Native American tribal languages.

[5] Note that, for the purposes of this research, I consider the residents of the territories of the United States, such as Guam and Micronesian Islands, who migrated to the mainland United States as immigrants. Their children are therefore

generation children of immigrants, age of arrival is the key factor in explaining adaptation and incorporation into the host society. When the BHS seniors were born abroad, I determine the length of time they have been in the United States using their age at the time of arrival in the United States and/or the year they were born and immigrated to the country and age at the time of the senior survey. In some cases the place they started first grade along with parental place of birth also helped determine if the student was first generation.

The first-generation seniors were born outside the United States to both immigrant parents (also foreign born). The exceptions are children born abroad to U.S. citizens. For example, children of U.S. military/foreign service personnel with a U.S.-born spouse are considered third or higher generation regardless of place of birth.

I separate the first-generation children of immigrants into three categories: the 1.25, 1.50 and 1.75 generation based on their age of arrival, which corresponds to their duration in the United States. About twelve percent of the seniors with a language other than English at home were 1.25 generation. They arrived in the United States when they were teenagers, entered high school in the United States and had lived here for about one to five years at the time of the survey. A somewhat higher proportion (18.3 percent) was 1.5 generation. The 1.5 generation arrived when they were roughly pre-adolescent, between the ages of six and twelve years old and joined elementary or middle school in the United States. A similar eighteen percent of the seniors with a home language other than English were 1.75 generation. They came to the United States when they were five years old or younger. This generation is the closest to the second generation in terms of acculturation to the host society and exposure to English. At the time of the survey they had been in the U.S. school system for the past 12 to13 years. There is a good age distribution in terms of 1.25, 1.50 and 1.75 generations within the first generation.

The second generation includes children who were born in the United States to at least one foreign-born parent. Using this definition, 17.6 percent or 1,687 students in the survey are identified as second generation.

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categorized into various generational statuses depending on whether they were born in the territories or on the mainland and how old they were when they arrived in the United States.

The third and higher generation students include everyone who was born in the United States to parents who were also U.S. born. The majority of the UWBHS seniors, or 69.7 percent, are third or higher generation. The birthplaces of grandparents are not included in the survey. Therefore, it is not possible to determine a student's generational status beyond third generation.

Among those with a home language other than English, a higher proportion (48 percent) of seniors are first generation than second generation (37.3 percent), and only about fifteen percent are third or higher generation. The language of origin appears to reflect recency of immigration among the children of immigrants.

Finally, the first-generation immigrant children who came here in pre-adolescent and adolescent years are most likely to have attended schools in the country of origin. Children who lived in transitory camps, such as many Cambodian refugees, may not have gone much to school. Also, depending on the country of origin, they may or may not have been exposed to English in school or in the broader community. For instance, while English is commonly used and taught in the Philippines and India, it is not so widely used in Korea. Thus, the first-generation immigrant children are likely to have arrived to the United States with varying degrees of English skills. Since there is virtually no way to find this out about the BHS seniors, I assume that all first-generation immigrant children come here with the same level of English ability (minimum) irrespective of their country of origin, and that over time, with exposure in the new country, they learn English at different rates.

Even though sample size per generational status category or language group is big enough for descriptive univariate analysis at the aggregate levels, the cell size in 2 X 2 tables or other forms of multivariate tables becomes small for certain generational categories for particular language groups. For instance, fewer than 10 seniors who speak Korean, Vietnamese, Khmer or Filipino languages are third generation.

The Spanish language group shows different characteristics than other language of origin groups. For instance, Spanish is the only single language group with a sizable number of students (N=162) belonging to the third or higher generation. One could say that Spanish speaking students are distributed quite evenly across first, second and third generation. A slightly larger proportion of Khmer speakers are second generation than first generation. On the contrary, Korean, Vietnamese and Russian or East European language groups have a

larger share of first-generation than second- or third-generation members, reflecting a recent immigrant wave from these areas.

Dependent Variables

My working baseline BHS sample includes 9,599 students (68.9% of the universe) from 13 schools from five graduating cohorts in years 2000, 2002, 2003, 2004 and 2005. However, the analytical sample sizes are 8,779 for educational aspirations and expectations (due to missing values for 820 (or 8.5 percent) of the students whom I exclude). College plans include all 9,599 seniors from the baseline survey.

The first dependent variable, *educational aspirations*, is based on the responses to the very first question in the BHS baseline senior survey that asked: "How far would you LIKE to go to school?" Aspirations for four-year college, graduate or professional attainment are coded 1, while aspirations for two-year college, high school or less than high school are coded 0.

The second dependent variable, *educational expectations*, is based on the second question in the BHS: "Realistically speaking how far do you THINK you will get in school?" Responses are similarly coded into 1 for college and higher and 0 for less than four-year college.

The third dependent variable, post-high school college plans, are derived from students' responses to the following two baseline survey questions: Q24, "Do you plan to go on to college or other additional schooling right after high school? That is, do you plan to be continuing your education THIS FALL?" The check-off response format was as follows: no, don't know and yes. Those who responded affirmatively to Q24 were asked to respond to Q25, "Please tell us about the colleges you are likely to attend. ORDER THESE SCHOOLS BY PREFERENCE." Responses to this question allowed the BHS staff to determine whether the student was planning to go to a two-year or a four-year college. The BHS project defines two-year and four-year colleges according to the 2005 Carnegie Classification[6] which groups institutions according to their programs and degrees into two-year or four-year types.

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[6] http://classifications.carnegiefoundation.org/descriptions/

I combine the information in Q24 and Q25 to create a dummy variable that indicates a student plans to attend a four-year college in the fall (=1) or has no four-year college plans (=0), which includes two-year college plans, no college plans at all and don't know responses. The data reveal that 78.7 percent of seniors planned to attend a college in the fall; 53.3 percent planned to attend a four-year college.

Thus, aspirations and expectations relate to desires to attain college education in the future, most likely a minimum of three to four years beyond high school. A plan to attend a four-year college in the fall after high school represents immediate short-term ambition to attain a college degree.

Among the BHS seniors, 75.7 percent report they aspire to a four-year college level of educational attainment and a slightly smaller proportion (68.2 percent) report they actually expect to attain a four-year college degree. I find that educational aspirations and expectations are highly correlated (correlation coefficient of 0.779, significant at $p<0.000$). The implication of this high correlation is that aspirations and expectations in the BHS data may not be measuring as distinguishable social psychological attributes as the literature suggests. Therefore, I might find the predictors of, and their effects on, *aspirations* to be similar to those for *expectations*.

Analytical Strategy

I have two goals in the analysis of data. First, I examine the data to see if significant variations exist in the outcomes of interest (dependent variables) by the BHS high school seniors' individual, demographic and family characteristics (independent variables). I achieve this by looking at (1) simple univariate distribution of the sample and (2) distribution of seniors' characteristics by language spoken at home in terms of proportion of students and the number of students who belong in the category of interest. I employ multiple regression statistical models to estimate net effects of predictors on the outcome variables after controlling for the effects of other independent variables. Due to the binary categorical nature of the dependent variables I use the multiple logistic regression method (Agresti 2002).

FINDINGS

I report bivariate descriptive statistics followed by multiple logistic regression results and a short discussion that needs more work.

Descriptive Statistics

Like high school seniors around the country on the verge of finishing high school and transitioning into a new life, school and work career, the BHS 12th-grade teenagers also hold high educational ambitions for their future. Tables 1.1, 1.2 and 1.3 show educational aspirations, expectations and college plans, respectively, each language group. Nine language groups are represented in these tables: English-only speakers, Spanish speakers, Korean speakers, Khmer speakers, Vietnamese speakers, Filipino language speakers, Russian and other East European language speakers, 'other Asian' and 'other non-English' language speakers. The last column in each table consists of an average proportion by the row categories. For instance, in Table 5.1 we see that 78 percent of all female youth report aspirations of a college education compared to 73 percent of males. Females tend to have higher educational expectations (Table 1.2) and college plans (Table 1.3) than males as well, but the differences are very small.

Table 1.1 illustrates that three quarter (75 percent) of BHS high school seniors aspire to attain a four-year college education or professional and graduate degree, and Table 1.2 shows that a smaller proportion (68 percent) expect realistically to attain at least a bachelor's degree. Thus, consistent with other studies, the BHS seniors hold higher aspirations than expectations. While the majority of seniors report high educational ambitions for some near future, perhaps about four to six years beyond high school, a much smaller proportion have some concrete plans for the immediate future (3-6 months after high school in the fall). Table 1.3 indicates that a little over half (54 percent) of the seniors plan to attend a four-year college in the fall after their high school senior year.

[TABLE 1.1 ABOUT HERE]

[TABLE 1.2 ABOUT HERE]

[TABLE 1.3 ABOUT HERE]

Even though the majority of the BHS seniors have high educational ambitions, these social psychological characteristics differ by language group.

A very similar pattern emerges in these tables. Korean, Vietnamese and "other Asian" language groups clearly have higher ambitions and immediate plans to go to a four-year college than other language groups including English-speaking monolinguals. On the other hand, Khmer, Russian and Spanish language groups report college ambitions and plans at consistently lower rates. Filipino and "other non-English" language groups appear to rank somewhere in the middle, on a par with the English-only group.

Furthermore, these social psychological attributes also vary by demographic, individual and family characteristics. Ambitions and plans vary by parental human capital and home ownership. In general, the tables show the higher the family SES, the higher the rate of ambition and plans. However, the parental education association appears to be stronger for Spanish and Russian language groups than other language groups in all three outcomes. For instance, 80 percent of Spanish speakers with a college-educated parent report college expectations compared to 44 percent with parents who have only high school diploma or lower educational attainment (Table 1.2). The numbers are very similar for Russian speakers. Parental educational level also appears to be similarly associated with ambitions and plans for Filipino-speaking youths. For instance, while 69 percent of Filipino-language-speaking seniors with college-educated parents plan to go to a four-year college in the fall, only 41 percent of Filipino-language-speaking youth with a parent who had some college or lower education plan to go to a four-year college (Table 1.3). Ambitions and plans for Korean, Khmer and Vietnamese speakers, on the other hand, do not appear to be influenced much by parental educational level as can be seen in these descriptive tables. Note that the majority of the Khmer-speaking and Vietnamese-speaking students have families with lower levels of education than other language groups. A high proportion of Korean-speaking youth, on the other hand, have college-educated parents. Since our main interest is in comparing minority home language groups to the English-only speaking group, it is instructive to see that a strong relationship between parental education and ambition and plans exists differentially by language groups.

There are differences in educational aspirations and plans by whether the senior lives in two-parent families or not. Similarly, overall high ambition and plans are reported by a higher percentage of second-generation youths (80 percent aspire, 72 percent expect and 61

percent plan) than any other generation including the third or higher generation. English-only and Spanish are the only language groups with a sufficient number of third- or higher generation youths for analysis. Looking at the English-only speaking group in Table 1.1, a higher proportion of second-generation English monolinguals (80 percent) report high educational aspiration compared to those in the third or higher generations (75 percent). Similar associations are observed in Table 1.2 and Table 1.3 for English monolinguals. Among Spanish-speaking youth though, a slight second-generation advantage is observed in college plans (52 vs. 46 percent), a slight negative second-generation effect is observed for college expectations (63 vs. 66 percent) and no second-generation advantage (73 vs. 73 percent) over third or higher generations is apparent for college aspirations. A lower proportion of immigrant youths who recently immigrated (in teenage years) than other generational groups reports having plans to attend a college in the fall (Table 1.3). However, aspirations and expectations by generational status do not follow a clear pattern across all language groups.

Proficiency in minority home language appears to be negatively associated with educational ambitions and plans for most language groups. Let us use the Vietnamese language group as an example. A slightly higher percentage of seniors (83 percent) from Vietnamese language background who are not proficient in home language reported college aspirations than did seniors proficient in Vietnamese language (79 percent). Although the differences are not big, this tends to be a pattern that runs across most language groups and for college expectations and plan outcomes also. English-proficient seniors from dual-language homes have higher educational ambition than seniors who are not proficient in English.

 The variable that is of highest interest to this paper is bilingual proficiency among seniors raised in dual-language homes. Fluently bilingual youths report having higher college aspirations, expectations and plans than do youths who are not fluently bilingual. This is pretty much the trend across all minority language groups. For instance, 92 percent of Khmer-speaking students who are fluently bilingual aspire for college (Table 1.1), while only 68 percent of Khmer-speaking students who are not fluently bilingual do so. Khmer-speaking youth deviate from all other language groups in that youth from this group of fluently bilinguals are less likely to plan to attend a four-year college (39 percent) than those who are not fluently bilingual (49 percent).

Finally, as anticipated, expectations of significant others are positively related to seniors' own educational ambitions and college plans.

In summary, the descriptive statistics reveal high rates of educational aspirations and expectations among the BHS seniors. About half of the seniors report having a plan to go to a four-year college in the fall after high school. Educational ambitions and plans vary by family SES, bilingual fluency and expectations of significant others between and within language groups.

In the multiple regression models in the following section, I will test whether these relationships between language groups, language proficiency and other variables and educational ambitions and plans hold when other individual and family characteristics are controlled.

Multiple Logistic Regression Analysis

Analytical Strategy

Table 1.4 reports the results of logistic regression models predicting whether the high school seniors aspired to attain college or higher education (bachelor's degree and above) in the pooled sample. Table 1.5 reports parallel models predicting college expectations and Table 1.6 reports models predicting whether the seniors plan to attend a four-year college in fall after high school. I also test the hypotheses for each minority language group in Tables 1.7a through 1.7f.

[TABLE 1.4 ABOUT HERE]

[TABLE 1.5 ABOUT HERE]

[TABLE 1.6 ABOUT HERE]

For each set of analyses, there are six models. Model 1 is the baseline equation with language spoken at home, as a proxy for language minorities, ethnicity and mode of incorporation. Model 1 shows the observed inequality in college aspirations, expectations and plans, respectively, in the three tables by language spoken at home relative to English-only-speaking monolinguals (the reference category). In Model 2, the other two exogenous variables, namely—family socioeconomic status (SES) indexed by parental educational

attainment and home ownership, and family composition, plus control for sex are added. This model tests whether differences in composition by socioeconomic origins will "explain" (mediate or account for) the observed patterns of inequality in college ambitions and plans between language minorities and the majority population observed in Model 1. Model 3 adds generational status, a measure of U.S. exposure or length of acculturation. Since immigrant generation is the primary determinant of both native language fluency and English language proficiency, it may explain why some language minorities are less successful. This equation tests the fourth hypothesis. Models 4 and 5 test the selective acculturation hypothesis. Proficiency in one's minority home language and in English among youths from dual-language homes are added in Model 4, which tests the hypothesis that proficiency in minority home language and /or in English predict college ambitions and plans of seniors.

Note that the language background variable (Spanish, Korean, Khmer and other languages listed) in Model 1, Model 2 and Model 3 compares the effects of specific minority language group on college ambitions and plans relative to English-only-speaking monolinguals. However, when I add minority language proficiency and English proficiency variables in Model 4, the language proficiency variables reflect whether seniors from dual-language homes are proficient in their native tongue and English, respectively, compared to English-only monolinguals (the reference category). Since the reference category also includes seniors from dual-language backgrounds who are not proficient in either home language or English, the language background dummy variables (Spanish, Korean, Khmer and other languages listed) pick up the non-proficient seniors and now represent minority language groups who are not proficient in their native language or in English.

In Model 5, an interaction term between home language and English proficiency among youths in dual-language homes is added to test the effects of fluent bilingualism, a key indicator of selective acculturation, on college ambitions and plans. For the purposes of this dissertation, I will call this analytical strategy the "Alternative" method.

Model 5, or the "Alternative" method, advances the model by Portes and Rumbaut (2001) by allowing an analysis of whether or not fluent bilingualism influences educational aspirations above and beyond English and native language proficiency. Portes and Rumbaut (2001) modeled language dominance in terms of four mutually exclusive categories (English dominant including English monolinguals, native language dominant, fluently bilingual and limited bilingual). Let us call this analytical strategy "Traditional." In the "Traditional" method,

Portes and Rumbaut (2001) entered two dummy variables simultaneously in the model[7] to explain the effects of fluent bilingualism as a measure of selective acculturation versus the omitted category (all others), and limited bilingualism as a measure of dissonant acculturation versus the omitted category (all others). In their modeling strategy, where all the categories are introduced in one model, even though the coefficient for fluent bilingualism shows the strength of the association with the dependent variables, it is difficult to discern how much more or better model fit fluent bilingualism provides over a simpler model which includes English proficiency and/or minority language proficiency. The "Alternative" modeling strategy I employ, on the other hand, allows us to see the improvement in model fit by adding the effects of fluent bilingualism (Model 5) above and beyond the additive effects of English and native language proficiency (Model 4).

In the full sample in which I pool all language groups together, I also run a new series of models using the "Traditional" method Portes and Rumbaut (2001) used. I create five mutually exclusive categories: English-only-speaking monolinguals (the reference category); seniors from dual-language homes who are dominant in English; dominant in minority home language; limited in both English and home language; and fluently bilinguals. Creating mutually exclusive categories helps interpretation of odds ratios in two ways. First, it helps determine the extent of consonant, selective and dissonant acculturation proposed by segmented assimilation theory. However, I am specifically interested in testing the selective acculturation hypothesis through fluent bilingualism. I am less in interested in dissonant or consonant acculturation in this particular study. Second, mutually exclusive categories of language ability avoid collinearity problems when proficiency data are available only for a portion of the sample (about a quarter in the BHS sample). That is, extra flags for presence of home language or English monolinguals do not need to be added to the model since these groups are captured in one of the mutually exclusive categories.

 In the separate analysis I run for all minority language groups with large sample size, I only conduct the original "Alternative" analysis I propose. Since each language group contains full information (100 percent) for both home language proficiency and English proficiency, and does not deal with the English-only-speaking monolingual group that lacks English

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[7] See Appendix C and Table 9.2 (predicting standardized Math and Reading achievement scores and GPA in middle school), Table 9.4 (predicting high school GPA) and Table 9.5 (predicting high school dropout and inactive in school), in Portes and Rumbaut (2001).

proficiency data, the interaction model suits the analytical logic well. As with the pooled sample, for each language group we can estimate how much explanatory power fluent bilingualism affords (in Model 5) above and beyond assumed benefits of minority language proficiency or English proficiency (in Model 4).

 Finally, in Model 6, I also include covariates –such as prior academic achievement and work efforts, the youth's own educational aspirations and expectations and those of parents, friends, mentor-like adults and favorite teachers measured in the BHS baseline senior survey, as controls, and also to examine the extent to which these variables mediate effects of family social status, composition and modes of incorporation.

Results for Pooled Sample

A very similar pattern of effects of independent variables on college aspirations, expectations and plans appears across Tables 1.4 through 1.6. For instance, mirroring the bivariate relationships described earlier, Model 1 in these three tables shows that Spanish-speaking, Khmer-speaking and Russian-speaking youths are significantly less likely than English-only-speaking monolinguals to either aspire or expect to attain a bachelor's degree or higher education or to plan to attend a four-year college in the fall after high school. The odds for Spanish-speaking youth to aspire/expect/plan for a four-year college education are about 30 percent lower than the odds for English-only-speaking monolinguals. The odds for Khmer-speaking youth to aspire for college relative to English-only-speaking youth are 26 percent lower, the odds to expect to earn a college degree are 44 percent lower, and the odds to plan to attend a four-year college are 22 percent lower. The odds for these outcomes among Russian-speaking youth relative to English-only-speaking youth are 47 percent, 50 percent and 58 percent lower, respectively. Such low odds for these language groups are likely due to family social background and generational status.

Korean speakers are significantly more likely than English-speaking monolinguals to have high educational ambitions and plans. Korean speakers are 3.7 times more likely than English monolinguals to aspire for college education, four times more likely to expect to attain college education and 2.3 times more likely to plan to attend a four-year college in the fall after high school. No other minority language group shows this level of advantage of college ambitions. Vietnamese speakers are more likely than English monolinguals to aspire for college, but the effect does not reach statistical significance. Vietnamese speakers,

however, are 1.5 times more likely than English monolinguals to expect to earn college degree (odds ratio 1.491, p<0.001 in Table 1.5). Vietnamese speakers are not any different from English monolinguals when it comes to making plans to attend a four-year college in fall after high school. The coefficients for the Filipino language group are not significant.

When family SES variables, namely, parental education and home ownership, and family structure and sex are added in Model 2 to language groups, these variables improve the predictive power of the model by eight times (see Table 1.4 where pseudo-r-squared of 0.011 in Model 1 vs. 0.079 in Model 2.) Similar improvements in prediction power due to family social background are also observed for expectations (Table 1.5) and college plans (Table 1.6). Bayesian Information Criteria (BIC) statistic shows a better model fit for Model 2 which includes language group and family SES background and family structure.

The results indicate that parental education is a strong predictor of higher educational ambitions and plans, supporting my second hypothesis. Net of language background, sex and family structure, youths who have parents with college degree are three to almost five times as likely to have higher educational ambitions as youths who have parents with only high school education or less. Home ownership is yet another family SES indicator that has strong significant effect on high school seniors' educational ambitions and plans. Seniors whose parents own homes are 23 percent more likely than seniors whose parents rent to have college aspirations, 32 percent more likely to have college expectations, and 31 percent more likely to plan to attend a four-year college in fall after high school. Females are significantly more likely than males to have higher educational ambitions and plans.

Not surprisingly, lower parental education fully explains the disadvantage reported by Spanish-speaking youth about their educational ambitions and plans. The disparity in ambitions and plans between Spanish-speaking youth and English-only-speaking youth reduces in Model 2 and the effects are not significant any longer. Lower parental education and lower rate of home ownership also account for lower odds of college aspiration among Khmer-speaking youth as the odds ratio from Model 1 changes from negative 0.732 to positive 1.269, and the effect loses statistical significance (see Table 1.4.) This means that, if Khmer-speaking youth had equal levels of family SES (in terms of parental education and home ownership) as English-only-speaking monolinguals, they are 27 percent more likely to have college aspirations than the latter group. A very similar effect of family SES for Khmer-speaking youth is also observed in college expectations and college plans.

Even though including family SES in Model 2 reduces the college aspiration disparity between the Russian-speaking group and the English-only-speaking group to almost a sixth (from odds ratio 0.430 to 0.502), the effect remains significant. This suggests that family SES explains some of the disadvantage of Russian-speaking youth but not all. This appears to be the case in terms of college expectations and college plans also. While disadvantage for Khmer-speaking youth seems to be due to lower family SES, the disadvantage for Russian-speaking youth appears to be related to something else. The subsequent models should help find those out.

Family SES has a suppressor effect on Korean-speaking youth. For instance, even though Korean-speaking seniors are 3.7 times as likely as English-only-speaking seniors to aspire for college in the first place, if they had similar family SES as the latter group, they are 4.0 times as likely to aspire for college education. Family SES variables increase the odds for college expectation by 12 percent from 4.071 in Model 1 to 4.576 in Model 2 (see Table 1.5). The odds for college plans also increase by 8 percent from 2.299 in Model to 2.491 in Model 2 (see Table 1.6).

Vietnamese is another language group which also experiences suppressor effects of family SES on college ambitions and plans. For instance, while Vietnamese-speaking youth are already 49 percent more likely than English-only-speaking youth to expect to attain a college education (see Model 1 in Table 1.5), when their family SES is statistically made equal to that of English-only-speaking youth in Model 2, they are 251 percent more likely to expect to go to college than English-only-speaking youth.

Model 3 tests the effects of generational status on college ambitions and plans. In general, the direction and magnitude of the odds ratios indicate that, net of family SES, family structure, sex and the language spoken at home, the native-born second-generation youth have significantly higher odds of holding high ambitions than the third- or later generation youth. For instance, second-generation youth are 24 percent more likely than third- or later generation youth to aspire for college, 22 percent more likely to expect to earn a college degree and 39 percent more likely to plan to attend college in fall after high school. This result supports the fourth hypothesis and is consistent with findings by Kao and Tienda (1995) that educational aspirations decline for third generation.

The recent immigrants, the 1.25 generation, are 47 percent less likely than English-only-speaking peers to plan to attend college in the fall after high school, and the effects are significant. Other studies have also found that students who start U.S. schooling in secondary grades, and had had prior schooling in the country of origin, may not be as prepared for college as students who have spent longer time in the U.S. schools (Rodriguez and Cruz 2009).

The direction of the odds ratio for the 1.25 generation is also negative for college aspirations and expectations but does not reach statistical significance. The 1.50 generation, who immigrated to the United States when they were between six and 12 years of age, does not differ significantly from the third- or later generation on either college aspirations or expectations. The 1.75 generation, who immigrated as very young children, does not differ from third-or later generation in holding college aspirations and expectations. However, net of other controls, they are 33 percent more likely than the third- or later generations to plan to go to college in the fall after high school. This result suggests that the second generation and the 1.75 generation have similar odds of planning to attend a college and thus behave in a similar manner at least in this measure of social psychological dimension. Using the CILS data, Portes and Rumbaut (2001) found no effect of length of acculturation, measured in terms of number of years in the United States and nativity, on educational expectations of adolescents. Note that their sample included only the second generation.

Model 4 adds proficiency in home language and English among seniors who speak a non-English language at home. In Models 4, 5 and 6, the language background variables (Spanish, Korean, Khmer, Vietnamese and other listed) pull out the effects of not having proficiency in either minority home language or English among seniors with dual-language background from language proficiency variables. Therefore, the language proficiency variables capture the effects of language proficiency among dual-language seniors relative to English-only-speaking monolinguals. The language background variables now represent seniors from dual-language homes who are not proficient in either home language or English or both.

The results in Model 4 suggest that, net of other controls, seniors from dual-language backgrounds who are proficient in their native tongue have the same odds of holding college ambitions and plans as do English-only-speaking youth. That is, seniors proficient in their mother tongue are not in a better or a worse position than English-only-speaking peers in

terms of having high educational aspirations, expectations and plans. However, seniors from dual-language backgrounds who are proficient in English are 53 percent more likely than English-only-speaking monolinguals to aspire for college, 53 percent more likely to expect to earn a college degree and 73 percent more likely to plan to attend a college in the fall after high school. The results thus suggest that, while proficiency in minority mother tongue does not accrue either advantage or disadvantage to youths in terms of desiring college education, proficiency in English provides advantage to this group of youths. These results are consistent with Hao and Bonstead-Bruns' (1998) study but are in contrast to Qian and Blair's (1999) findings. One possible explanation is that having English proficiency helps the high school seniors communicate with high school counselors, teachers, prospective college administrators and recruiters to find out information about colleges and the financial aid application processes. They are likely able to write a more cogent application than those less proficiency, thus impressing college personnel with their abilities. Having proficiency in minority home language only may not be as helpful to the high school seniors seeking information about colleges and the application process.

It is not surprising that when language proficiency variables are introduced in Model 4, the disparity between minority language group and English-only monolinguals increases. The language groups now represent seniors from dual-language homes who are limited in either native language, or English or both.

In Model 5, I add an interaction equation between proficiency in home language and English among seniors with dual-language background. Since the two proficiency variables are dummy variables, coded 1 and 0, the odds ratio for this interaction equation reflects the effects of fluent bilingualism on college ambitions and plans. The results show that, net of other variables in the equation, fluent bilingualism has a significant independent effect on college aspirations. That is, youths who are skilled in both their mother tongue and English are 1.7 times more likely to aspire for college than youths who speak only English. The effects of fluent bilingualism on college expectations and plans are also positive but the effects are not significant for these two outcomes. These results, thus, provide partial support for my third hypothesis. However, the interpretation and confirmation need qualification. The model fit statistics, such as BIC values or -2Log Likelihood test statistics, show that the fuller model (5) with fluent bilingualism is not a better fit than the nested model (4) without the interaction term. The -2Log Likelihood ratio chi square test in Model 5 (Table 1.6) is smaller by three values than the value in the nested Model 4, even though the BIC is

larger by three. It should be noted that the BIC penalizes models for having many parameters. This also explains why—despite statistically significant effects of the newly added variables (English proficiency in Models 4 and interaction in Model 5) on the outcome—the BIC values actually increase slightly. The -2Log Likelihood statistic, on the other hand, is more robust than BIC (or ACI) as it does not penalize a model for additional parameters (Agresti 2002). As Models 4 and 5 are theoretically important, I argue that despite the statistical testing of model fits, the results are worth noting. The changes between these two models indicate whether having fluency in English and home language provides additional advantage over proficiency in only one language. Furthermore, the effects of fluent bilingualism are positive consistently across the three educational ambition outcomes.

Finally, Model 6 adds seniors' high school grades, work effort and college expectations of significant others. Consistent with results from prior studies, all these variables have net significant direct positive effects on college ambitions and plans of high school seniors. The higher the high school grades and the more hours spent on homework, the higher the odds of high school seniors having college ambitions and plans. Similarly, the youths' perceptions that their parents, friends and mentor-like adults expect them to go to college significantly raises the likelihood that the youths themselves hold high ambitions and plans for themselves. This is the core tenet of status socialization theory (Morgan 2005).

The comprehensive model (6) shows that, net of other variables, including high school grades, parental education level and home ownership are important predictors of educational ambitions and plans. While fluent bilingualism appears to strongly predict educational aspirations and expectations, it exerts positive influence on immediate college plans. Generational status does not predict aspirations and expectations, but it predicts college plans. When high school grades and expectations of significant others are controlled for, females cease to have an advantage in educational aspirations, expectations and college plans. Family structure influences the outcomes through high expectations parents hold. Even after controlling for individual and family background variables, Korean-speaking youth are more likely to hold higher educational aspirations, expectations and college plans than English-only speaking youth.

Results by Language Groups

In the pooled sample above we saw that educational aspirations, expectations and college plans vary by language spoken at home and that family social background accounts for much difference between minority language groups and the English-only language group. Bilingual proficiency appears to offer significant advantages in developing high educational aspirations and expectations but not for college plans. In the following analysis I examine which predictors are significant and whether the effects vary by language group. Specifically, I examine how fluent bilingualism operates in influencing educational aspirations for different language groups. I replicate the logistic regression analysis for all three outcomes separately by language group. The results were very similar for the three outcomes. Therefore, I present results only for educational aspirations. Another main reason I chose to display results for aspirations is that, in the pooled sample analysis, fluent bilingualism turned out to be a strong predictor only for aspirations in Model 5.

Tables 1.7a through 1.7f report logistic regression results predicting college aspirations of high school seniors who spoke the following non-English languages at home: Table 1.7a Spanish, Table 1.7b Korean, Table 1.7c Khmer, Table 1.7d Vietnamese, Table 1.7e other Asian language and Table 1.7f other non-English language group. For Spanish and 'other non-English' language groups, the third generation is a sizable proportion of these language groups. Therefore, I use third or later generation as the reference category for these two language groups. For the rest, which are Asian languages, I actually exclude the third generation from the analysis because there are too few of them in the third or later generation category. Secondly, for all language groups I combine all the sub-groups of first generation into one category to ensure sufficient sample size per category to run reliable models.

[TABLE 1.7A THROUGH TABLE 1.7F ABOUT HERE]

The results reveal interesting differences in the effects of predictors for language groups. For instance, parental education is important in predicting college aspirations of high school seniors who speak Spanish (Table 1.7a) and those who speak 'other non-English' (Table 1.7f) languages that include German, French, African languages, Russian and other non-Asian languages. Net of sex, family structure, generational status, grade and college expectations of significant others, Spanish-speaking youths with college-educated parents

are 4.3 times as likely as Spanish-speaking youths whose parents have only completed high school or less to have college aspirations. In contrast, for all Asian language groups parental education has positive effects, but the effects are not statistically significant (Tables 1.7b-1.7e).

Generational status does not appear to predict educational aspirations except for Korean and 'other Asian' language groups. Second-generation Korean-speaking youth are three times as likely as first-generation Korean-speaking youth to aspire for college when sex, family social background and family structure are controlled for (Table 1.7b). Similarly, 'other Asian' language groups which include Filipino, Chinese, Japanese, Asian Indian and others also have a clear second-generation advantage over first generation (Table 1.7e). Among Spanish speakers, the second-generation effect is positive relative to third generation and the first-generation effect is negative, but not statistically significant. Bohon, Johnson and Gorman (2006) found that immigrant status was not associated with aspirations among Latino adolescents. The effects of generational status for Khmer and Vietnamese language groups are not significant (Tables 1.7c and 1.7d).

Fluent bilingualism is not a significant predictor of college aspirations for any language group. In addition, the effects of fluent bilingualism appear to be negative for some language groups (Spanish, Korean, Vietnamese and other-Asian languages) and positive for others (Khmer and other non-Asian non-English languages). These results do not provide support for the positive effects of selective acculturation. A possible reason for these results is the small number of fluent bilingual youths per language group. In the final Model 6, controlling for family SES, generational status and other characteristics, prior school achievement, measured by high school GPA and the seniors' perceptions that their friends expect them to go to college after high school are significant predictors of college aspirations across language groups. Differences across language groups are partially explained by SES, encouragement and GPA.

DISCUSSION (Needs more work)

Significant differences in aspirations, expectations and college plans are observed by language spoken at home. Korean, Vietnamese and 'other Asian' language groups that include Chinese, Japanese, Asian Indian among others, are the most ambitious language

groups. Spanish, Khmer and Russian language groups, in contrast, have low college ambitions. Parental education clearly explains the low educational ambitions and plans among Spanish speakers—in both the pooled sample analyses and the Spanish-language specific analysis. Thus, even though low aspirations and expectations among one Spanish-speaking immigrant group by national origin—Mexico—are generally attributed to the negative mode of incorporation (Portes and Rumbaut 2001), the evidence in this paper suggests that low parental human capital is the primary reason for low educational ambitions among the children of immigrants from Spanish language background. Families with low parental education also generally are low income. The Spanish-speaking high school seniors may be weighing options for work rather than college to help the family financially.

The advantage of the Korean language group in holding higher educational ambitions and plans than English-only monolinguals is also partly due to higher family SES of this group, The Vietnamese group stands out in having high education ambitions despite low family SES. Other studies (Portes and Rumbaut 2001) have found that Vietnamese and Korean immigrant groups have well established, economically diverse, ethnic communities, which provide inspiration, support and information, including material supports, to their members.

Compared to English-only speaking monolinguals, fluently bilingual youths have higher odds of aspiring to and expecting college education. This suggests that selective acculturation provides a mechanism by which immigrant parents and the ethnic community support the children. Not only do the fluently bilingual adolescents may have fewer conflicts with their parents, as proposed by selective acculturation thesis, they are also exposed to the cultural orientation of valuing high ambitions (Portes and Hao 2002). After all, their parents are among selective groups of individuals who came to the United States with high ambition for a better future for themselves and their children (Kasinitz et al. 2008) and with an optimistic attitude (Kao and Tienda 1995).

Table 1.1. Proportion of Seniors Who Aspired for College Education or More by Language Spoken at Home

	English-only	Spanish	Korean	Khmer	Viet-namese	Filipino	Russian	Other Asian	Other	Total
Sex										
Male	0.729	0.695	0.903	0.691	0.754	0.702	0.618	0.840	0.734	0.734
Female	0.781	0.675	0.937	0.700	0.855	0.826	0.547	0.886	0.750	0.777
Highest level of education attained by either parent										
High school or less	0.583	0.578	0.909	0.673	0.790	0.733	0.429	0.800	0.600	0.618
Some college	0.710	0.661	0.885	0.750	0.831	0.674	0.554	0.778	0.729	0.714
College graduate or more	0.884	0.884	0.951	0.733	0.813	0.862	0.794	0.931	0.869	0.884
Family home ownership during high school senior year										
Rent	0.669	0.641	0.880	0.664	0.787	0.750	0.442	0.813	0.694	0.678
Own	0.792	0.720	0.941	0.738	0.833	0.786	0.750	0.887	0.777	0.794
Family structure during high school senior year										
Lived with both parents	0.703	0.651	0.956	0.671	0.741	0.781	0.484	0.721	0.752	0.707
Other living arrangements	0.801	0.708	0.904	0.706	0.825	0.774	0.597	0.917	0.737	0.793
Generational status (length of U.S. residence)										
1.25 gen: Arrived US as a teenager	0.708	0.641	0.884	0.333	0.571	0.733	0.483	0.857	0.692	0.668
1.50 gen: Arrived US between ages 6-12 years	0.673	0.444	0.896	0.786	0.863	0.720	0.540	0.818	0.696	0.735
1.75 gen: Arrived US during pre-school year	0.811	0.654	0.868	0.633	0.769	0.759	0.789	0.857	0.839	0.758
2.0 gen: Student US born, at least one parent US born	0.797	0.728	0.958	0.738	0.842	0.841	0.750	0.921	0.685	0.799
3.0+ gen: Student & both parents U.S. born	0.752	0.728	1.000	0.800	0.667	0.667	0.692	0.688	0.815	0.752
Minority language proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.669	0.911	0.691	0.825	0.852	0.615	0.864	0.749	0.764
Overall: Proficient	--------	0.692	0.927	0.750	0.792	0.600	0.559	0.867	0.731	0.734
English proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.558	0.888	0.616	0.755	0.684	0.461	0.889	0.659	0.668
Overall: Proficient	--------	0.725	0.934	0.738	0.886	0.794	0.738	0.858	0.755	0.791
Bilingual proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.634	0.909	0.684	0.789	0.813	0.531	0.875	0.724	0.735
Overall: Proficient	--------	0.751	0.948	0.923	0.917	0.640	0.703	0.815	0.779	0.797

Table 1.1. Continued.

	English-only	Spanish	Korean	Khmer	Viet-namese	Filipino	Russian	Other Asian	Other	Total
Father's expectation of student's post high school plans										
Do other things	0.528	0.526	0.690	0.479	0.571	0.621	0.432	0.731	0.529	0.532
Go to college	0.849	0.763	0.959	0.782	0.843	0.828	0.619	0.891	0.830	0.843
Mother's expectation of student's post high school plans										
Do other things	0.439	0.396	0.667	0.453	0.435	0.538	0.346	0.636	0.468	0.442
Go to college	0.837	0.772	0.937	0.761	0.842	0.806	0.621	0.901	0.814	0.832
Friends' expectation of student's post high school plans										
Do other things	0.532	0.522	0.848	0.420	0.500	0.615	0.378	0.727	0.563	0.536
Go to college	0.848	0.755	0.934	0.765	0.865	0.822	0.657	0.900	0.828	0.842
Mentor' expectation of student's post high school plans										
Do other things	0.454	0.450	0.633	0.415	0.450	0.333	0.276	0.765	0.482	0.456
Go to college	0.830	0.734	0.953	0.751	0.836	0.827	0.645	0.877	0.802	0.824
Favorite teacher's expectation of student's post high school plans										
Do other things	0.497	0.431	0.810	0.474	0.682	0.625	0.400	0.650	0.490	0.507
Go to college	0.819	0.726	0.939	0.736	0.818	0.800	0.600	0.895	0.792	0.812
Proportion per language	0.758	0.684	0.920	0.696	0.807	0.776	0.573	0.865	0.742	0.757
N	6798	452	287	250	264	116	150	163	299	8779

Note:
[a] Proficiency in English and home language are available only for those students who reported having a home language other than English. The value of '0' is assigned for both English proficiency and minority home language proficiency for English monolinguals, which is represented by "----" symbol in the table. See text for explanation.

Table 1.2. Proportion of Seniors Who Expected to Attain College Education or More by Language Spoken at Home

	English-only	Spanish	Korean	Khmer	Viet-namese	Filipino	Russian	Other Asian	Other	Total
Sex										
Male	0.654	0.567	0.868	0.582	0.706	0.489	0.564	0.680	0.626	0.654
Female	0.712	0.582	0.930	0.529	0.819	0.797	0.495	0.784	0.637	0.705
Highest level of education attained by either parent										
High school graduate or less	0.468	0.441	0.870	0.532	0.755	0.600	0.405	0.575	0.424	0.505
Some college	0.628	0.575	0.874	0.578	0.787	0.488	0.473	0.583	0.626	0.630
College graduate or more	0.842	0.802	0.935	0.667	0.750	0.828	0.765	0.874	0.804	0.841
Family home ownership during high school senior year										
Rent	0.560	0.529	0.860	0.483	0.767	0.531	0.419	0.688	0.548	0.573
Own	0.735	0.614	0.920	0.645	0.763	0.726	0.656	0.757	0.691	0.733
Family structure during high school senior year										
Lived with both parents	0.611	0.559	0.900	0.571	0.638	0.594	0.484	0.558	0.606	0.613
Other living arrangements	0.747	0.588	0.898	0.544	0.801	0.702	0.529	0.800	0.647	0.731
Generational status (length of U.S. residence)										
1.25 gen: Arrived US as a teenager	0.667	0.436	0.907	0.667	0.464	0.533	0.400	0.667	0.692	0.583
1.50 gen: Arrived US between ages 6-12 years	0.592	0.311	0.875	0.786	0.847	0.560	0.520	0.818	0.739	0.693
1.75 gen: Arrived US during pre-school year	0.755	0.481	0.849	0.500	0.718	0.724	0.684	0.643	0.710	0.662
2.0 gen: Student US born, at least one parent US born	0.736	0.633	0.930	0.562	0.772	0.750	0.625	0.829	0.520	0.716
3.0+ gen: Student & both parents US born	0.679	0.660	0.000	0.600	0.667	0.667	0.769	0.438	0.717	0.678
Minority language proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.562	0.889	0.552	0.767	0.704	0.615	0.771	0.640	0.665
Overall: Proficient	--------	0.582	0.907	0.550	0.764	0.600	0.486	0.644	0.630	0.657
English proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.389	0.876	0.453	0.730	0.632	0.404	0.694	0.585	0.582
Overall: Proficient	--------	0.636	0.908	0.604	0.819	0.680	0.689	0.748	0.644	0.700
Bilingual proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.515	0.889	0.549	0.750	0.681	0.469	0.757	0.628	0.645
Overall: Proficient	--------	0.656	0.922	0.615	0.861	0.640	0.676	0.630	0.653	0.710

Table 1.2. Continued.

	English-only	Spanish	Korean	Khmer	Viet-namese	Filipino	Russian	Other Asian	Other	Total
Father's expectation of student's post high school plans										
Do other things	0.428	0.336	0.690	0.338	0.571	0.448	0.432	0.462	0.391	0.426
Go to college	0.789	0.697	0.935	0.637	0.795	0.747	0.549	0.788	0.731	0.779
Mother's expectation of student's post high school plans										
Do other things	0.350	0.292	0.611	0.340	0.391	0.231	0.423	0.364	0.355	0.350
Go to college	0.770	0.662	0.918	0.609	0.801	0.728	0.540	0.794	0.705	0.761
Friends' expectation of student's post high school plans										
Do other things	0.438	0.406	0.783	0.280	0.476	0.346	0.378	0.515	0.365	0.436
Go to college	0.786	0.650	0.921	0.620	0.820	0.767	0.581	0.792	0.759	0.776
Mentor' expectation of student's post high school plans										
Do other things	0.365	0.287	0.667	0.317	0.400	0.250	0.276	0.588	0.321	0.364
Go to college	0.762	0.637	0.926	0.598	0.795	0.721	0.579	0.753	0.704	0.752
Favorite teacher's expectation of student's post high school plans										
Do other things	0.414	0.292	0.738	0.289	0.682	0.313	0.350	0.500	0.408	0.417
Proportion per language	0.686	0.575	0.899	0.552	0.765	0.672	0.520	0.736	0.632	0.682
N	6798	452	287	250	264	116	150	163	299	8779

Note:
[a] Proficiency in English and home language are available only for those students who reported having a home language other than English. The value of '0' is assigned for both English proficiency and minority home language proficiency for English monolinguals, which is represented by "----" symbol in the table. See text for explanation.

Table 1.3. Proportion of Seniors Who Planned to Attend a 4-Year College in the Fall After High School by Language Spoken at Home

	English-only	Spanish	Korean	Khmer	Viet-namese	Filipino	Russian	Other Asian	Other	Total
Sex										
Male	0.496	0.424	0.701	0.460	0.540	0.442	0.328	0.560	0.497	0.499
Female	0.589	0.474	0.771	0.503	0.596	0.635	0.343	0.641	0.551	0.581
Highest level of education attained by either parent										
High school graduate or less	0.351	0.335	0.690	0.468	0.513	0.412	0.234	0.457	0.387	0.383
Some college	0.484	0.471	0.663	0.529	0.649	0.422	0.276	0.514	0.563	0.490
College graduate or more	0.700	0.624	0.809	0.471	0.588	0.688	0.605	0.710	0.602	0.695
Family home ownership during high school senior year										
Rent	0.419	0.359	0.613	0.427	0.503	0.543	0.210	0.370	0.485	0.423
Own	0.598	0.526	0.801	0.560	0.650	0.560	0.514	0.705	0.556	0.601
Family structure during high school senior year										
Lived with both parents	0.465	0.474	0.683	0.494	0.452	0.543	0.258	0.435	0.471	0.470
Other living arrangements	0.614	0.434	0.759	0.480	0.602	0.560	0.355	0.662	0.558	0.597
Generational status (length of U.S. residence)										
1.25 gen: Arrived US as a teenager	0.280	0.256	0.681	0.333	0.379	0.563	0.186	0.273	0.464	0.364
1.50 gen: Arrived US between ages 6-12 years	0.436	0.347	0.755	0.571	0.533	0.407	0.339	0.625	0.571	0.503
1.75 gen: Arrived US during pre-school year	0.640	0.435	0.661	0.505	0.643	0.677	0.522	0.581	0.563	0.578
2.0 gen: Student US born, at least one parent US born	0.626	0.523	0.776	0.476	0.698	0.604	0.750	0.725	0.514	0.614
3.0+ gen: Student & both parents US born	0.536	0.463	0.667	0.250	0.444	0.000	0.533	0.474	0.535	0.534
Minority language proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.448	0.732	0.492	0.615	0.568	0.467	0.643	0.542	0.556
Overall: Proficient	--------	0.451	0.735	0.381	0.527	0.526	0.291	0.500	0.516	0.497
English proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.306	0.711	0.426	0.423	0.409	0.179	0.385	0.447	0.401
Overall: Proficient	--------	0.499	0.743	0.514	0.774	0.587	0.591	0.664	0.546	0.592
Bilingual proficiency in dual-language homes [a]										
Overall: Not proficient	--------	0.402	0.726	0.488	0.533	0.550	0.288	0.585	0.525	0.510
Overall: Proficient	--------	0.517	0.753	0.385	0.789	0.577	0.500	0.690	0.544	0.585

Table 1.3. Continued.

	English-only	Spanish	Korean	Khmer	Viet-namese	Filipino	Russian	Other Asian	Other	Total
Father's expectation of student's post high school plans										
Do other things	0.290	0.315	0.500	0.400	0.500	0.367	0.250	0.286	0.272	0.301
Go to college	0.652	0.522	0.777	0.518	0.579	0.615	0.364	0.662	0.627	0.638
Mother's expectation of student's post high school plans										
Do other things	0.212	0.259	0.440	0.373	0.391	0.267	0.226	0.217	0.169	0.224
Go to college	0.633	0.511	0.760	0.514	0.584	0.595	0.362	0.660	0.615	0.621
Friends' expectation of student's post high school plans										
Do other things	0.295	0.314	0.642	0.291	0.378	0.296	0.245	0.400	0.327	0.305
Go to college	0.652	0.515	0.754	0.532	0.605	0.626	0.378	0.652	0.616	0.637
Mentor' expectation of student's post high school plans										
Do other things	0.216	0.261	0.303	0.239	0.250	0.154	0.194	0.333	0.150	0.219
Go to college	0.628	0.495	0.785	0.533	0.593	0.602	0.375	0.633	0.611	0.618
Favorite teacher's expectation of student's post high school plans										
Do other things	0.271	0.253	0.583	0.310	0.455	0.333	0.111	0.333	0.226	0.279
Go to college	0.615	0.487	0.762	0.515	0.578	0.593	0.379	0.639	0.585	0.604
Proportion per language	0.547	0.451	0.735	0.484	0.568	0.556	0.337	0.602	0.526	0.544
N	7440	492	317	273	278	126	172	176	325	9599

Note:

[a] Proficiency in English and home language are available only for those students who reported having a home language other than English. The value of '0' is assigned for both English proficiency and minority home language proficiency for English monolinguals, which is represented by "----" symbol in the table. See text for explanation.

Table 1.4. Logistic Regression Models Predicting High School Seniors' Aspirations for 4-Year College or More Education

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Language background (vs. English speaking monolinguals)						
Spanish	0.691***	0.911	0.886	0.631**	0.728	1.010
Korean	3.670***	3.974***	3.881***	2.809***	3.340***	3.911***
Khmer	0.732*	1.269	1.141	0.870	0.995	0.952
Vietnamese	1.335	2.119***	2.243***	1.810**	2.150***	1.351
Filipino or Tagalog	1.107	0.929	0.925	0.628	0.730	0.986
Russian or other East European	0.430***	0.502***	0.581**	0.441***	0.515**	0.616
Other Asian languages	2.049**	1.910**	1.846*	1.304	1.523	1.847*
Other Non-English languages	0.922	1.047	0.998	0.682*	0.788	1.067
Female (vs. male)		1.341***	1.334***	1.337***	1.337***	0.786***
Family socioeconomic background						
Highest level of education attained by either parent (vs. high school or less)						
Some college		1.543***	1.538***	1.532***	1.528***	1.271***
College graduate		4.440***	4.442***	4.432***	4.422***	2.958***
Family owned home (vs. rented)		1.306***	1.280***	1.269***	1.266***	1.02
Family structure (vs. did not live with both parents)						
Lived with both parents in high school		1.233***	1.235***	1.237***	1.242***	1.033
Generational status (vs. 3rd or later generation)						
1.25 gen: Foreign-born immigrated at age 13 or older		0.776	0.932	1.048		0.683
1.50 gen: Foreign-born immigrated at age 6-12 years		0.893	0.967	1.011		0.775
1.75 gen: Foreign-born immigrated at age 0-5 years		1.054	1.040	1.040		0.809
2.0 gen: U.S. born student to one foreign-born parent		1.250**	1.238**	1.244**		1.088
Language proficiency, self-reported [a]						
Proficient in minority home language (1= yes)				1.019	0.726	0.507**
Proficient in English among minority home language (1= yes)				1.528**	1.216	0.913
Proficient in minority home language X proficient in English					1.686*	2.209**
High school achievement and school work effort						
Self reported GPA in high school senior year						1.754***
Hours spent on homework per week during high school senior year						1.430***
Educational expectations by significant others [b]						
College expectation, father						1.482***
College expectation, mother						1.919***
College expectation, friend						1.901***
College expectation, mentor like adult						1.734***
College expectation, favorite teacher						1.146
Constant	3.128***	1.004	0.997	1.001	1.003	0.026***
Model fit						
Pseudo R^2	0.011	0.079	0.080	0.082	0.082	0.239
Log Likelihood	-4808.5	-4478.7	-4472.0	-4466.7	-4464.2	-3702.2
Df	8	13	17	19	20	27
BIC	9698.6	9084.4	9107.4	9114.9	9119.0	7658.7

Source: Five waves of BHS 2000-2005 (*N* = 8,779)

Notes:
[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* p<0.05, ** p<0.01, *** p<0.001; fit statistics based on STATA's fitstat command.

Table 1.5. Logistic Regression Models Predicting High School Seniors' Expectations of Attaining 4-Year College or More Education

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Language background (vs. English speaking monolinguals)						
Spanish	0.620***	0.831	0.789*	0.562***	0.630**	0.894
Korean	4.071***	4.576***	4.294***	3.114***	3.574***	4.502***
Khmer	0.564***	1.025	0.924	0.701*	0.780	0.744
Vietnamese	1.491**	2.513***	2.355***	1.899***	2.182***	1.350
Filipino or Tagalog	0.939	0.763	0.716	0.485**	0.546*	0.727
Russian or other East European	0.496***	0.591**	0.613*	0.466***	0.528**	0.631
Other Asian languages	1.277	1.141	1.071	0.754	0.854	0.905
Other Non-English languages	0.786*	0.886	0.832	0.570**	0.639*	0.860
Female (vs. male)		1.360***	1.354***	1.357***	1.357***	0.767***
Family socioeconomic background						
Highest level of education attained by either parent (vs. high school or less)						
Some college		1.632***	1.633***	1.627***	1.624***	1.398***
College graduate		4.729***	4.750***	4.743***	4.735***	3.350***
Family owned home (vs. rented)		1.432***	1.414***	1.402***	1.399***	1.134*
Family structure (vs. did not live with both parents)						
Lived with both parents in high school		1.316***	1.312***	1.315***	1.319***	1.074
Generational status (vs. 3rd or later generation)						
1.25 gen: Foreign-born immigrated at age 13 or older		0.832	1.006	1.107	0.719	
1.50 gen: Foreign-born immigrated at age 6-12 years		1.133	1.237	1.283	1.037	
1.75 gen: Foreign-born immigrated at age 0-5 years		1.052	1.039	1.039	0.834	
2.0 gen: U.S. born student to one foreign-born parent		1.215*	1.203*	1.207*	1.061	
Language proficiency, self-reported[a]						
Proficient in minority home language (1= yes)				1.004	0.760	0.532**
Proficient in English among minority home language (1= yes)				1.528***	1.281	0.952
Proficient in minority home language X proficient in English					1.512	1.930**
High school achievement and school work effort						
Self reported GPA in high school senior year						2.207***
Hours spent on homework per week during high school senior year						1.487***
Educational expectations by significant others[b]						
College expectation, father						1.599***
College expectation, mother						1.671***
College expectation, friend						1.977***
College expectation, mentor like adult						1.669***
College expectation, favorite teacher						1.086
Constant	2.186***	0.586***	0.579***	0.581***	0.582***	0.007***
Model fit						
Pseudo R^2	0.014	0.096	0.097	0.098	0.098	0.267
Log Likelihood	-5415.6	-4965.0	-4959.8	-4953.8	-4952.1	-4026.5
Df	8	13	17	19	20	27
BIC	10913.0	10057.0	10083.0	10089.2	10094.8	8307.3

Source: Five waves of BHS 2000-2005 (*N* = 8,779)

Notes:
[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* $p<0.05$, ** $p<0.01$, *** $p<0.001$; fit statistics based on STATA's fitstat command.

Table 1.6. Logistic Regression Models Predicting High School Seniors' Plans of Attending a 4-Year College in the Fall After High School

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Language background (vs. English speaking monolinguals)						
Spanish	0.682***	0.874	0.808*	0.515***	0.548***	0.746
Korean	2.299***	2.491***	2.295***	1.515*	1.640**	1.770**
Khmer	0.776*	1.329*	1.043	0.727*	0.773	0.782
Vietnamese	1.091	1.704***	1.682***	1.239	1.337	0.804
Filipino or Tagalog	1.036	0.876	0.803	0.484**	0.518**	0.652
Russian or other East European	0.422***	0.486***	0.570**	0.393***	0.421***	0.499**
Other Asian languages	1.255	1.162	1.064	0.671*	0.721	0.726
Other Non-English languages	0.92	1.038	0.944	0.579***	0.617**	0.812
Female (vs. male)		1.498***	1.488***	1.492***	1.493***	0.931
Family socioeconomic background						
Highest level of education attained by either parent (vs. high school or less)						
Some college		1.489***	1.494***	1.491***	1.490***	1.275***
College graduate		3.277***	3.305***	3.307***	3.304***	2.271***
Family owned home (vs. rented)		1.534***	1.487***	1.471***	1.469***	1.181**
Family structure (vs. did not live with both parents)						
Lived with both parents in high school		1.310***	1.307***	1.309***	1.311***	1.064
Generational status (vs. 3rd or later generation)						
1.25 gen: Foreign-born immigrated at age 13 or older			0.625**	0.794	0.833	0.548**
1.50 gen: Foreign-born immigrated at age 6-12 years			0.969	1.092	1.112	0.874
1.75 gen: Foreign-born immigrated at age 0-5 years			1.332*	1.318*	1.314*	1.155
2.0 gen: Native born student to one foreign-born parent			1.390***	1.369***	1.371***	1.271**
Language proficiency, self-reported[a]						
Proficient in minority home language (1= yes)				1.016	0.871	0.697
Proficient in English among minority home language (1= yes)				1.729***	1.570**	1.262
Proficient in minority home language X proficient in English					1.249	1.402
High school achievement and school work effort						
Self reported GPA in high school senior year						2.328***
Hours spent on homework per week during high school senior year						1.314***
Educational expectations by significant others[b]						
College expectation, father						1.386***
College expectation, mother						1.741***
College expectation, friend						1.688***
College expectation, mentor like adult						1.998***
College expectation, favorite teacher						1.114
Constant	1.206***	0.327***	0.321***	0.323***	0.323***	0.004***
Model fit						
Pseudo R^2	0.008	0.073	0.077	0.078	0.079	0.225
Log Likelihood	-6565.2	-6134.8	-6110.5	-6098.1	-6097.4	-5130.0
Df	8	13	17	19	20	27
BIC	13212.9	12397.9	12386.1	12379.5	12387.4	10516.7

Source: Five waves of BHS 2000-2005 (*N* = 9,599)

Notes:
[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* $p<0.05$, ** $p<0.01$, *** $p<0.001$; fit statistics based on STATA's fitstat command.

Table 1.7a. Logistic Regression Models Predicting Aspirations for College among High School Seniors Who Speak Spanish at Home

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5
Female (vs. male)	1.021	1.002	0.992	0.990	0.626
Family social background					
Some college of parent (vs. high school or less)	1.438	1.348	1.278	1.278	1.195
College graduate parent (vs. high school or less)	5.729***	5.160***	5.170***	5.202***	4.275***
Family owned home (vs. rented)	1.002	0.970	0.901	0.901	0.757
Family structure					
Intact (vs. did not live with both parents)	1.399	1.479	1.456	1.455	1.762*
Generational status (vs. 3rd or later generation)					
1st gen: Foreign-born		0.679	0.850	0.857	0.882
2.0 gen: Native born to at least one foreign-born parent		1.073	1.074	1.078	1.129
Language proficiency, self-reported					
Proficient in minority home language (1= yes)[a]			1.283	1.506	0.724
Proficient in English among minority home language (1= yes)[a]			1.956*	2.311	1.426
Proficient in minority home language X proficient in English				0.833	1.290
High school achievement and school work effort					
Self reported GPA in high school senior year					2.037***
Hours spent on homework per week during high school senior year					1.393**
Educational expectations by significant others[b]					
College expectation, father					0.900
College expectation, mother					3.597***
College expectation, friend					1.251
College expectation, favorite teacher					1.557
Constant	1.114	1.279	0.623	0.535	0.016***
Pseudo R^2	0.070	0.077	0.087	0.087	0.225
LR Chi Square	39.680	43.162	49.084	49.130	126.837
Df	5	7	9	10	16
BIC	561.2	569.9	576.2	582.3	541.3

Source: Five waves of BHS 2000-2005 (*N* = 409)
Notes:

[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* $p<0.05$, ** $p<0.01$, *** $p<0.001$; fit statistics based on STATA's fitstat command.

Table 1.7b. Logistic Regression Models Predicting Aspirations for College among High School Seniors Who Speak Korean at Home

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5
Female (vs. male)	1.887	2.189	2.053	2.048	1.999
Family social background					
Some college of parent (vs. high school or less)	0.803	0.735	0.770	0.767	0.549
College graduate parent (vs. high school or less)	2.426	2.316	2.055	2.045	0.896
Family owned home (vs. rented)	2.464*	2.067	1.926	1.929	1.357
Family structure					
Intact (vs. did not live with both parents)	0.393	0.354	0.383	0.384	0.091**
Generational status (vs. 1st generation)					
2.0 gen: Native born to one U.S. parent		3.171*	4.772**	4.774**	17.541**
Language proficiency, self-reported					
Proficient in minority home language (1= yes)[a]			4.399**	5.022	1.143
Proficient in English among minority home language (1= yes)[a]			1.386	1.578	0.522
Proficient in minority home language X proficient in English				0.840	4.397
High school achievement and school work effort					
Self reported GPA in high school senior year					13.666***
Hours spent on homework per week during high school senior year					0.786
Educational expectations by significant others[b]					
College expectation, father					46.475***
College expectation, mother					0.701
College expectation, friend					0.140
College expectation, favorite teacher					1.803
Constant	8.221**	6.248**	1.645	1.474	0.005*
Model fit					
Pseudo R^2	0.074	0.109	0.155	0.156	0.533
Log Likelihood	-74.1	-71.3	-67.6	-67.6	-37.3
Df	5	6	8	9	15
BIC	182.1	182.2	186.1	191.7	165.2

Source: Five waves of BHS 2000-2005 (*N* = 286)

Notes:

[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* $p<0.05$, ** $p<0.01$, *** $p<0.001$; fit statistics based on STATA's fitstat command.

Table 1.7c. Logistic Regression Models Predicting Aspirations for College among High School Seniors Who Speak Khmer at Home

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5
Female (vs. male)	1.119	1.097	1.115	1.135	0.694
Family social background					
Some college of parent (vs. high school or less)	1.317	1.227	1.182	1.188	1.228
College graduate parent (vs. high school or less)	1.133	1.124	1.201	1.286	1.945
Family owned home (vs. rented)	1.286	1.225	1.168	1.187	0.854
Family structure					
Intact (vs. did not live with both parents)	1.147	1.200	1.162	1.165	0.960
Generational status (vs. 1st generation)					
2.0 gen: Native born to one U.S. parent		1.489	1.463	1.459	1.792
Language proficiency, self-reported					
Proficient in minority home language (1= yes)[a]			1.177	0.724	0.722
Proficient in English among minority home language (1= yes)[a]			1.617	0.970	0.972
Proficient in minority home language X proficient in English				2.004	1.369
High school achievement and school work effort					
Self reported GPA in high school senior year					1.203
Hours spent on homework per week during high school senior year					1.472*
Educational expectations by significant others[b]					
College expectation, father					2.557*
College expectation, mother					1.697
College expectation, friend					3.138**
College expectation, favorite teacher					1.446
Constant	1.616	1.342	0.905	1.281	0.042**
Model fit					
Pseudo R^2	0.008	0.014	0.023	0.027	0.178
Log Likelihood	-149.7	-148.8	-147.4	-146.9	-124.1
Df	5	6	8	9	15
BIC	332.5	336.1	344.4	348.8	336.2

Source: Five waves of BHS 2000-2005 (*N* = 245)

Notes:

[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* $p<0.05$, ** $p<0.01$, *** $p<0.001$; fit statistics based on STATA's fitstat command.

Table 1.7d. Logistic Regression Models Predicting Aspirations for College among High School Seniors Who Speak Vietnamese at Home

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5
Female (vs. male)	1.908*	1.886	1.953*	1.931	1.185
Family social background					
Some college of parent (vs. high school or less)	1.212	1.197	1.075	1.069	0.760
College graduate parent (vs. high school or less)	1.031	1.038	0.869	0.845	0.532
Family owned home (vs. rented)	1.182	1.126	0.982	1.007	1.010
Family structure					
Intact (vs. did not live with both parents)	1.426	1.471	1.532	1.506	1.389
Generational status (vs. 1st generation)					
2.0 gen: Native born to one U.S. parent		1.212	0.697	0.664	0.681
Language proficiency, self-reported					
Proficient in minority home language (1= yes)[a]			0.623	0.779	0.647
Proficient in English among minority home language (1= yes)[a]			3.154**	5.834	6.018
Proficient in minority home language X proficient in English				0.515	0.530
High school achievement and school work effort					
Self reported GPA in high school senior year					3.612***
Hours spent on homework per week during high school senior year					1.090
Educational expectations by significant others[b]					
College expectation, father					1.932
College expectation, mother					2.897
College expectation, friend					4.241**
College expectation, favorite teacher					0.305
Constant	2.077	2.007	2.368	1.966	0.008***
Model fit					
Pseudo R^2	0.020	0.021	0.060	0.061	0.244
Log Likelihood	-120.8	-120.7	-115.9	-115.8	-93.3
Df	5	6	8	9	15
BIC	274.9	280.2	281.7	287.0	275.2

Source: Five waves of BHS 2000-2005 (*N* = 255)

Notes:

[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* *p*<0.05, ** *p*<0.01, *** *p*<0.001; fit statistics based on STATA's fitstat command.

Table 1.7e. Logistic Regression Models Predicting Aspirations for College among High School Seniors Who Speak Other Asian Languages at Home

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5
Female (vs. male)	1.593	1.716	1.914	1.990	1.296
Family social background					
Some college of parent (vs. high school or less)	0.702	0.843	0.817	0.815	0.626
College graduate parent (vs. high school or less)	2.327	2.651*	2.600*	2.573*	1.337
Family owned home (vs. rented)	1.442	1.083	1.087	1.134	1.211
Family structure					
Intact (vs. did not live with both parents)	1.496	1.606	1.495	1.472	1.099
Generational status (vs. 1st generation)					
2.0 gen: Native born to one U.S. parent		2.281*	1.941	1.879	1.422
Language proficiency, self-reported					
Proficient in minority home language (1= yes)[a]			0.508	0.810	0.857
Proficient in English among minority home language (1= yes)[a]			0.837	1.182	1.463
Proficient in minority home language X proficient in English				0.529	0.362
High school achievement and school work effort					
Self reported GPA in high school senior year					2.042*
Hours spent on homework per week during high school senior year					1.506*
Educational expectations by significant others[b]					
College expectation, father					0.960
College expectation, mother					1.423
College expectation, friend					1.412
College expectation, favorite teacher					1.322
Constant	1.849	1.320	2.055	1.506	0.045**
Model fit					
Pseudo R^2	0.062	0.082	0.094	0.096	0.180
Log Likelihood	-107.8	-105.6	-104.2	-103.9	-94.3
LR Chi Square	14.4	18.8	21.6	22.1	41.4
Df	5	6	8	9	15
BIC	249.0	250.1	258.4	263.4	277.6

Source: Five waves of BHS 2000-2005 (*N* = 260)
Notes:

[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* *p*<0.05, ** *p*<0.01, *** *p*<0.001; fit statistics based on STATA's fitstat command.

Table 1.7f. Logistic Regression Models Predicting Aspirations for College among High School Seniors Who Speak Other Non-English Languages at Home

Independent variables	Model 1	Model 2	Model 3	Model 4	Model 5
Female (vs. male)	0.836	0.850	0.872	0.882	0.641
Family social background					
Some college of parent (vs. high school or less)	1.591	1.568	1.499	1.494	1.421
College graduate parent (vs. high school or less)	4.013***	3.736***	3.456***	3.421***	2.840**
Family owned home (vs. rented)	1.780**	1.694*	1.461	1.463	1.610
Family structure					
Intact (vs. did not live with both parents)	0.795	0.821	0.860	0.856	0.684
Generational status (vs. 3rd or later generation)					
1st gen: Foreign-born		0.712	0.793	0.816	0.454
2.0 gen: Native born to at least one foreign-born parent		0.826	0.762	0.776	0.535
Language proficiency, self-reported					
Proficient in minority home language (1= yes)[a]			1.448	1.050	0.808
Proficient in English among minority home language (1= yes)[a]			2.311**	1.694	1.517
Proficient in minority home language X proficient in English				1.458	1.768
High school achievement and school work effort					
Self reported GPA in high school senior year					0.961
Hours spent on homework per week during high school senior year					1.415***
Educational expectations by significant others[b]					
College expectation, father					1.797
College expectation, mother					2.000*
College expectation, friend					2.126**
College expectation, favorite teacher					1.652
Constant	1.226	1.562	0.685	0.886	0.132*
Model fit					
Pseudo R^2	0.072	0.074	0.094	0.095	0.213
Log Likelihood	-259.4	-258.7	-253.1	-252.9	-219.8
Df	5	7	9	10	16
BIC	555.4	566.3	567.3	573.1	543.3

Source: Five waves of BHS 2000-2005 (*N* = 449)

Notes:

[a] Proficient in all four dimensions: understand, speak, read and write.
[b] Perceptions reported by the high school seniors.
* *p*<0.05, ** *p*<0.01, *** *p*<0.001; fit statistics based on STATA's fitstat command.

REFERENCES