# Does Selective Migration Matter? Explaining Ethnic Disparities in Educational Attainment among Immigrants' Children ${ }^{1}$ 

Cynthia Feliciano<br>University of California, Irvine


#### Abstract

Understanding why some national-origin groups excel in school while others do not is an enduring sociological puzzle. This paper examines whether the degree of immigrants' educational selectivity - that is, how immigrants differ educationally from non-migrants in the home country - influences educational outcomes among groups of immigrants' children. This study uses published international data and U.S. Census and Current Population Survey data on 32 immigrant groups to show that as immigrants' educational selectivity increases, the college attainment of the second generation also increases. Moreover, the more positive selection of Asian immigrants helps explain their second generations' higher college attendance rates as compared to Europeans, AfroCaribbeans, and Latinos. Thus, the findings suggest that inequalities in relative pre-migration educational attainments among immigrants are often reproduced among the next generation in the United States.


Immigrants, especially from Asia and Latin America, have entered the United States in record numbers since 1965. This seemingly endless immigration flow will shape American society in crucial ways, and its impact hinges on the adaptation of immigrants, and, most critically, their children. Two issues dominate today's immigration debates: 1) the progress of immigrants themselves, including whether they are of "declining quality,"2 and 2) the mobility of immigrants' children. Both issues are complex, as immigrants and their children display a remarkable range of characteristics and outcomes. Research on the second generation - children of immigrants raised in

[^0]the United States - points to a striking diversity of outcomes that vary systematically by national origin, especially in education, which is the most important predictor of eventual economic success. This article argues that a previously neglected dimension of the "quality" of immigrants - the selective nature of their migration - helps explain educational attainment differences among immigrants' children. In proposing a link between immigrants' educational selection - that is, where immigrants ranked within their home country's educational stratification system - and educational outcomes among immigrants' children, I suggest that ethnic differences in educational success among immigrants' children can partly be attributed to the reproduction of pre-migration class structures in the United States.

## IMMIGRANT SELECTIVITY

Immigrants do not reflect a random sample of the population from which they came. However, the question of whether immigrants represent the "best and the brightest" or the "poorest of the poor" has been debated throughout immigration history. Current immigration research does not adequately address this question of how immigrants compare to those who do not migrate (Gans, 2000), and scholars therefore do not agree on this issue, or on how selectivity affects adaptation. Borjas $(1999,1990)$ argues that contemporary immigrants are of increasingly low quality because relatively less skilled migrants dominate contemporary flows. Portes, Rumbaut, and other scholars argue, however, that all immigrants represent a positively selected group from their home country (Bray, 1984; Portes and Rumbaut 1996:Ch. 1).

Selective migration has been shown to affect earnings (Borjas, 1987; Carliner, 1980; Chiswick, 1978) and health disparities among immigrants (Landale, Oropesa, and Gorman, 2000; Weeks, Rumbaut and Ojeda, 1999). However, the impact of selection on adaptation processes is understudied (Rumbaut, 1999). This article examines the impact of immigrants' selection on the educational attainment of immigrants' children; a link between the two has been suggested by previous research, but not explicitly examined (Borjas, 1990; Ogbu, 1991).

Due to data limitations, most studies using the concept of selectivity do not adequately specify selectivity's role. Adjudicating the effects of selectivity requires data comparing the populations in the sending country with immigrants from those same countries in the United States. Only a few case studies of specific immigrant groups use such data (Landale, Oropesa and Gorman, 2000; Ortiz, 1986; Ramos, 1992; Weeks, Rumbaut and Ojeda,
1999). Most existing comparative studies instead use a set of proxies for selectivity, which even they admit are "ad hoc", such as GNP, income inequality, and distance (Borjas, 1987; Cobbclark, 1993; Jasso and Rosenzweig, 1986). In contrast, this article directly examines the impact of selective migration by comparing the relative educational attainments of migrants and non-migrants from 32 of the top immigrant-sending countries to the United States. In previous work (Feliciano, 2005), I have found that nearly all immigrants are more highly educated than the populations remaining in their home countries (i.e., positively selected), but that immigrants vary considerably in their degree of positive educational selectivity by country of origin. Here, I address whether differences in the degree of positive educational selectivity influence educational outcomes among groups of immigrants' children from different countries.

## CLASS REPRODUCTION FROM IMMIGRANTS TO THE NEXT GENERATION

In proposing a link between selective migration and children of immigrants' educational attainment, I address the question of whether education creates social mobility and opportunities or whether education merely serves to reproduce the existing social class structure. Scholars such as Bourdieu (1973), Bowles and Gintis (1976) and Willis, (1977) argue that, rather than allowing for upward mobility, education actually perpetuates existing inequalities. According to this view, immigrants who come to the United States seeking better educational opportunities for their children may be disappointed by the realities of limited social mobility.

While immigrants' children almost always attain more schooling, in absolute terms, than their parents (Farley and Alba, 2002), in relative terms, immigrants' pre-migration class status may often be reproduced among their U.S.-raised children. Taking a broad view of education, it is not just the specific credential, such as whether someone has graduated high school (the absolute level of schooling), which matters. Rather, the context in which education is attained, or how that attainment compares to others, is important. Neglecting educational selectivity, or relative educational attainment, assumes that a high school degree earned in one context (say, a country where only $10 \%$ of the population has one) has the same meaning as a high school degree earned in another context (say, where $80 \%$ of the population has one). Because educational opportunities differ substantially by country, immigrants who do not have high educational credentials by American
standards may, in fact, be quite selective relative to the general populations in their home countries (Lieberson, 1980:213-214). Stratification models may therefore need to be revised for immigrants' children to reflect the different meanings of educational attainment for different immigrant groups.

Educational selectivity may affect children's educational outcomes through family background and social, cultural and ethnic capital. Parents' education is the single most important determinant of children's schooling, and not simply because education is related to occupational status and income (Blau and Duncan, 1967; Hirschman and Falcon, 1985; Jencks et al., 1972). One non-economic benefit of having highly educated parents may be that children perceive more pressure from their parents to continue in school, even if they are not academically oriented (Jencks et al., 1972:138; Sewell, Haller and Ohlendorf, 1970). Further, children from middle-class or upper-class families may have more cultural capital, which includes resources and advantages such as attitudes and styles of speaking and interacting that are rewarded in school (Bourdieu, 1973; Bourdieu and Passeron, 1977). For immigrants, non-economic forms of capital might transfer across borders, even if immigrant parents are not that educated by U.S. standards. For example, immigrants who were of high status in the home country may facilitate the achievement of the next generation in order to attain a similar class position in the United States.

## ETHNIC DIFFERENCES AND THE SECOND GENERATION

Why various American ethnic groups achieve markedly different socioeconomic outcomes is an enduring sociological puzzle. Straight-line assimilation theory predicted a single trajectory of upward mobility over time and across generations in the United States (Gordon, 1964; Park, 1928), but the reality never fit the theory, even among earlier waves of migration from Europe (Alba and Nee 1997; Perlmann and Waldinger, 1997). European immigrant groups moved ahead at divergent rates, with vast differences in educational and occupational attainments among the second generation, even controlling for background factors (Perlmann, 1988; Thernstrom, 1973). Understanding socioeconomic disparities among second-generation immigrants is particularly important because these disparities may persist across future generations (Borjas, 1994; Glazer and Moynihan, 1963; Hirschman and Falcon, 1985; Steinberg 1981). Thus, understanding why the second generation succeeds or fails may shed light on why some groups seem stuck in poverty, why others join the mainstream middle class, and why some, like
the Jews and Japanese, achieve extraordinary success (Hirschman and Falcon, 1985; Treiman and Lee, 1996; Waldinger and Lichter, 1996). Thus, as Zhou (2001:301) states, "the central question for today's research remains that of accounting for ethnic differences."

Contemporary second-generation national-origin groups differ markedly in educational outcomes. Asian-origin youths tend to be more academically successful than Latin American-origin youths. For example, in California, 44 percent of Asian high school graduates in 1996 were eligible to attend the University of California (because they had completed the required courses with adequate grades), compared to only 8 percent of Latinos (Lopez and Stanton-Salazar, 2001). Such group differences persist even after controlling for parental education and economic resources. Steinberg and his associates (1996), for example, found that, after controlling for family background, ethnic differences persisted in educational achievement, as well as in many beliefs and behaviors related to educational success, such as educational aspirations and time spent on homework (Steinberg 1996; Steinberg, Brown and Dornbusch, 1996).

Many scholars have turned to cultural arguments when class and family background do not seem to explain group differences. In particular, cultural arguments have been invoked to explain the success of "model minority" Asian newcomers, such as the Vietnamese and Chinese, compared to Latinos, from countries such as Mexico, the Dominican Republic, and El Salvador. Sowell (1981) attributes the success of Japanese immigrants to valuing reading and education. Others emphasize the "fit" between the value systems in Asian countries and American middle class values (Caudill and DeVos, 1956; Hsu, 1971). Some contend that the Confucian culture's reverence for learning drives Asian parents to push their children to succeed or that Asian families provide environments conducive to school success (Cheng and Yang, 1996; Schneider and Lee, 1990). However, attributing Asian success to "values" makes little sense when one is lumping together groups from many culturally distinct countries (Steinberg, 1981). Cultural arguments ignore the importance of pre-migration characteristics and ethnic community resources in explaining Asian success. The history of Asian exclusion may have made Chinese and Japanese immigration very selective (Cheng and Yang, 1996; Hirschman and Wong, 1986). In contrast to immigrants with a longer, less restricted, history of migration to the United States, such as Mexicans, many Asian migrants could only begin to migrate under the 1965 Immigration Act's skilled worker provisions because they did not have previous family ties to draw upon for entry. Although in recent decades more

Asians began to migrate under family provisions, and many Southeast Asians arrived as refugees, the historical pattern for many Asian groups has been one of skilled migration flows.

According to segmented assimilation theory, straight assimilation into the mainstream is one possible outcome of second-generation adaptation; another possibility is downward integration if immigrants' children fail to attain higher educations (Gans, 1992; Portes and Zhou, 1993; Rumbaut and Portes, 2001; Zhou, 1997). A third possibility is that second-generation immigrants achieve rapid advancement within the ethnic community, using ethnicity as a source of social capital (Coleman 1988; Portes and Zhou, 1993; Zhou and Bankston, 1998).

This literature suggests that ethnic capital, which is social or cultural capital provided by the ethnic community and characteristic of an entire immigrant group, may influence the next generation's educational success (Borjas, 1992; Portes and Rumbaut, 2001, 1996; Zhou and Bankston, 1998, 1994). Similarly, Borjas (1992:126) writes, "persons who grow up in highquality ethnic environments will, on average, be exposed to social, cultural, and economic factors that increase their productivity when they grow up." Wilson's (1990) work on the underclass also notes the importance of ethnic social resources. He argues that the prospects of young black males in inner city neighborhoods are poor because they are not exposed to "mainstream role models that keep alive the perception that education is meaningful [and] that steady employment is a viable alternative to welfare" (Wilson 1990:56). Borjas (1992) shows that the skills of the second generation depend not only on the parents' skills, but equally as much on the average skills of the entire immigrant generation. He finds that ethnic capital, which he measures as the average earnings of the immigrant group, is an important predictor of the earnings of the second generation, and slows down the convergence of ethnic socioeconomic differences across generations (Borjas, 1993, 1992).

I argue that the average educational selectivity of the immigrant generation can be thought of as a form of ethnic capital that influences educational attainment among the second generation. This study thus brings together ideas from the literatures on immigrant selectivity, class reproduction, and second-generation adaptation to try to understand what accounts for ethnic and racial differences in educational attainment among the new second generation.

## ANALYSIS STRATEGY

This study asks about ethnic differences in schooling in two ways. First, does
immigrants' educational selectivity help explain why some ethnic groups obtain higher amounts of schooling, on average, than others? For this question, a group-level analysis is an appropriate, albeit modest, test of the selectivity hypothesis. Following Borjas (1993), I conduct ordinary least squares regression analyses on aggregate national-origin groups to ascertain whether an immigrant group's educational selectivity affects the average educational attainment of 1.5 -generation and second-generation groups, net of the immigrant group's average socioeconomic status. I employ a method similar to Borjas' (1993) of using intercensal comparisons so that it is more likely that the groups of immigrants are the parents of the second generation. ${ }^{3}$

Second, I ask a slightly different, although related, question: does immigrants' educational selectivity help explain why individual children of immigrants from certain ethnic/racial groups are more or less likely to attain educational success (as measured by college attendance)? I examine differences across four broad pan-ethnic/racial groups: Whites (European/ Canadian origin), blacks (West Indian origins), Asians (Asian origin), and Latinos (Latin American or Spanish-speaking Caribbean origins). Clearly, these are umbrella terms for very diverse national-origin groups. However, because these groups tend to be lumped together when they come to the United States, these categories are meaningful. For example, the terms "Asian excellence" and "Latino underachievement" are often used in both academic and popular circles. At the individual-level unit of analysis, I conduct logistic regression analyses on 1.5-generation and second-generation adults to ascertain whether including the immigrant group's educational selectivity as an independent variable explains away the significance of membership in a white, black, Asian, or Latino group.

To supplement the primary findings of the study, and to provide further evidence of whether selective migration matters for children of immigrants' educational adaptation, I include two additional sets of analyses. The first is a descriptive examination of whether changes in selectivity among Mexican immigrants over time correspond to similar changes in educational attainment among Mexican immigrants' children. The second

[^1]examines whether immigrant groups' educational selectivity significantly predicts whether children of immigrants in their senior year of high school expect to attain a college degree, controlling for their parents' socioeconomic status; this analysis supplements the main findings by addressing one of the limitations of the primary data used in this study.

The reader should be cautioned that these sets of analyses are modest tests of the selectivity hypothesis. Given the limitations of the data, I can only examine whether there is an empirical relationship between the premigration educational position of immigrant groups and the attainment of immigrants' children, and I cannot explore in detail the mechanisms through which group selectivity might influence the education of second-generation individuals.

## DATA AND METHODS

The data for this study come from multiple sources. I gathered data on the educational attainment of the adult populations of sending countries, data on adult first-generation immigrants in the United States, and data on children of immigrants in the United States.

## Measuring Immigrant Selectivity

Measuring immigrants' educational selectivity required data for nationalorigin groups on both the sending and receiving sides of the migration process. First, I gathered published data on the sending countries' average levels of educational attainment, by age, for 31 of the top migrant-sending countries to the United States and Puerto Rico. Second, I created extracts of U.S. Census data on first-generation U.S. immigrants from each of the 32 countries from the IPUMS (Integrated Public Use Micro Samples). My selection of the immigrants for each country's sample was guided by three main principles. First, since I wanted measures of educational attainment that would reflect those of the "average" immigrant from that country, I included only those immigrants who migrated within ten years (before or after) the average year a particular immigrant group migrated to the United States. I collected the IPUMS for the closest year available following the average years of migration for that particular national-origin group. Second, I limited the sample of immigrants to only those who migrated as adults. Thus, I analyzed data from immigrants who were at least 18 years old when they migrated, so I could be reasonably sure that most of their education occurred in their home country rather than in the United States. Third, I
selected immigrants within the same age range as the home country populations in the published UNESCO data (in most cases, ages $20+$ or $25+$ ). This ensured that I was comparing migrants and non-migrants within the same age range.

Following Lieberson (1976, 1980), I calculated the net difference index (ND), a comparative measure of immigrants' and nonmigrants' educational attainments (adjusted for age) along all points of the education distribution, as the measure of selectivity. The net difference index is calculated based on the percentage of immigrants with the same level of attainment as nonmigrants, the percentage of immigrants with more education than nonmigrants, and the percentage of immigrants with less education than nonmigrants (see Lieberson, 1976 for a detailed discussion of this measure). For example, an index of .35 indicates that an immigrant's educational attainment will exceed that of a nonmigrant from the same country 35 percent more often than a nonmigrant's education will exceed that of an immigrant from that country (Lieberson, 1980:201). If the number of immigrants exceeding nonmigrants in educational attainment equals the number of nonmigrants exceeding immigrants in education, the value of ND will be zero. Thus, the higher the ND, the more educated the immigrants are relative to the nonmigrant population in their home country. If immigrants are more often less educated than nonmigrants (that is, there is negative selection), the value of ND will be negative. Table 1 lists each nationalorigin group's educational selectivity (ND); this will be the key independent variable.

## Measuring Immigrants' Socioeconomic Status

I also used extracts of IPUMS data on immigrants from the 32 countries to calculate the average socioeconomic status of the immigrant group, which will be a key control variable. I calculated the average years of schooling among each immigrant group, the average occupational status (Duncan SEI score), and the average income for each national-origin group. Since these variables were all very highly correlated (see Appendix Table 1 for the correlations), I standardized and summed these measures into a socioeconomic status scale ranging from 0 to 1 . Table 1 also lists the average socioeconomic status score of each group.

## Educational Attainment among Children of Immigrants

Lastly, I created extracts from the IPUMS and the Current Population Survey (CPS) on children of immigrants ages 20-40 to measure the depen-

TABLE 1
Means of Independent and Dependent Variables by National Origin

| Source Country |  |  | Dependent Variables |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Independent Variables |  | 1.5 Generation 1990 Census |  | Second Generation 1997-2001 CPS |  |
|  | Selectivity (ND) | SES | \% Some college | N | \% Some college | N |
| Canada | 0.434 | 0.749 | 67.48 | 1227 | 71.09 | 497 |
| China | 0.671 | 0.380 | 70.33 | 91 | 90.13 | 146 |
| Colombia | 0.625 | 0.397 | 68.39 | 193 | 70.86 | 105 |
| Cuba | 0.399 | 0.227 | 62.78 | 1088 | 70.8 | 332 |
| Dominican Republic | 0.490 | 0.176 | 54.64 | 194 | 58.24 | 190 |
| Ecuador | 0.496 | 0.287 | 60.00 | 130 | 70.9 | 62 |
| El Salvador | 0.350 | 0.057 | 50.00 | 106 | 54.06 | 183 |
| Greece | 0.409 | 0.271 | 57.87 | 197 | 74.83 | 108 |
| Guatemala | 0.551 | 0.062 | 57.14 | 91 | 61.76 | 43 |
| Haiti | 0.720 | 0.187 | 72.92 | 96 | 81.73 | 42 |
| Honduras | 0.454 | 0.093 | 65.38 | 52 | 69.84 | 31 |
| Hong Kong | 0.612 | 0.772 | 85.12 | 215 | 74.42 | 23 |
| Hungary | 0.885 | 0.646 | 71.43 | 49 | 68.63 | 60 |
| India | 0.859 | 1.000 | 88.38 | 198 | 90.31 | 91 |
| Iran | 0.884 | 0.764 | 76.12 | 67 | 78.83 | 33 |
| Ireland | 0.572 | 0.699 | 65.67 | 67 | 79.24 | 158 |
| Italy | 0.258 | 0.453 | 53.19 | 626 | 69.49 | 459 |
| Jamaica | 0.678 | 0.567 | 62.21 | 217 | 81.38 | 62 |
| Japan | 0.670 | 0.766 | 71.74 | 814 | 74.52 | 101 |
| Korea | 0.525 | 0.575 | 79.33 | 300 | 90.06 | 60 |
| Mexico | 0.208 | 0.000 | 31.87 | 3502 | 43.98 | 2582 |
| Netherlands | 0.685 | 0.861 | 73.15 | 149 | 88.69 | 82 |
| Nicaragua | 0.670 | 0.285 | 51.85 | 54 | 74.89 | 46 |
| Peru | 0.645 | 0.427 | 69.14 | 81 | 80.95 | 57 |
| Philippines | 0.597 | 0.658 | 74.43 | 653 | 74.16 | 249 |
| Poland | 0.573 | 0.54 | 51.15 | 131 | 72.14 | 113 |
| Portugal | 0.231 | 0.19 | 38.37 | 245 | 58.77 | 93 |
| Puerto Rico | -0.064 | 0.088 | 33.77 | 1457 | 44.11 | 1175 |
| Thailand | 0.648 | 0.463 | 59.02 | 61 | 58.23 | 30 |
| Russia | 0.365 | 0.776 | 71.43 | 56 | 82.1 | 26 |
| Vietnam | 0.595 | 0.423 | 68.60 | 242 | 90.29 | 24 |
| Yugoslavia | 0.502 | 0.479 | 57.29 | 96 | 68 | 47 |

dent variable, ${ }^{4}$ whether at least some college had been completed. ${ }^{5}$ I calculated this variable for two different groups of children of immigrants: the 1.5 generation, those who migrated as children before the age of 11 , and the 2nd generation, those who were born in the United States of at least one immigrant parent. The ethnic group of the second generation is defined by the
${ }^{4}$ I included only adults ages 20-40, so that they are old enough to have at least attended some college, yet young enough to be the children of the immigrant generation.
${ }^{5}$ I conducted similar analyses using average years of schooling and high school graduation as outcomes. The results were very similar. These findings are not included here because of space limitations, but are available from the author upon request.
father's place of birth, or, if only the mother was born abroad, the mother's place of birth. For the 1.5 generation, I used 1990 IPUMS data, because it is the only dataset with sufficient sample sizes. For the 2 nd generation, I used the 1997-2001 Current Population Surveys because the CPS, unlike the Census, has a question about parents' nativity, which allows me to directly identify U.S.-born children of immigrants (see Farley and Alba (2002) for a discussion of the utility of the CPS to examine the second generation). I combined the nonrepeated cases across these five years in the CPS to create a dataset of the second generation as of the late 1990 s/early 2000 s. The percentages of immigrants' children who have completed some college are shown, by national-origin group, in Table 1.

Since the IPUMS and the CPS do not contain questions on family background, I also include an analysis using the Children of Immigrants Longitudinal Study (CILS), a study explicitly designed to examine secondgeneration adaptation processes. The CILS surveyed U.S. and foreign-born children of immigrants in San Diego, California and Miami/Ft. Lauderdale, Florida. The first survey, conducted in 1992, included 5,262 one-and-a-half and second-generation respondents who were in the eighth and ninth grades. A second follow-up was conducted three years later, as most were seniors in high school; the follow-up included 4,288 ( $81.5 \%$ ) of the original respondents, who are the sample included in this analysis. While the CILS includes children of immigrants from 77 different nationalities, I include only children of immigrants from the nineteen nationalities for which I have data on the immigrant group's selectivity and socioeconomic status. These include children of immigrants from Mexico, Cuba, Dominican Republic, Nicaragua, El Salvador, Honduras, Ecuador, Guatemala, Colombia, Peru, Korea, Hong Kong, Japan, Vietnam, Philippines, China, India, Jamaica and Haiti. I merged data on the nineteen first-generation immigrant groups' socioeconomic status and selectivity to the CILS data on the corresponding secondgeneration children. Unfortunately, the major limitation of the CILS is that the respondents are too young to have attended college. However, I can examine expectations of graduating from college; in this analysis, I control for family background, which is a limitation of the primary IPUMS and CPS data used in this study.

## RESULTS

## Group-level Analysis

Descriptive Results. As previously stated, Table 1 shows the main independent
and dependent variables used in the group-level analysis, sorted by the country of origin. The table illustrates the substantial variability in socioeconomic status, selectivity, and educational attainment among the 32 groups in the study. One-and-a-half generation and second-generation Indians have the highest levels of college attainment. At the other end of the spectrum, Mexicans have the lowest levels of attainment. For example, 88 percent of 1.5 -generation Indians attended at least some college. In contrast, only 32 percent of 1.5 -generation Mexicans have at least some college education. For these groups and most others, college attendance rates are slightly higher among the second generation than among the 1.5 generation, most likely because the data for the second generation come from a later time period.

The relationship between the immigrant groups' educational selectivity (ND) and socioeconomic score is particularly important because selective migration may not capture anything above and beyond an immigrant group's socioeconomic status in the United States. In Table 2, I show a

TABLE 2
Average Socioeconomic Status by Educational Selectivity and Percent of Next Generation with Some College Attainment, 32 Origin Countries

|  | Low Average Socioeconomic Status | High Average Socioeconomic Status |
| :---: | :---: | :---: |
| Low Average Selectivity | Cuba, Dominican Republic, Ecuador, El Salvador, Greece, Guatemala, Honduras, Mexico, Portugal, Puerto Rico | Canada, Ireland, Italy, Korea, Russia, Yugoslavia |
|  | Average College Attendance Rate of these origin countries: <br> 1.5 gen: $51.18 \%$ <br> second gen: 60.73\% | Average College Attendance Rate of these origin countries: 1.5 gen: $65.73 \%$ second gen: $76.66 \%$ |
| High Average Selectivity | China, Colombia, Haiti, Nicaragua, Peru, Vietnam | Hong Kong, Hungary, India, Iran, Jamaica, Japan, Netherlands, Philippines, Poland, Thailand |
|  | Average College Attendance Rate of these origin countries: <br> 1.5 gen: $66.87 \%$ <br> second gen: $81.48 \%$ | Average College Attendance Rate of these origin countries: <br> 1.5 gen: $71.28 \%$ <br> second gen: 76.13\% |

cross-tabulation of dichotomous measures of immigrant group selectivity and socioeconomic status, based on whether the immigrant group was above or below the median. The table shows that while most groups correspond on both indicators (are both low or both high in selectivity and socioeconomic status), a substantial minority of groups diverges on the two measures. For example, Mexicans and Puerto Ricans have both very low educational se-
lectivity and very low socioeconomic status. In fact, Puerto Rican migrants are the only group that is negatively selected (-.064, Table 1), and they have the second-lowest socioeconomic status ( 0.88 , Table 1 ). Mexicans have the third lowest ND (.208, Table 1) and the lowest socioeconomic status score ( 0.00 , Table 1). Conversely, Indians have very high selectivity (.859, Table 1 ), and also very high socioeconomic status ( 1.00 , Table 1). In contrast, other groups, such as Canadians and Russians, have high socioeconomic status, but low selectivity. These immigrant groups come from countries with high overall educational attainment levels, which, due to a ceiling effect, necessarily means the immigrants will not be that highly selected. Further, some groups are highly selected, but are of low overall socioeconomic status; these include immigrants from Nicaragua, Haiti and China. These immigrants are much more highly educated relative to their home countries' populations, but do not have high educational attainment, occupational statuses or incomes by American standards.

Table 2 also shows the college attendance outcome for the 1.5 and second-generation groups in each cell. Not surprisingly, those from immigrant groups with both low selectivity and low socioeconomic status have the lowest college attendance rates ( $51.18 \%$ for the 1.5 generation and $60.73 \%$ for the second generation). Among the 1.5 generation, those from immigrant groups with both high socioeconomic status and high selectivity have the highest college attendance rates ( $71.28 \%$ ). However, college attendance rates for those from immigrant groups with high selectivity, but low socioeconomic status are similar to those of high socioeconomic status, but low selectivity. Interestingly, among the second generation, those immigrant groups with high selectivity, but low socioeconomic status, have higher college attendance rates than even those with both high selectivity and high socioeconomic status. This descriptive analysis shows that children of immigrant groups with high selectivity are doing quite well, even if those groups are of low socioeconomic status in the United States (this includes those from China, Colombia, Haiti, Nicaragua, Peru and Vietnam). However, the dichotomous measures of selectivity and socioeconomic status are quite simplistic. For example, this table suggests a great deal of overlap between immigrant groups' socioeconomic status and selectivity. Indeed, the two measures are highly correlated (.60, see Appendix Table 2). Nevertheless, only two groups, Mexicans and Puerto Ricans, are in both the lowest quartile of socioeconomic status and selectivity, and only one group, Indians, is in the highest quartile of both indicators. I turn now to regression analyses that preserve the full range of both indicators.

## Regression Results

Table 3 shows regression results for the determinants of the college atten-

TABLE 3
Coefficients of Models of the Determinants of College Attendance Rates among 1.5 and Second-Generation Immigrant Groups in the United States (STANDARD ERRORS IN PARENTHESES)

dance rates among 1.5 -generation immigrant groups. I begin with a model that includes the average socioeconomic status of the immigrant group as the only predictor and then add, in Model 2 , immigrants' educational selectivity to see if it adds any significant explanatory power. Table 2, Model 1, shows that the immigrant group's average socioeconomic status is a strong predictor of college attendance rates for 1.5 and second-generation groups. The national-origin group with the highest immigrant socioeconomic status score (coded 1) has nearly 36 percent more college-educated persons among the 1.5 generation than the group with the lowest immigrant socioeconomic status, and this variable explains 53 percent of the variance. Among the second generation, college attendance rates are almost 29 percent higher for the highest socioeconomic status group, and this explains 40 percent of the variance.

The second models in Table 2 add immigrants' educational selectivity to the equations. This addition increases the explained variance $\left(\mathrm{R}^{2}\right)$ and decreases the coefficients of immigrant socioeconomic status for both the 1.5 and second generations. The decline in the coefficients of immigrant socioeconomic status in Model 2 indicates that part of the influence of socioeconomic status on average group educational outcomes is actually due to its correlation with immigrants' selectivity. Immigrants' educational selectivity
significantly affects college attendance rates for both the 1.5 and secondgeneration groups. For example, among the 1.5 generation, the most positively selected immigrant group has 34 percent more college educated persons. Moreover, the finding that educational selectivity is significant, net of socioeconomic status, applies even when the analysis excludes those groups with the most divergence between socioeconomic status and selectivity (analysis not shown). While the descriptive analyses suggest that only the six immigrant groups of high selectivity and low socioeconomic status might drive the results, in fact, additional analyses by the author revealed that this was not the case.

The findings for second-generation groups differ from those of 1.5generation groups in that less of the variance in college attainment is explained by the variables in the analysis. For example, 53 percent of the variance in percent college educated is explained for second-generation groups, compared to 70 percent for 1.5 -generation groups. This finding most likely reflects the different experiences of the 1.5 and secondgeneration. Having grown up entirely in the United States, the second generation is less likely to be as influenced by the migration experiences and characteristics of the immigrant generation. In any case, readers should be cautioned that the large amount of variance explained is at the group level of analysis, and would not apply at the individual level. Further, results at the group level might be the result of ecological fallacy and not apply at the individual level. I thus turn now to additional analyses to examine whether the selectivity findings hold at the individual level.

## Individual-Level Analysis: Ethnic/Racial Differences

Descriptive Statistics. Having shown that educational selectivity is an important variable affecting group-level differences in educational attainment outcomes among children of immigrants, I now turn to individual-level analyses. I address the question of whether immigrants' educational selectivity contributes to explaining the advantages or disadvantages associated with pan-ethnic group membership for children of immigrants. Specifically, I consider whites (consisting of children of immigrants with national origins in Europe or Canada), blacks (national origins in Haiti, Jamaica), Asians (national origins in Asia), and Latinos (national origins in Latin America or Spanish-speaking Caribbean).

Table 4 shows the means and standard deviations of the variables included in this analysis by race/ethnicity for the 1.5 generation and the second generation. The table shows that there are sharp disparities in college

TABLE 4
Means and Standard Deviations of Variables Included in Individual-Level Analysis by Ethnic/Racial Group, Ages 20-40

| 1.5 Generation, 1990 Census | White | Black | Asian | Latino |
| :--- | :---: | :---: | :---: | :---: |
| College Educated | 0.62 | 0.66 | 0.76 | 0.4 |
| Age | 30.03 | 25.87 | 26.71 | 27.97 |
|  | $(5.82)$ | $(4.52)$ | $(5.57)$ | $(5.69)$ |
| Age at Immigration | 3.84 | 6.14 | 4.38 | 4.78 |
|  | $(3.22)$ | $(3.14)$ | $(3.40)$ | $(3.35)$ |
| Female | 0.48 | 0.56 | 0.51 | 0.51 |
| Central City | 0.33 | 0.55 | 0.38 | 0.48 |
| Immigrant Group's Socioeconomic Status | 0.60 | 0.46 | 0.68 | 0.09 |
| $\quad$ Occupational Status, Income, Education) | $(.19)$ | $(.18)$ | $(.15)$ | $(.13)$ |
| Immigrant Group's Educational Selectivity | 0.43 | 0.67 | 0.63 | 0.23 |
| (Net Difference Index) | $(.16)$ | $(.08)$ | $(.08)$ | $(.19)$ |
|  | 2,058 | 272 | 1,881 | 5,621 |
| N |  |  |  |  |
| Second Generation, 1997-2001 CPS |  |  |  |  |
| College Educated | 0.69 | 0.75 | 0.79 | 0.48 |
| Age | 30.99 | 26.37 | 27.27 | 28.37 |
|  | $(6.03)$ | $(4.78)$ | $(5.66)$ | $(5.93)$ |
| Female | 0.51 | 0.63 | 0.51 | 0.54 |
| Central City | 0.24 | 0.51 | 0.40 | 0.40 |
| Immigrant Group's Socioeconomic Status | 0.50 | 0.39 | 0.60 | 0.07 |
| (Occupational Status, Income, Education) | $(.25)$ | $(.24)$ | $(.20)$ | $(.12)$ |
| Immigrant Group's Educational Selectivity | 0.43 | 0.56 | 0.64 | 0.19 |
| (Net Difference Index) | $(.19)$ | $(.21)$ | $(.00)$ | $(.19)$ |
| N | 1,162 | 65 | 255 | 2,036 |

attendance among the groups, and particularly between Asians and Latinos. Seventy-six percent of 1.5-generation Asians have some college schooling, compared to only 40 percent of 1.5-generation Latinos. One-and-a-half generation whites and blacks have similar levels of college attainment ( $62 \%$ and $66 \%$ ). Among the second generation, Asians are also the most educated. Second-generation Latinos again have the lowest levels of attainment: only 48 percent have some college education.

The independent variables in the analysis include age, age at migration, sex, central city residence, and immigrants' socioeconomic status and educational selectivity, both defined at the level of the national-origin group. ${ }^{6}$ The table shows that among both the 1.5 generation and the second generation, blacks are more likely to be female ( $63 \%$ among the second generation), and also more often reside in central cities than the other groups. Whites are the least urban (only $24 \%$ of second generation whites are located
${ }^{6}$ The findings in this section should be treated as tentative given that I cannot control for family background factors, such as parents' educational attainment, which have been found to be important predictors of educational attainment.
in central cities, compared to over half of blacks). As for the immigrant groups' socioeconomic status and selectivity, Latinos tend to come from immigrant groups with the lowest socioeconomic statuses and with the least positive selectivity, while Asians tend to have higher socioeconomic status and higher selectivity. Blacks and whites fall in-between. Whites tend to have high socioeconomic status but are less selective than Asians or Blacks. Blacks have lower socioeconomic status than whites or Asians, but have higher selectivity than whites and Latinos.

## Multivariate Analysis

Tables 5 and 6 show odds ratios of the determinants of some college attain-
TABLE 5
Odds Ratios of Models of the Determinants of College Education among 1.5-
Generation Persons Ages 20-40 in the United States, 1990

|  | Model 1 | Model 2 | Model 3 |
| :---: | :---: | :---: | :---: |
| Black | 1.202 | 1.928 | 1.176 |
| Asian | $1.897{ }^{\text {b }}$ | $1.765^{\text {b }}$ | 1.404 |
| Latino | $0.418^{\text {b }}$ | 1.434 | 1.251 |
| Age |  | $1.025^{\text {a }}$ | $1.031{ }^{\text {b }}$ |
| Age at Immigration (approximate) |  | 0.984 | $0.972^{\text {a }}$ |
| Female |  | $1.172^{\text {b }}$ | $1.177^{\text {b }}$ |
| Central City |  | 0.931 | 0.977 |
| Immigrant Group's Socioeconomic Status (Occupational Status, Income, Education) |  | $10.512^{\text {c }}$ | $4.047^{\circ}$ |
| Immigrant Group's Educational Selectivity (Net Difference Index) |  |  | $5.111^{\text {c }}$ |
| Observations | 9,832 | 9,832 | 9,832 |

Source: IPUMS, 1990.
Notes: Robust standard errors, adjusted for clustering at national-origin group level:

$$
\begin{aligned}
& { }^{2} p<.05 \\
& { }^{5} p<.01 \\
& c_{p}<.001
\end{aligned}
$$

ment among 1.5 and second-generation adults in the United States. The significance levels reflect the use of robust standard errors to correct for the clustering at the level of the immigrant group. Model 1 includes only the broad ethnic/racial groups as predictors of high school graduation, with whites as the comparison group. Model 1 shows that, among the 1.5 generation (Table 5), blacks do not differ significantly from whites in the odds of attending college, while Asians are 1.9 times more likely to attend college than whites, and Latinos are less than half as likely to attend college as whites. Among the second generation (Table 6), Asians are more than two times as likely to attend college as whites, while Latinos are much less likely to attend college.

TABLE 6
Odds Ratios of Models of the Determinants of College Attendance among SecondGeneration Persons Ages 20-40 in the United States, 1997-2001

|  | Model 1 | Model 2 | Model 3 |
| :--- | :---: | :---: | :---: |
| Black | 0.903 | 1.086 | 0.887 |
| Asian | $2.035^{\mathrm{b}}$ | $1.841^{\mathrm{a}}$ | $1.530^{\mathrm{d}}$ |
| Latino | $0.391^{\mathrm{c}}$ | $0.677^{\mathrm{a}}$ | $0.671^{\mathrm{b}}$ |
| Age |  | 1.003 | 1.007 |
| Female |  | $1.348^{\mathrm{c}}$ | $1.369^{\mathrm{c}}$ |
| Central City |  | 0.920 | 0.957 |
| Immigrant Group's Socioeconomic Status |  | $3.618^{\mathrm{c}}$ | $1.904^{\mathrm{d}}$ |
| $\quad$ (Occupational Status, Income, Education) |  |  | $3.221^{\mathrm{c}}$ |
| Immigrant Group's Educational Selectivity | 7,289 | 7,289 | 7,289 |
| Observations |  |  |  |

Source: March CPS 1997-2001.
Notes: Robust standard errors, adjusted for clustering at national-origin group level:
${ }^{\mathrm{a}} \mathrm{p}$ < $<.05$
${ }^{\mathrm{b}} \mathrm{p}<.01$
${ }^{c} p<.001$
$d_{p}<.10$
Model 2 adds individual-level controls to the analysis as well as the average socioeconomic status of the immigrant group. For both the Asian 1.5 and second generation, part of their advantage over whites is explained by these factors, most importantly the higher socioeconomic status of the immigrant generation. Nevertheless, even controlling for these factors, both 1.5 and second-generation Asians are still more likely than whites to attend college. In contrast, the disadvantage of the Latino 1.5 generation, and part of the disadvantage of the second generation, is explained by individual background variables and immigrants' socioeconomic status.

Model 3 introduces immigrants' educational selectivity to the model. For blacks and Latinos, immigrants' educational selectivity does not change the substantive results. For the Asian 1.5 and second generations, however, immigrants' selectivity is an important factor explaining their advantage in terms of college attendance. Once selectivity is introduced into the model, the odds ratio of Asians attending college decreases from almost 1.8 times as likely as whites, to 1.4 times as likely among the 1.5 generation, which does not significantly differ from whites. Among the second generation, the Asian advantage in terms of college attendance relative to whites is also almost entirely explained by the higher educational selectivity of the immigrant generation.

## College Attendance among 1.5-Generation Mexicans over Time

If my argument is correct, then changes in the educational selectivity of any particular immigrant group should correspond to similar changes in the
educational attainment of the next generation. Mexicans have a long history of U.S. migration, and the educational selectivity of Mexican immigrants has declined in recent years, such that Mexican immigrants who migrated in the 1990s appear much more similar, in terms of educational attainment, to the population in Mexico than did Mexican immigrants who came earlier (Durand, Massey and Zenteno, 2001). Therefore, the educational attainment among children of immigrants from Mexico should also have declined across the past few decades.

Figure I shows the selectivity of Mexican immigrants who arrived from

Figure I. College Attendance among 1.5-Generation Mexicans and Changes in Mexican Immigrant Selectivity, 1960-1990


Sources: March CPS 1997-2001 (1.5 generation), IPUMS 1960-1990, UNESCO Publications

1960 to 1.990 and the percent of the Mexican 1.5 generation who arrived during these years and completed at least some college (in 1997-2001). Selectivity is measured here as the difference between the percent of Mexicans in Mexico with no schooling and the percent of Mexican immigrants in the United States with no schooling. Thus, the chart shows that in 1960, there was a gap of 25 percent between Mexicans and Mexican immigrants in the percent with no schooling, but by 1990, more Mexican immigrants had no schooling than persons in Mexico.

The figure shows that as educational selectivity among Mexican im-
migrants has declined, there has been a similar decline in the percent college educated among the 1.5 generation who are likely the children of those immigrants. This decline is surprising given the fact that the 1.5 generation who arrived in 1960 are much older than those who arrived in 1990. Since older adult populations are less educated than younger adult populations, one would actually expect to see the opposite relationship. However, suggestively, the percent college educated among the Mexican 1.5 generation has declined from 1960 to 1990 . Thus, declining Mexican immigrant educational selectivity over time appears to correspond to declining educational attainment levels among the Mexican 1.5 generation.

## Expectations for College Graduation among 1.5- and Second-Generation High School Seniors

In Table 7, I report results from the CILS data of logistic regression models

TABLE 7
Odds Ratios from Logistic Regressions of Expectations of Graduating from College on Selected Independent Variables

| Independent Variables | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Latino | 0.626 | 1.104 | $2.211^{\text {d }}$ | $2.005^{\text {d }}$ | 1.39 |
| Black (ref = Asian) | $0.727^{\text {b }}$ | 1.127 | 1.706 | 1.056 | 0.78 |
| Age |  | 0.923 | . $915{ }^{\text {d }}$ | $0.897^{\text {a }}$ | 0.968 |
| Female |  | $1.442^{\text {b }}$ | $1.409^{\text {b }}$ | $1.403^{\text {b }}$ | 1.131 |
| Parents' SES |  | $2.470^{\text {c }}$ | $2.130^{\text {c }}$ | $2.102^{\text {c }}$ | $1.734^{\text {c }}$ |
| U.S. Born |  | 1.039 | 1.073 | $1.188^{\text {a }}$ | $1.305^{\text {b }}$ |
| Fluent bilingual |  | $1.657^{\text {c }}$ | $1.636^{\text {c }}$ | $1.578^{\text {c }}$ | $1.468^{\text {c }}$ |
| Grade point average |  | $2.301^{\text {c }}$ | $2.347^{\text {c }}$ | $2.364^{\text {c }}$ | $2.038^{\text {c }}$ |
| Group SES (occupation, income, education) |  |  | $5.598{ }^{\text {a }}$ | 1.507 | 1.508 |
| Group Educational Selectivity (ND) |  |  |  | $7.573^{\text {b }}$ | $4.933^{\text {a }}$ |
| College Expectations, Time 1 |  |  |  |  | $3.381^{\text {c }}$ |
| Perceptions of Parents' Aspirations |  |  |  |  | $3.533^{\text {c }}$ |
| N | 3,538 | 3,538 | 3,538 | 3,538 | 3,538 |
| Pseudo $\mathrm{R}^{2}$ | 0.007 | 0.157 | 0.163 | 0.167 | 0.261 |

Notes: Robust standard errors, adjusted for clustering at national-origin group level:
${ }^{a} p<.05$
${ }_{p} \ll .01$
${ }_{p} p<.001$
${ }^{c} p<.10$
predicting whether the respondent expects to obtain a college degree or not (at the time when most of the respondents were high school seniors). While ethnic differences in educational expectations are not nearly as pronounced as differences in other educational outcomes, I include this analysis to as-
certain whether immigrants' selectivity significantly predicts an educational outcome controlling for family background.

The first model in Table 7 only includes dummy variables for race, with Asians as the reference category. The odds ratios indicate that Latinos and blacks are less likely than Asians to expect to graduate from college; however, only the coefficient on blacks is significant. In Model 2, I add the control variables: age, sex, parents' socioeconomic status, whether the respondent was born in the United States, whether the respondent is fluent bilingual or not, and grade point average in 1992. Adding these variables changes the odds ratios on the racial categories such that Latinos and blacks no longer significantly differ from Asians in their expectations of graduating from college. In Model 3, I add one of the key independent variables: the average socioeconomic status of the immigrants from each respondent's national-origin group. ${ }^{7}$ The odds ratio indicates that respondents from immigrant groups with the highest average socioeconomic status are about 5.6 times as likely to expect to obtain higher degrees than those from the immigrant group with the lowest socioeconomic status. Once group socioeconomic status is included in the model, Latinos change from not significantly differing from Asians in their likelihood of expecting a college degree, to being more than two times more likely to expect a college degree than Asians. This suggests that if Latinos were from national-origin groups with similarly high socioeconomic statuses as most Asians, they would have higher educational expectations than Asians or blacks. It should also be noted that the average socioeconomic status of the national-origin group significantly impacts these individuals' educational expectations, even controlling for their family background, including their own parents' socioeconomic status. In Model 4, I add the other key independent variable: the educational selectivity (ND) of the immigrant group. Once this is added to the model, the odds ratio on group socioeconomic status declines from 5.6 to 1.5 , and is no longer statistically significant. This indicates that much of the influence of group socioeconomic status is due to the fact that the groups with higher socioeconomic status in the United States are also more highly selected. Group educational selectivity has a strong effect: respondents from the most highly select immigrant group are 7.6 times as likely to expect to obtain a college degree than those from the least educationally select immigrant group. Model 5 includes the respondents' expectations of obtaining a college

[^2]degree from three years earlier when they were approximately 14 years old, as well as the respondents' perceptions of whether or not their parents want them to attain a graduate degree. Including educational expectations at Time 1 means that this model essentially examines the factors influencing change in educational expectations from Time 1 to Time 2. This variable has a large effect: those respondents who expected to graduate college three years earlier are more than three times as likely to expect to obtain a higher degree at Time 2 as respondents who did not expect to graduate college at Time 1. Parents' aspirations also have a large effect on the child's educational expectations. Respondents who believe their parents aspire for them to obtain graduate degrees are more than three-and-a-half times more likely to expect to graduate college than those whose parents do not hope for them to obtain a graduate degree. Adding these controls to the model does not otherwise change the odds ratios of the variables substantially, although the odds ratio on Latino is no longer significant. Controlling for prior educational expectations and parents' aspirations also decreases the odds ratio on group selectivity. This suggests that group selectivity influences the aspirations that parents have for their children, and that perhaps it is partly through this mechanism that immigrant selection affects expectations among the second generation.

As indicated by these results, we do not see the same ethnic discrepancies in educational expectations as we do for attainment. However, this table does show that immigrant group selectivity contributes to the expectations of graduating from college, even controlling for parental socioeconomic status, as well as grades and language ability. Since educational expectations are highly predictive of eventual attainment (Duncan, Featherman and Duncan, 1972; Haller and Portes, 1973; Sewell, Haller and Portes, 1969; Sewell and Hauser, 1980; Sewell and Hauser, 1975), this finding provides further evidence that differences in immigrant group selection may help account for ethnic differences in educational attainment.

## DISCUSSION AND CONCLUSION

This study's major finding is that there is a link between patterns of educational selection among immigrants to the United States and educational attainment outcomes among children of immigrants. I find that the average educational selectivity of the immigrant group significantly affects college attendance rates among 1.5 and second-generation children of immigrants at the national-origin group level of analysis. Even controlling for immigrants'
average socioeconomic status, higher educational selectivity among the immigrant generation is associated with higher educational attainment among the next generation. I also show that immigrants' selectivity is a significant predictor of educational attainment among immigrants' children at the individual level. Furthermore, immigrant selectivity is an important factor contributing to broad ethnic/racial group differences in educational attainment, especially college attendance rates among Asians. The results suggest that within one national-origin group, Mexicans, changes in educational selectivity among immigrants over time are correlated with a decline in college attendance rates for their 1.5 generation. While other factors (such as increasing college costs) could account for this pattern, considered in conjunction with the other evidence, the results suggest that this pattern may be related to declining selectivity. Further, I also show that the educational selectivity of the immigrant generation significantly predicts expectations of college graduation for 1.5 and second-generation high school seniors, controlling for their parents' socioeconomic status and immigrant group average socioeconomic status. While expectations certainly differ from eventual educational attainment, this finding suggests that immigrants' educational selectivity helps explain educational outcomes, even net of family background.

This study adds to the existing literature on immigration in several ways. First, I directly measure selectivity using compiled educational attainment data on both immigrants and nonmigrants from their homelands. Many studies that refer to selectivity only suggest it as a possible factor or use proxies instead of measuring it directly. Second, most studies that do measure selectivity directly (e.g., Landale et al., 2000), only do so in case studies of one sending country. In contrast, I measure selectivity in 32 different countries and assess its impact on the immigrant groups' next generation. Finally, I move beyond existing research that connects selectivity to health and earnings outcomes among immigrants by providing tentative evidence that suggests educational selectivity is an important factor contributing to educational attainment differences among the 1.5 and second generations in the United States.

In tackling the longstanding sociological question of ethnic group differences in educational outcomes, this study highlights the influence of immigrant selectivity - a previously neglected factor. Educational selectivity explains a substantial portion of the variance in ethnic group differences in college attendance rates. Most notably, immigrant groups' socioeconomic status and average educational selectivity together account for 68 percent of the variance in college attendance rates among these 321.5 generation
groups. While this large variance only applies to the aggregate level of analysis, it suggests that an important factor contributing to group differences has been overlooked. Although tentative, given the limitations of the data and my inability to control for family background, the results at the individual level suggest that immigrant selectivity may also partly account for some of the advantages of belonging to an Asian ethnic group.

These findings challenge explanations for ethnic group differences in educational success that favor culture. For example, some scholars privilege "oppositional cultures" developed in the United States as an explanation for ethnic group differences (Ogbu, 1991), while I suggest that a pre-migration structural characteristic of immigrant groups is important. Further, this study counters arguments that certain national groups intrinsically value education more than others by showing the selection process that is occurring; only select segments of any home country's population come to the United States, and they are not necessarily representative of their national cultures. While this does not mean that cultural factors are irrelevant, it does suggest that cultural differences may ultimately stem from differences in pre-migration structural positions.

Consistent with theories of class reproduction (Bourdieu, 1973; Bowles and Gintis, 1976; Willis, 1977), this paper suggests that education is not often a vehicle for upward mobility among immigrant groups. Rather, education serves to reproduce existing stratification systems, even those carried over from other countries. My findings suggest that when education is conceptualized in a broad sense, such that not just the degree attained is considered, the importance of relative educational attainment (or educational selectivity) becomes clear. For immigrants, understanding where they were situated in their home country's system of educational stratification prior to migration can help explain where their children end up in the American educational stratification system.

Class reproduction appears to be taking place from one generation of immigrants to their children. That is, relative class position, measured by the relative pre-migration educational attainment of the immigrant generation, is being reproduced among the next generation in the United States. Since immigrants' selectivity matters above and beyond the absolute level of schooling, occupational status or income of the immigrant groups, this suggests that selectivity matters for the non-economic benefits it is capturing. These findings are consistent with theories of ethnic, social and cultural capital. That is, educational selectivity (as well as educational attainment) may capture less tangible forms of capital that either hinder or facilitate
success in school. For example, highly selected immigrant groups' children may be expected to attain a certain level of schooling, comparable to the relative level the immigrants' themselves attained in the home country. Given that I control for income and occupational status, these findings suggests that it is not only economic differences that determine who among the second generation will attend college. Instead, my results are consistent with the argument that some immigrant parents are pushing their children to rise to a higher than average class position, and to do so, the second generation must attend college. After all, it is the transition to college that is most crucial in contemporary American society, separating those who attain just the average level of schooling in the United States, from those who rise above average.

The findings of this paper are limited and should be treated as tentative. Nevertheless, the results of several distinct, albeit modest, tests are all consistent with the idea that immigrants' educational selectivity matters for the next generation's education, beyond its association with absolute measures of socioeconomic status. Thus, while the findings are preliminary, the results suggest that stratification models may need to be revised in the case of children with immigrant parents to consider immigrants' pre-migration class position. Future research should also be directed at more fully exploring the relationship between immigrant parents' relative pre-migration class standing and educational outcomes among their children in the United States, including the mechanisms through which immigrant selection matters.

APPENDIX TABLE 1
Correlations among Variables Included in Socioeconomic Status Index

|  | Avg. Educ. | Avg. SEI | Avg. Income |
| :--- | :---: | :---: | :---: |
| Average Years of Schooling | 1.00 |  |  |
| Average Occupational Status (Duncan SEI score) | 0.90 | 1.00 |  |
| Average Income | 0.63 | 0.78 | 1.00 |

APPENDIX TABLE 2
Correlations among Variables Included in the Group-Level Analysis

|  | Immigrant <br> Selectivity | Immigrant <br> SES | \% College, <br> 1.5 Gen | \% College, <br> Second Gen |
| :--- | :---: | :---: | :---: | :---: |
| Immigrantys' Selectivity (ND) | 1.00 |  |  |  |
| Immigrants' SES | .60 | 1.00 |  |  |
| Percent Some College, 1.5 gen | .77 | .73 | 1.00 |  |
| Percent Some College, second gen | .67 | .63 | .80 | 1.00 |

## REFERENCES

Alba, R. D. and V. Nee
1997 "Rethinking Assimilation Theory for a New Era of Immigration," International Migration Review, 31(4):826-874.
Blau, P. M. and O. D. Duncan
1967 The American Occupational Structure. New York: Wiley.
Borjas, G. J.
2001 "Long-run Convergence of Ethnic Skill Differentials, Revisited," Demography, 38(3): 357-361.

1999 Heaven's Door: Immigration Policy and the American Economy. Princeton, NJ: Princeton University Press.

1994 "Long-run Convergence of Ethnic Skill Differentials: The Children and Grandchildren of the Great Migration," Industrial and Labor Relations Review, 47(4):553-573.

1993 "The Intergenerational Mobility of Immigrants," Journal of Labor Economics, 111: 113-135.

1992 "Ethnic Capital and Intergenerational Mobility," Quarterly Journal of Economics, 107(1):123-150.

1990 Friends or Strangers: The Impact of Immigrants on the U.S. Economy. New York: Basic Books, Inc.

1987 "Self-Selection and the Earnings of Immigrants," The American Economic Review, 77:531-553.
Bourdieu, P.
1973 "Cultural Reproduction and Social Reproduction." In Knowledge, Education, and Cultural Change. Ed. R. Brown. London: Tavistock.
Bourdieu, P. and J. C. Passeron
1977 Reproduction in Education, Society and Culture. London; Beverly Hills: Sage Publications.
Bowles, S. and H. Gintis
1976 Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life. New York: Basic Books.
Bray, D.
1984 "Economic Development: The Middle Class and International Migration in the Dominican Republic," International Migration Review, 18(2):217-236.
Carliner, G.
1980 "Wages, Earnings, and Hours of 1st, 2nd, and 3rd Generation American Males," Economic Inquiry, 18:87-102.
Caudill, W. and G. DeVos
1956 "Achievement, Culture and Personality: The Case of the Japanese Americans," American Anthropologist, 58(6):1102-1126.

Cheng, L. and P. Q. Yang
1996 "Asians: The 'Model Minority' Deconstructed." In Ethnic Los Angeles. Ed. R. Waldinger and M. Bozorgmehr. New York: Russell Sage Foundation.
Chiswick, B. R.
1978 "The Effect of Americanization on the Earnings of Foreign-born Men," Journal of Political Economy, 86:897-921.
Cobbclark, D. A.
1993 "Immigrant Selectivity and Wages - the Evidence For Women," American Economic Review, 83:986-993.
Coleman, J. S.
1988 "Social Capital in the Creation of Human Capital," American Journal of Sociology, 94:S95-S120.
Duncan, O. D., D. L. Featherman and B. Duncan
1972 Socioeconomic Background and Achievement. New York: Seminar Press.
Durand, J., D. S. Massey and R. M. Zenteno
2001 "Mexican Immigration to the United States: Continuities and Changes," Latin American Research Review, 36(1):107-127.
Farley, R. and R. Alba
2002 "The New Second Generation in the United States," International Migration Review, 36(3):669-701.
Foner, N .
2000 From Ellis Island to JFK: New York's Two Great Waves of Immigration. New Haven, CT: Yale University Press; New York: Russell Sage Foundation.
Gans, H. J.
2000 "Filling in Some Holes: Six Areas of Needed Immigration Research." In Immigration Research for a New Century. Ed. N. Foner, R. G. Rumbaut and S. J. Gold. New York: Russell Sage Foundation.

1992 "Second Generation Decline: Scenarios for the Economic and Ethnic Futures of the Post-1965 American Immigrants," Ethnic and Racial Studies, 15(2):173-193.
Glazer, N. and D. P. Moynihan
1963 Beyond the Melting Pot: The Negroes, Puerto Ricans, Jews, Italians, and Irish of New York City. Cambridge, MA: M.I.T. Press.
Gordon, M. M.
1964 Assimilation in American Life: The Role of Race, Religion, and National Origins. New York: Oxford University Press.
Green, D. A.
1999 "Immigrant Occupational Attainment: Assimilation and Mobility over Time," Journal of Labor Economics, 17(1):49-79.
Haller, A. O. and A. Portes
1973 "Status Attainment Processes," Sociology of Education, 46:51-91.
Hirschman, C. and L. M. Falcon
1985 "The Educational Attainment of Religio-Ethnic Groups in the United States," Research in Sociology of Education and Socialization, 5:83-120.

Hirschman, C. and M. G. Wong
1986 "The Extraordinary Educational Attainment of Asian-Americans: A Search for Historical Evidence and Explanations," Social Forces, 65:1-27.
Hsu, F.
1971 The Challenge of the American Dream: The Chinese in the United States. Belmont, CA: Wadsworth.
Jasso, G. and M. R. Rosenzweig
1986 "What's In a Name? Country-of-origin Influences on the Earnings of Immigrants in the United States," Research in Human Capital and Development, 4:75-106.
Jencks, C., M. Smith et al.
1972 Inequality: A Reassessment of the Effect of Family and Schooling in America. New York: Harper \& Row.
Landale, N.S., R. S. Oropesa and B. K. Gorman
2000 "Migration and Infant Death: Assimilation or Selective Migration among Puerto Ricans?," American Sociological Review, 65:888-909.
Lieberson, S.
1980 A Piece of the Pie: Blacks and White Immigrants since 1880. Berkeley: University of California Press.

1976 "Rank-sum Comparisons between Groups," Sociological Methodology, 7:276-291.
Lopez, D. E. and R. D. Stanton-Salazar
2001 "The Mexican-American Second Generation: Yesterday, Today and Tomorrow." In Ethnicities: Children of Immigrants in America. Ed. R. G. Rumbaut and A. Portes. Berkeley: University of California Press; New York: Russell Sage Foundation.
MacLeod, J.
1995 Ain't No Makin' It: Aspirations and Attainment in a Low-income Neighborhood. Boulder, CO: Westview Press.
Massey, D. D.
1999 "Why Does Immigration Occur? A Theoretical Synthesis." In Handbook of International Migration. Ed. C. Hirschman, P. Kasinitz and J. DeWind. New York: Russell Sage Foundation.

1988 "Economic Development and International Migration in Comparative Perspective," Population and Development Review, 14:383-413.

1987 "Understanding Mexican Migration to the United States," American Journal of Sociology, 92(6):1372-1403.
Menjivar, C.
1993 "History, Economy and Politics: Macro and Micro-Level Factors in Recent Salvadorean Migration to the U.S.," Journal of Refugee Studies, 6:350-371.
Ogbu, J. U.
1991 "Immigrant and Involuntary Minorities in Comparative Perspective." In Minority Status and Schooling: A Comparative Study of Immigrant and Involuntary Minorities. Ed. M. A. Gibson and J. U. Ogbu. New York: Garland Publishing.

Ortiz, V.
1986 "Changes in the Characteristics of Puerto Rican Migrants from 1955 to 1980," International Migration Review, 20(3):612-628.

Park, R.
1928 "Human Migration and the Marginal Man," American Journal of Sociology, 33(6):881893.

Perlmann, J.
1988 Ethnic Differences: Schooling and Social Structure among the Irish, Italians, Jews, and Blacks in an American City, 1880-1935. Cambridge: Cambridge University Press.
Perlmann, J. and R. Waldinger
1997 "Second Generation Decline? Children of Immigrants, Past and Present: A Reconsideration," International Migration Review, 31(4):893-922.
Portes, A. and J. Borocz
1989 "Contemporary Immigration - Theoretical Perspectives on Its Determinants and Modes of Incorporation," International Migration Review, 23(3):606-630.
Portes, A. and R. G. Rumbaut
2001 Legacies: The Story of the Immigrant Second Generation. Berkeley: University of California Press. New York: Russell Sage Foundation.
$\overline{1996 \text { Immigrant America: A Portrait. Second Edition. Berkeley: University of California }}$ Press.
Portes, A. and M. Zhou
1993 "The New Second Generation - Segmented Assimilation and Its Variants," The Annals of the American Academy of Political and Social Science, 530:74-96.
Ramos, F.
1992 "Out-Migration and Return Migration of Puerto Ricans." In Immigration and the Work Force: Economic Consequences for the United States and Source Areas. Ed. G. J. Borjas and R. B. Freeman. Chicago: University of Chicago Press.
Rumbaut, R. G.
1999 "Assimilation and Its Discontents: Ironies and Paradoxes." In The Handbook of International Migration: The American Experience. Ed. C. Hirschman, P. Kasinitz and J. DeWind. New York: Russell Sage Foundation.

1997 "Ties That Bind: Immigration and Immigrant Families in the United States." In Immigration and the Family: Research and Policy on U.S. Immigrants. Ed. A. Booth, A. C. Crouter and N. Landale. Mahwah, NJ: Lawrence Erlbaum Associates.

1995 "The New Californians: Comparative Research Findings on the Educational Progress of Immigrant Children." In California's Immigrant Children: Theory Research, and Implications for Educational Policy. Ed. R. G. Rumbaut and W. A. Cornelius. San Diego: Center for U.S.-Mexican Studies, U.C. San Diego.
Rumbaut, R. G. and A. Portes
2001 Ethnicities: Children of Immigrants in America. Berkeley: University of California Press; New York: Russell Sage Foundation.
Schneider, B. and Y. Lee
1990 "A Model for Academic Success: The School and Home Environment of East Asian Students," Anthropology and Education Quarterly, 21:358-377.
Sewell, W. H., A. O. Haller and G. W. Ohlendorf
1970 "The Educational and Early Occupational Status Attainment Process: Replication and Revision," American Sociological Review, 35:1014-1027.

Sewell, W. H., A. O. Haller and A. Portes
1969 "The Educational and Early Occupational Attainment Process," American Sociological Review, 34:82-92.
Sewell, W. H. and R. M. Hauser
1980 "The Wisconsin Longitudinal Study of Social and Psychological Factors in Aspirations and Achievements," Research in Sociology of Education and Socialization, 1:59-99.

1975 Education, Occupation, and Earnings. New York: Academic Press.
Sowell, T.
1981 Ethnic America: A History. New York: Basic Books.
Steinberg, L. D.
1996 "Ethnicity and Educational Achievement," American Educator. Summer.
Steinberg, L. D., B. B. Brown and S. M. Dornbusch
1996 Beyond the Classroom: Why School Reform Has Failed and What Parents Need to Do. New York: Simon \& Schuster.
Steinberg, S.
1981 The Ethnic Myth: Race, Ethnicity, and Class in America. First Edition. New York: Atheneum.
Thernstrom, S.
1973 The Other Bostonians: Poverty and Progress in the American Metropolis, 1880-1970. Cambridge, MA: Harvard University Press.
Treiman, D. J., and H.-K. Lee
1996 "Income Differences among 31 Ethnic Groups in Los Angeles." In Social Differentiation and Social Inequality: Essays in Honor of John Pock. Ed. J. N. Baron, D. B. Grusky and D. J. Treiman. Boulder, CO: Westview Press.
UNESCO
1997 United Nations Educational, Scientific and Cultural Organization Statistical Yearbook. UNESCO Publishing and Berman Press.

1995 United Nations Educational, Scientific and Cultural Organization Statistical Yearbook. UNESCO Publishing and Berman Press.

## 1993 United Nations Educational, Scientific and Cultural Organization Statistical Yearbook. UNESCO Publishing and Berman Press.

1992 United Nations Educational, Scientific and Cultural Organization Statistical Yearbook. UNESCO Publishing and Berman Press.

1989 United Nations Educational, Scientific and Cultural Organization Statistical Yearbook. UNESCO Publishing and Berman Press.

1978-1979 United Nations Educational, Scientific and Cultural Organization Statistical Yearbook. UNESCO Publishing and Berman Press.

1975 United Nations Educational, Scientific and Cultural Organization Statistical Yearbook. UNESCO Publishing and Berman Press.

Waldinger, R. and M. Lichter
1996 "Anglos: Beyond Ethnicity?" In Ethnic Los Angeles. Ed. R. Waldinger and M. Bozorgmehr. New York: Russell Sage Foundation.
Weeks, J. R., R. G. Rumbaut and N. Ojeda
1999 "Reproductive Outcomes among Mexico-Born Women in San Diego and Tijuana: Testing the Migration Selectivity Hypothesis,"Journal of Immigrant Health, 1:77-90.
Willis, P. E.
1977 Learning to Labour: How Working Class Kids Get Working Class Jobs. Farnborough: Saxon House.
Wilson, W. J.
1990 The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy. Chicago: University of Chicago Press.
Zhou, M.
2001 "Progress, Decline, Stagnation? The New Second Generation Comes of Age." In Strangers at the Gates: New Immigrants in Urban America. Ed. R. Waldinger. London: University of California Press.

1997 "Growing Up American: The Challenge Confronting Immigrant Children and Children of Immigrants," Annual Review of Sociology, 23:63-95.
Zhou, M. and C. L. Bankston
1998 Growing Up American: How Vietnamese Children Adapt to Life in the United States. New York: Russell Sage Foundation.

1994 "Social Capital and the Adaptation of the Second Generation: The Case of Vietnamese Youth in New Orleans," International Migration Review, 28(4):821-845.


[^0]:    ${ }^{1}$ The author gratefully acknowledges financial support from the Ford Foundation and Social Science Research Council. I would like to thank Rebecca Emigh, Vilma Ortiz, Doug Downey, James Ainsworth-Darnell, Vu Pham, Adria Imada, and participants in the UCLA professional writing seminar for their comments and suggestions.
    ${ }^{2}$ Borjas $(1990,1999)$ uses the term "quality." The point of using the term in this paper is not to assess the "quality" of immigrants, but to show that "quality" is subjective and depends on how one measures or conceptualizes it.

[^1]:    ${ }^{3}$ Borjas (1993) found that earnings of second-generation workers are more heavily influenced by the earnings of their parents' generation than by the earnings of current immigrants from the same source country. To this end, I followed Borjas's method of using younger aged children of immigrants (ages 20-40), and earlier data from the immigrant generation, to ensure that there was overlap of parents and children in the analysis.

[^2]:    ${ }^{7}$ These models contain robust standard errors, as well as adjust for clustering at the level of the national-origin group.

