ACHIEVEMENT IN INCOME AMONG ASIAN AND HISPANIC AMERICAN YOUNG ADULTS

ABSTRACT

This paper examines the income among Asian American and Hispanic young adults who received at least secondary schooling in the United States. Samples of the study are drawn from the National Education Longitudinal Study of 1988. Several findings from this paper are worth highlighting. First, eight years after high school, some groups are able to surpass whites in income while some others lag behind. Measures from assimilation theory, human capital theory, and social capital theory all significantly affect the income level of an individual. Human capital investment in higher education and working experiences explain most of income differences between minority groups and whites. Second, the study confirms the high economic payoffs of four-year college education while questions the payoffs of two-year college education. Four-year college education generates similar economic rewards to immigrant young adults as to whites. Third, both first and second generation young adults have higher income than their third or higher generation counterparts. Immigrant children or children of Asian immigrants who receive at least secondary schooling in the United States do not seem to suffer any disadvantage in income at a given education level. Fourth, the ethnic composition and acculturation level of the school where the respondents attended at eighth grade have significant impacts on the educational attainment while no effect on income net of an individual's own race/ethnicity or acculturation background. This paper concludes that four-year college education appears to be one of the major channels to higher income for immigrant minority groups. There is no obvious evidence suggesting that the quality of

recent immigrants and immigrant children from Asia and Latin America is lower than that of whites.

Introduction

Between 1990 and 2000, the U.S foreign-born population grew by 57 percent, from 19.8 million to 31.1 million (U.S. Census Bureau 2000a). Unlike earlier waves of immigrants predominantly from Europe, today's immigrants come largely from Asia and Latin America. In 2000, 16 million or 52 percent of the foreign-born population are from Latin America. The foreign-born from Asia accounted for 26 percent (8.2 million) of the total foreign-born population (U.S. Census Bureau 2000a). After decades following the Immigration Act of 1965, a large new generation formed by children of immigrants born in the Untied States or brought at an early age from abroad has emerged. The number of foreign-born and first-generation U.S. residents in 2000 has reached the highest level in U.S. history. Fifty six million or 21 percent of the nation's population under age 25 in 2000 was either foreign-born or first-generation, up from only 7 percent in 1970. An estimated 88 percent of Asian and Pacific Islander elementary and high school students and 65 percent of Hispanic students had a foreign-born parent, compared with only 7 percent of non-Hispanic Whites (U.S. Census Bureau 2000b). Children of immigrants are estimated to represent over one-half the growth of the school-age population from 1990 to 2010 (Fox and Passel 1994).

Clearly, children of Asian and Hispanic immigrants will play an increasingly important role in American life. In particular, the success of the American economy over the coming decades depends to a considerable degree on the productivity of a labor force in which Asian and Hispanic Americans will play a progressively larger role. Studies looking at the non-Hispanic White population in the United States have demonstrated that economic success is closely related to one's educational achievement (Duncan and

Duncan 1968; Sewel, Haller, and Portes 1969; Shanahan, Miech, and Elder 1998). Highly educated workers are employed more steadily than others and have higher incomes. During the last two decades, this advantage for more highly educated workers has become even more pronounced as the relative rewards of higher levels of education became greater than they had been earlier (Murphy and Welch 1989; Weinberg 1996). While the increased returns on higher education are evident among non-Hispanic Whites, there has not been as much research on how education may impact earnings among relatively recent immigrants. It is especially unclear as to whether the American educational system yields the same rewards to immigrants and their children as to native-born individuals.

In this paper, we examine the incomes earned by Asian and Hispanic immigrant children eight years after high school. This paper has two main tasks: 1) First, to provide a general picture of the overall economic well-being of the children of Asian and Hispanic immigrants at their early career stage, especially how they fare relative to Whites. 2) Second, to identify factors that contribute to their economic success or failure. We are particularly interested in the following questions: 1) How does education affect the earnings of these young Asian and Hispanic Americans? Are minority ethnic groups able to translate their education into equivalent income as Whites? 2) How are their earnings affected by their immigration background and acculturation level? Are there any variations of the effects among different racial/ethnic groups? 3) To what extent are their earnings affected by their family background, such as family socioeconomic status and family social capital? 4) To what extent do early school characteristics affect their earnings? Do certain school factors affect any groups more than the others? 5) How does

early job expectations affect future earnings? Does same job expectation lead to similar future earnings for every group?

Literature On the Socioeconomic Status of Recent Immigrants

Following the Immigration and Nationality Act of 1965, the national origin of immigration flow has shifted away from the traditional European source countries toward Asian and Latin American countries (Rumbaut 1994). These shifts in the immigration sources were accompanied by equally important changes in the understanding of the economic impact of immigration. Initiated in Borjas (1985), a body of studies suggests that immigrants from Asia and Latin America are of lower "quality" than traditional immigrants from Europe. These studies conclude that the relative skills of immigrant cohorts after the 1970s relative to natives declined substantially. And there was little evidence to suggest that post-1965 immigrants reach wage parity with the typical U.S.-born worker during their working lives (Chiswick 1986; LaLonde and Topel 1992; Borjas 1995). They argued that much of the decline of immigrant "quality" can be attributed to shifts in the national origin of immigrant flows towards developing countries in Asia and Latin America. These studies drastically altered the perception of what immigrants from Asia and Latin America contribute to the economy's skill endowment in the United States.

Because of the controversial implications of the results from the above studies, there has been a great deal of debate concerning their validity. First, not all recent immigrants are of lower "quality" based on the general standards of the socioeconomic status. The educational and occupational attainments of recent immigrants are extremely polarized. The most educated and the least educated groups in today's United States are

immigrants (Rumbaut 1994). Immigrants from developing countries of Asia and Africa significantly exceed native-born Americans in educational and occupational attainments. This is especially true among immigrants from Asia, such as India, Taiwan, Iran, Hong Kong, China, the Philippines, and Korea. These immigrants, while a "brain drain" to their home countries, are believed to be the most skilled immigrants ever to come to the United States. By the mid-1980s, over half of all doctoral degrees in engineering awarded by U.S. universities were earned by foreign-born students. One third of all engineers with a doctorate working in the U.S were immigrants (Rumbaut 1994). In 2002, Asian American households in the Untied States had the highest proportion of high school or above education and the highest income among all race/ethnic groups (U.S Census Bureau 2003).

Although Asian Americans in the United States have been consistently found to have higher achievements in education, occupation, and income relative to other ethnic minority groups and non-Hispanic Whites (Kitano 1976), there is also an abundant literature that suggests that the higher levels of education of Asian Americans are not always translated into other measures of success. Wong (1982), Hirschman and Wong (1986), Wong and Hirschman (1983), and Barringer, Takeuchi, and Xenos (1990) showed that Asian Americans are at a disadvantage in turning education into income. Higher educational levels of Asian immigrants, even of those who were born here, do not necessarily lead to income equality with Whites (Barriger et al 1990). This suggests that structural barriers or discrimination in the labor market may contribute to the lower return on education among Asian Americans.

In general, Hispanics in the United States are less educated and less well-off compared to non-Hispanic Whites and Asian Americans. In 2000, more than two in five Hispanics had less than a high school graduation education (U.S Census Bureau 2000a). The proportion of people with a four-year college degree is only 10.6 percent which is much lower than 28.1 percent among non-Hispanic Whites. However, educational attainment varies among different Hispanic subgroups. Cubans are more likely than other Hispanic groups to have a high school or above education, while Mexicans are the least educated Hispanic group. Approximately half of Mexicans have not graduated from high school and only 6.9 percent have a bachelor degree (U.S Census Bureau 2000a). Hispanics are among the most economically disadvantaged workers in the nation. Hispanics in the United States have higher rates of labor force participation but much lower income, and are more concentrated in low-wage unskilled jobs (Rumbaut 1994). Additionally, in 2002, Hispanic households earned, on average, $33,103 which is 29 percent less than non-Hispanic White households (U.S Census Bureau 2003).

Although structural barriers and discriminations in the labor market may contribute to the lower income among Hispanics, several studies find that Hispanics earn less than other groups primarily because of their lower human capital (Chapa 1990). Chavez (1991) argues that the large inflows of recent immigrants from Mexico create a deceptively pessimistic picture of Mexican-origin workers in the U.S. labor market. In her view, U.S.-born, English-speaking Mexican Americans are approaching the labor market status of non-Hispanic Whites. Evidence from the census also suggest that Mexican Americans earn low wages primarily because they posses less human capital than other workers, not because they receive smaller labor market rewards for their skills

(Trejo 1997). By this account, Mexican Americans are climbing the economic ladder across generations in the same way that earlier waves of European immigrants did.

Those studies that have examined immigrants' socioeconomic situations frequently compare simply whether or not immigrants attain the same education and earn similar incomes as non-Hispanic Whites. A more critical criterion, the ratio of education to income, is often ignored. Also, thus far no study has examined intensively the incomes earned by children of recent immigrants. These children, offspring of immigrants who were born in the United States or children brought at an early age from abroad, have just entered young adulthood during the 1990s. So far, most of the studies on this new generation of young Americans have focused on their acculturation and academic experience (e.g., Kao and Tienda 1995; Zhou and Bankston 1994). The transition to the labor market, and the returns on the education of the children of immigrants have not yet been thoroughly studied.

Data and Methods

The study draws its data from the National Education Longitudinal Study:88 (NELS:88) data. The base year of the NELS:88 was conducted in the spring term of the 1987-1988 school year when students were at eighth grade. The NELS:88 followed this eighth-grade cohort over time with four follow-up studies by year 2000. Information on participants' economic achievement comes from the fourth follow-up interviews of the NELS conducted in 2000. Most of the sample members turned twenty six years of age and were eight years out of high school. The data are particularly well suited for this study because the survey includes substantial number of various Asians and Hispanics.

We focus our analysis on three Asian groups and two Hispanic groups: Chinese, Filipinos, Southeast Asians, Mexicans, and Puerto Ricans. Most previous studies usually focus on Asian and Hispanic pan-ethnic groups. However, given the diversity among Asian American and Hispanic subgroups with regard to socioeconomic status, migration experience and culture, it is particularly necessary to investigate outcomes among these groups rather than rely on one pan-ethnic category. Combining Asians or Hispanics might confound the effects of specific ethnic group membership with the effects of retaining an immigrant culture in general (Portes 1996). The total sample for the analysis of income consists of 8,380 respondents (see Table 2). This includes 148 Chinese, 130 Filipinos, 84 Koreans, 100 Southeast Asians, 807 Mexicans, 56 Cubans, 124 Puerto Ricans, and 6,934 Whites. Table 12 shows the employment status among the eight racial/ethnic groups.

The dependent variable for the second part of the analysis is the natural logarithm of the annual income of the respondent in 1999 which is the before-tax income including all of the wages, salaries, and commissions. The annual income in 1999 in the sample range from $1 to $500,000 with mean=27,235 and std=20,771.

There are five groups of independent variables in this study: 1) demographic characteristics; 2) immigration status; 3) family backgrounds; 4) school characteristics; 5) earlier occupational aspiration.

We distinguish three types of family background in this dissertation: 1) family socioeconomic status which includes family income and parental education level; 2) family social capital which is the interpersonal relationship between parents and children. We use three variables to proxy family social capital: family structure, parents'

educational aspirations, and parent-child interactions in learning activities at home; 3) cultural capital which represents the exposure or knowledge of art, music, etc. Cultural capital is measured in two variables. The first one measures students' participation in extracurricular classes and activities such as art, music, and dances. The second one measures parents' involvement with their children in other activities, such as borrowing books from the library, and taking children to museums and concerts.

We choose five characteristics of the school respondents attended for 8th grade as the third group of independent variables since all of them have been considered as high quality measurements by the NELS researchers (National Center for Education Statistics 2000). These five variables are: region of the school, urbanicity of the school, public versus private school, student teacher ratio, school ethnic composition, and school acculturation level.

Following Xie and Goyette (2003),we use youth's occupational expectation in 12th grade to predict their educational attainment and income in 1999.

A few control variables are also included in the multivariate model: the highest educational attainment of the respondent, number of working weeks, self-employment status in 1999, and respondents' family formation information.

In the next section, we first use descriptive statistics to compare mean earnings in 1999 among the racial/ethnic groups in the sample. We then look at the profile of the self-employment status and income variations by education level. Second, we use Ordinary Least Square regression models to predict respondents' logged annual income in 1999. We discuss the estimated effects of the main predictors in the following order: educational attainment, individual acculturation measures, family and school background,

and early job expectations. Third, we run separate multivariate analyses to evaluate the payoffs of part-time enrollment status among respondents who have at least some post-secondary education experience.

Descriptive Statistics

It is not surprising that the average income also vary widely. Chinese have the highest income of $34,790 among all eight groups and far surpasses the $27,140 of Whites (table not shown here). Following Chinese, Koreans ($32,870), Cubans ($29,540), and Southeast Asians ($23,800) also have relative high incomes although the incomes are not high enough to be statistically different from that of Whites. Mexicans rank at the bottom with an annual income of $23,060 which is significantly less than that of Whites.

Figure 1 provides a general picture of mean earnings by education and the broad race/ethnicity category. Figure 1 makes it easier to compare the income returns on education while controlling for race/ethnicity. As shown in Figure 1, people with high school or less education and those with some college education or two year college degrees fare about the same in 1999 earnings. The main difference in earnings exists between four-year college or above degree holders and those without a four-year college degree. This is true for all groups. Four-year college or above education brings about $5,000 bonus among Whites, $8,000 among Hispanics, and $10,000 among Asians.

A major question of this study is whether education generates the same rate of income returns for immigrant minority groups and Whites. Table 1 provides a summary of mean earnings by educational attainment and the eight subgroups of race/ethnicity. Table 1 is useful in comparing the income among different groups while controlling for

the education level. Overall, there is no striking evidence that ethnic minority groups receive less return for the education than Whites in observed mean earnings. As shown in Table 1, high school or less education yields similar earnings among the eight groups. Among people with some college education or two-year college degrees, Filipinos earn significantly less compared to Whites, falling behind Whites as much as 18.8%. However, this might be due to the fewer working weeks among Filipinos. Meanwhile, Mexicans also suffer about a 13.9% income loss compared to Whites among people with some college education or two-year college degrees. Other groups fare about the same to Whites.

Four-year college or above education actually returns more earnings among some ethnic minority groups than Whites. Chinese with four-year college or above degrees earn about $38,550 in 1999, a 25.9% advantage compared to $30,610 among Whites. Puerto Ricans earn $43,350, 41.6% more than Whites. Although on average Mexicans worked about four weeks less compared to Whites, they do not suffer any income loss compared to their White counterparts. However, it should be noted that only a small proportion of Mexicans (11%) and Puerto Ricans (12%) have a four-year college or above degree. They might be selective of people from privileged families with advantageous human and social capital. Therefore, their higher economic gains to a 4-year college or above degree might be due to factors other than education.

Results from the Multivariate Analysis

In this section of analysis, we use Ordinary Least Square models to predict the annual income in 1999. The dependent variable is the natural logarithm of the 1999

income of the respondents. We exclude Koreans and Cubans from the multivariate an analysis because of their small sample size.

Predictors are grouped into six categories: 1) basic demographic characteristics acquired at birth; 2) human capital measurements which include the individual's educational attainment, number of working weeks, and self-employment status; 3) two individual acculturation variables generation status and home language environment; 4) family background which includes family human capital, family social capital, family culture capital measures; 5) variables measuring characteristics of schools where respondents attended at eighth grade; 6) strategic adaptation measurement which is the job expectation when the respondent is in the 12^{th} grade. To address our hypotheses that some predictors may operate differently among groups, we also tried running models separately for the largest groups Chinese, Mexican, and White. The results from separate models are similar to results from analyses when race/ethnicity are as predictors.

The results of multivariate analysis with race/ethnicity as predictors are presented from Table 2 to Table 6. Table 2 first presents estimated effects of individual's demographic characteristics, family formation information, educational attainment, and working related factors. Effects of individuals' immigration background were tested by adding generation status and home language environment to the model. Table 3 adds family background to the previous models in Table 2. Table 4 adds variables measuring characteristics of schools where respondents attended at eighth grade. Table 5 presents estimated effects of early occupational expectations. Table 6 presents models that include interaction terms between ethnicity and educational attainment, generation status, school type, school ethnic composition, school acculturation level, and occupational

expectations. In Table 6, we also present estimated interaction effects between individuals' gender and marital status and number of children.

Consistent with the descriptive statistics, Model 1 in Table 3 demonstrates significant group variations in income in 1999. Chinese demonstrates the highest income which is about $7,168 ($e^{2.88+6.00} - e^{2.88} = 7168$) more than that of Whites. On the other hand, Filipinos and Mexicans earn slightly less compared to Whites. Southeast Asians and Puerto Ricans do not differ markedly from Whites in income. The significant variations on income among different Asian and Hispanic subgroups reinforce the necessity to divide them into subgroups. Gender shows a consistent significant impact on income[1].

In Model 2, we add two variables about respondents' family formation information to Model 1. Married individuals earn more than their single counterparts. The more children one has the less money he/she earns. We also tested the interaction effect between gender and these two family formation variables. As it is shown in Table 6, marriage and children affect the income of men and women differently. Married men earn significantly more than married women. The presence of children is associated with positive rather than negative effects for men. The findings on gender and family formation are not surprising. Different patterns of socialization between the sexes and pregnancy and motherhood all attribute to the lower income of women (Budig and England 2001).

[1] Gender and family formation variables are used as control variables in the study. Although they retain strong predictive power in the model, we do not analyze in detail about their specific effects.

Effects of Education

Model 3 in Table 2 adds educational attainment and working experience to the previous model. The differences between the minority groups and Whites all become non significant. Meanwhile, the R square of the additive model increases dramatically, from .09 to .36. The R-square stays about the same from Model 3 to Model 11 in Table 5. The impact of education stays fairly stable even after controlling for individuals' immigration, family and school background. This suggests that the income variations among the racial/ethnic groups are largely due to individuals' educational background and working experiences rather than individuals' family and school background or early occupational aspirations.

Education here is coded into three dummy variables: high school or less education which is the reference group, some college education or two year college degree, and four-year college degree or above education.

In Table 2, respondents with some college education or two-year college degree only show a slight income advantage compared to those with high school or less education. This advantage quickly fades once family income is added into the model in Table 3. This suggests that the slight advantage of people with some or two-year college education is mainly due to their advantageous family background rather than the extra schooling. On the other hand, the impact of four-year college or above education remains positive and strong throughout the models. This suggests that the income differences observed eight years after high school graduation mainly exist between people with a bachelor degree and those without, which is consistent with previous findings (Grubb 1993). Adding family background variables reduces the coefficient only by a very small

amount (e.g., from .33 in Model 4 table 2 to .27 in Model 5 Table 3). Four-year college education increases an individual's earnings by a great amount even when he or she comes from a disadvantageous family background.

Human capital theory holds that high levels of education should result in higher income regardless of the individual's minority status. Structuralist critiques of human capital theory suggest that education may not translate to higher income for minority groups as it does to Whites. To test the hypotheses based on the human capital theory and structural criticism, we examine the interaction effect between ethnicity and education while controlling for all the other predictors in the model. As shown in Model 12 in Table 6, there are no significant interaction effects between ethnicity and some or two-year college education except for Southeast Asians. When everything else being equal, Southeast Asians who have some or two-year college education seem to have an income loss compared to their White counterparts. However, we remain cautious about this interpretation because of the small number of Southeast Asians who have some year college education (n=39) and those with high school or less education (n=7). On the other hand, four-year college or above education seems to have a similar impact on income for all groups. With all other things being equal, four-year college education translates into similar economic returns to all minority groups as to Whites. The five immigrant minority groups, both Asian and Hispanic, do not appear to gain fewer returns from four-year college education than do Whites. The findings on the education returns contradict the abundant literature indicating the disadvantages suffered by Hispanic and Asian minorities (Ogbu 1978; Suzuki 1977; Wong 1985; Hirschman and Wong 1986). Although there are variations on income, both Asian and Hispanic minority young adults

receive income returns on educational investment equivalent to those of Whites. Therefore, the results seem to support the human capital theory rather than the structural barrier perspective.

Self-employment is another strong predictor throughout the models. People who are self-employed earn significantly more money compared to those who hold salary jobs. The impact of self-employment status remains positive even when an individual's educational attainment, immigration status, family and school background are controlled for.

Effects of Individual Acculturation Measures

Model 4 in Table 2 adds the effects of generation status and home language environment to address our expectations from the hypotheses that second generation youth and youth from bilingual homes will earn more than others. The results in Model 4 show that second generation young adults have higher income compared to their counterparts of third or above generations. This is true even when educational attainment is held constant. The effects of generation status remain significant even when individual's family, school background, and early job expectations are held constant. Home language environment does not have any significant effects on the income eight years after high school.

We hypothesize that being second generation promotes future income among Asian youth while it does not bring extra advantage among Hispanic youth. We test this hypothesis by including interaction variables between ethnicity and generation status. As shown in Model 13 at Table 6, there are no significant interaction effects between ethnicity and generation status when all other predictors are controlled for. Therefore the

findings do not support our hypothesis that second generation Asian youth are more advantageous than Hispanics.

As it is shown in the multivariate analyses, the advantages of first and second generation young adults in incomes are not explained by any of the family, school factors, or early job expectations. Curious about this phenomenon, we look into the occupations held by different generations. The NELS:88 researchers coded occupations reported by respondents into thirteen broad categories. Detailed occupations within each category are listed in Appendix F. In Table 7,we rank these thirteen categories by income and then look at the distribution among different generation status within each category. Due to the small number of first generation respondents, we have to combine first generation with second generation young adults. Comparisons are made between respondents from first and second generation with respondents from third and above generation. As you can see from Table 7, first and second generation young adults are more likely than their third and above generation counterparts to be in the top two highly-paid occupational categories. About 3.8% of first and second generation respondents are engineers, architects, and software programmers compared to only 0.6% among people belong to third and above generations. The proportion of people engaging in the field of computer science among first and second generations is about 11.3%, which is significantly higher than 2.8% among third and above generation counterparts. Meanwhile, significantly less first and second generation respondents are educators which is one of the lowest paid occupations as shown in Table 19. To conclude, it seems that the income advantages of first and second generation respondents can be largely attributed to their choice of occupations with higher earnings.

Effects of Family Characteristics

Estimated effects of family socioeconomic status, family social capital measures, and family cultural capital measures are presented in Model 5, Model 6, and Model 7 in Table 3. Family characteristics do not contribute much to the explanatory strength of the model. The R-squares of Model 5 to Model 7 in Table 3 are not much an improvement compared to Model 4 in Table 2. In contrast to the huge impact of family background on educational attainment, most family characteristics when individuals were in eighth grade do not have any significant impact on their earnings twelve years later. Family income, parents' education level, and parental involvement in learning activities at home turn out to be the only three family factors that have a significant impact on children's future income. The effects of family income, parents' education, and parental involvement in learning activities remain significant when all other factors are controlled for. The findings on family income are consistent with earlier research indicating that family income promotes earnings (Sewell and Hauser 1976).

More active parental involvement in learning activities at home positively affect their future income. Parental involvement in extracurricular classes and activities and other learning activities do not have any significant effect on income as they do on educational attainment.

Effects of School Factors

As shown in Table 4, attendance at a public school in eighth grade is associated with lower future income twelve years later. The negative effect of public school remains significant and stable when all family and other school factors are controlled for. There are also racial/ethnic variations on the effects of pubic school attendance. As shown in

Model 14 Table 6, the negative impact of public school attendance on income is smaller among Southeast Asian youth.

Model 8 in Table 4 shows the estimated effects of the school ethnic composition and school acculturation level while controlling for students' race/ethnicity, generation status and basic school characteristics. Model 9 adds family background to Model 6 to test whether the effects of school factors still hold after controlling for students' family background. Adding school factors do not change the coefficients of the race/ethnicity or generation status. The R-square of model stays basically the same from Model 7 in Table 15 to Model 9 in Table 4. Therefore, the explanatory strength of school characteristics is very limited in the model predicting income.

Neither the ethnic composition nor the acculturation level of the school where students attended at eighth grade have any significant effect on students' income eight years after high school. When the individuals' race/ethnicity is controlled for, attending a school where Asian Americans account for the majority of the student body does not bring more advantage in future income. Attendance at Hispanic-majority schools does not have any negative impact.

We hypothesize that school ethnic composition and acculturation level, as proxies for the public goods of a school's social capital, would affect each minority group the same way. Based on the insulation and subjective perspectives, we also hypothesize that a mismatch between the individual's and the school's majority race/ethnicity will hamper the individual's future earnings. Model 15 in Table 6 tests these hypotheses by adding interaction variables between race/ethnicity and school ethnic composition to the full model when all other factors are controlled for. Attendance at Asian-majority schools is

associated with a positive impact on income for Southeast Asians and Puerto Ricans. However, the number of respondents who attended Asian-majority schools is very small[2]. We remain cautious about interpreting the result. There are no significant variations among racial/ethnic groups on the effects of attendance at either Hispanic-majority schools or Black-majority schools. The findings on the interaction effects of school ethnic composition does not support the insulation and subjective hypotheses that mismatch between the individual's and the school's majority ethnicity will hamper students' future socioeconomic status.

Attendance at schools with low acculturation level is associated with lower earnings for Mexicans but not for other minority groups. Schools providing language training programs tend to concentrate on students not only from low family socioeconomic background but also from immigrant families. Compared to other immigrant minority groups, Mexican immigrants are more likely to concentrate in low SES jobs such as farm work and service work (Chavez 1991). This type of jobs may not provide their children much access to social networks that connect them to better-paid jobs.

Effects of Early Occupational Expectations

In Table 5, we test how early occupational expectations affect income at early career stages. Model 10 adds the job expectations when respondents were in 12th grade to Model 4 in Table 5. Model 11 tests whether the effect of job expectation still holds when family and school factors are controlled for. As shown in Table 5, respondents' early occupational expectations have a significant positive effect on their income eight years

[2] The number of Southeast Asians or Puerto Ricans who attended Asian-majority schools is less than 10.

after high school. The positive effect of early job expectation remains significant even after controlling for individuals' education level, family and school background.

Conclusion and Discussion

In the American dream of equality of opportunity, each individual advances financially on his own merits, not from family advantages (Corcoran 1992). If background factors alone do not strongly predict individuals' income, then this would suggest that the American dream is working. Results from this chapter suggest that this dream of equality of opportunity in most part seems to be real for immigrant children and children of recent immigrants. In this paper, we find that young Asian and Hispanic adults already exhibit significant income differences at early career stage. In general, Chinese earn significantly more while Filipinos and Mexicans earn less than Whites. Incomes earned by both Asian and Hispanic minorities are determined largely by their human capital investment such as educational levels and working experience. Although being born in a rich family brings extra advantage to income, overall an individual's family and school background do not have a huge impact on future earnings beyond their initial impact on schooling.

Education retains strong predictive power even when individuals' family and school background are controlled for. Four-year college or above education brings significant income advantages compared to those with only high school or less education. This finding is consistent with earlier studies about the high payoff of a four-year college education in the United States (Grubb 1993). The study also shows no significant interaction effects between four-year college education and race/ethnicity. Four-year college education generates similar economic rewards to minority youth as to Whites.

The finding on the payoff of four-year college education contradicts earlier studies indicating that immigrant minorities including Asian Americans do not receive as much economic returns from their education as Whites (Ogbu 1978; Wong 1985; Hirschman and Wong 1986). Findings from this study may imply that minority youth who attend secondary school and later receive four-year college education within United States are able to achieve income equality with Whites.

However, the study questions the payoffs of some or two-year college education. When family background is taken into consideration, individuals' with a two-year college degree or some college education do not show any significant income advantages over those with only high school or less education at least in young adulthood. Previous studies are not consistent on the payoffs of two-year college education. Although some previous researches have reported significant payoffs for associate's degree holders (Grubb 1993; Kane and Rouse 1995), several earlier studies based on data for youth only a few years out of high school suggested little or no wage effect for two-year college education (e.g. Breneman and Nelson 1981). In this study, the respondents are only eight years out of high school. The long-term payoffs of two-year college education still need to be assessed. If future studies do not find any significant economic advantages of two-year college education in the long run, community college should not be used as a path for socioeconomic advancement among those who cannot afford four-year college education.

The analyses also show that both first generation and second generation young adults **earn significantly more** than their third and above generation counterparts. The advantages of first and second generation young adults in incomes are not explained by

any of the family, school factors, or early job expectations. The "myth" of the effects of generation status on income may lie in their occupational choices. Descriptive statistics reveal that first and second generation young adults are more likely to concentrate on jobs with higher earnings compared to third and above generation peers. Anticipating structural barriers in the job market, immigrant children and children of immigrants may "strategically" choose occupations with higher earning potentials (Suzuki 1977; Xie and Goyette 2003).

Earlier research based on older generation of immigrants or immigrants who come to the United States as adults find that the positive effect of both education and working experience was discounted for foreign-borns than among natives (Chiswick 1978). The current study shows that immigrant children who receive at least secondary schooling here in the United States do not suffer any disadvantages in income. This is true at least at early career stage when they are in their mid twenties. The finding that immigrant minority groups earn as much as or even more than their White counterparts on a given educational level also suggests that the "quality" of these immigrant minority young adults is not inferior to that of Whites.

Many of the family and school factors that shape individuals' educational attainment do not exhibit any significant effects on income. Family income, parental education, and parental involvement in learning activities are the only three family factors that show significant impacts on income. Higher family income not only transfers into higher educational attainment but also directly promotes children's future earnings net of education.

School ethnic composition and acculturation level do not significantly affect income. However, slight variations do exist on the impact of school ethnic composition among different ethnic groups. Attendance at Asian-majority schools seems to promote earnings among Southeast Asians and Puerto Ricans. Attending lower acculturated schools has a negative impact on earnings only among Mexicans.

Early job expectation has a positive effect on income. The findings do not reveal any significant interaction effects between race/ethnicity and job expectation. This suggests that job expectations positively affect future earnings in a similar way among Asian Americans as among Hispanics. Therefore, the "strategic adaptation" approach---strategically choose occupations with higher earning potentials---not only works for Asians as it is shown in Xie and Goyette's (2003) study but also works for Hispanics.

The phenomenon of income inequality is very complicated. Due to the data limitation, the predictive models are limited to the few individual variables, family, and school characteristics in the study. To achieve an alternative and more encompassing explanation, future studies must focus on factors at a broader level such as the modes of incorporation of the immigrant groups as well as the contexts of reception in the labor market. Labor market represents an important dimension in the contexts of reception. Demand for specific kinds of labor and regional wage differentials, etc. are all potential determinants of earnings. More importantly, the manner in which particular immigrant groups are typified also plays a significant role (Chavez 1991).

The findings of the study are based on a sample of young adults who attend at least secondary schools in the United States and who are only in their early career stage. Therefore, findings of this study may not be applied to all immigrant minority population.

Estimation of income is highly sensitive to the length of time and the life-cycle stage over which the income variables are measured (Solon 1999). Income inequality measured at young adulthood does not mean permanent income inequality for lifetime. The long-term income profile of minority groups may be very different from what the present study presents.

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