Skidmore College Creative Matter

Sociology Senior Seminar Papers

Sociology

Fall 2019

Location of Education: Impacts on Returns to Degrees for Asians

Kelly Tran Skidmore College, ktran@skidmore.edu

Follow this and additional works at: https://creativematter.skidmore.edu/socio_stu_stu_schol

Recommended Citation

Tran, Kelly, "Location of Education: Impacts on Returns to Degrees for Asians" (2019). *Sociology Senior Seminar Papers*. 46. https://creativematter.skidmore.edu/socio_stu_stu_schol/46

This Thesis is brought to you for free and open access by the Sociology at Creative Matter. It has been accepted for inclusion in Sociology Senior Seminar Papers by an authorized administrator of Creative Matter. For more information, please contact dseiler@skidmore.edu.

Running Head = LOCATION OF EDUCATION

Location of Education:

Impacts on Returns to Degrees for Asians*

Kelly Tran

Skidmore College

Word Count = 6,534

*Please direct all correspondence to Kelly Tran by email at ktran@skidmore.edu and mail at Skidmore College, 815 North Broadway, Saratoga Springs, NY 12866. The author wishes to acknowledge the generous support of Professor Catherine Berheide, Professor Andrew Linder and her seminar colleagues.

Location of Education: Impacts on Returns to Degrees for Asians ABSTRACT

How might an Asian immigrant who earned a college degree abroad experience different returns to their degree than an Asian American with an American degree? Human capital theory suggests that additional schooling is rewarded in the labor market because employers value the skills, training, and knowledge that come from additional education. However, I propose that foreign education lessens the returns to degrees (job relatedness, income, and job satisfaction) for Asians in the U.S. labor market. I analyze a subset of 12,372 Asian-identifying respondents from the 2017 National Survey of College Graduates, a biennial survey of college graduates in the United States. At the bivariate and multivariate level, foreign educated Asians report their jobs being more related to their highest degree than U.S. educated Asians. Additionally, there is no statistically significant relationship between income, job satisfaction, and foreign education. Thus, my hypotheses are disconfirmed and human capital theory is supported. Of my independent and control variables, the proportion of a respondent's life spent in the U.S. is the largest predictor of job relatedness and income. The more time a respondent has spent in the U.S., the less related their principal job is to their highest degree and the more income the respondent earns. This study invites further research on returns to degrees for Asians by disaggregating the generalized racial identity into ethnic groups to uncover differences within the Asian racial group.

Location of Education: Returns to Degrees for Asians

In the past decades, an extensive body of literature has emerged that investigates education as a stratifying mechanism. In 2017, there were more than 22 million Asian Americans living in the United States, comprising more than 6 percent of the national population. The Pew Research Center reports Asian Americans as the fastest growing community of any major racial/ethnic group. In the particular case of Asian Americans, a long period of discrimination severely impacted their opportunities for mobility with in the United States. The term "model minority" has been used to characterize Asian Americans, based on the observations that they compare favorably to their white counterparts, and seemingly outperform other racial minorities, in education, occupational attainment and socioeconomic status (Barringer, Takeuchi, and Xenos 1990; Zeng and Xie 2004; Dukhong 2015).

While the U.S. Asian population overall does well on measures of economic well-being compared with the population as a whole, few studies examine how an American degree is a form of human capital in the assimilation process for immigrants coming to the United States (Barringer, Takeuchi, and Xenos 1990; Zeng and Xie 2004; Painter 2013; Painter and Qian 2016; Lancee and Bol 2017). Fewer studies examine how the place of education influences the returns to degree-holding Asian Americans (Barringer et al. 1990; Zeng and Xie 2004). Educational degrees should ease the acculturation and assimilation processes for immigrant populations. However, human capital attained abroad may not be compatible with that obtained in the United States.

This paper aims to test the human capital theory within a group with high levels of education attainment. Specifically, this study will be assessing the transferability of human capital cross-culturally. By the logic of the human capital theory, high levels of education, no

matter the origin, should be rewarded in the labor market. Foreign degrees do not translate directly into the American labor market, creating barriers to employment commensurate with educational background and ultimately leading to lower paying occupations (Basran and Li 1998; Gurcharn and Zong 1998; Arbeit and Warren 2013; Painter 2013). A recurrent finding is that compared to the native population, immigrants earn lower wages (Barringer et al. 1990; Zeng and Xie 2004) and are unable to obtain desirable jobs (Painter 2013).

Using the National Survey of College Graduates, this research paper seeks to answer the following questions: how does the place of education affect the returns to degrees for Asian Americans? More specifically, to what extent do foreign-educated and U.S.-educated Asian Americans differ, if at all? Based on previous studies, I hypothesize that:

- Foreign educated Asians report *less* job to degree relatedness than U.S. educated Asian Americans,
- Foreign educated Asian immigrants earn *less* income than U.S. educated Asian Americans, and
- 3. Foreign educated Asians report *lower* job satisfaction than their U.S. educated counterparts.

THEORETICAL BACKGROUND

Why might an Asian immigrant who earned a college degree abroad experience different returns to their degree than an Asian American with an American degree? To think about this question thoroughly, I find it useful to draw on human capital theory to consider the processes through which educational attainment translates into labor market outcomes.

Human Capital Theory

Human capital theory suggests that additional schooling is rewarded in the labor market because employers value the skills, training, and knowledge that come from additional education (Arbeit and Warren 2013; Barringer et al. 1990; Lancee and Bol 2017; Torres Stone, Purkayastha, and Berdahl 2006). Educational attainment acts as an indicator of skills that a potential employee brings to the labor market (Arbeit and Warren 2013). Based on this approach, human capital theory holds that high levels of education should result in greater returns to degrees. In evaluating lower returns to foreign degrees, scholars focus on the transferability of human capital. Degrees function as a signal on the basis of which employers screen potential employees. From this perspective, the relative value of a foreign degree in the labor market is a function of employers' assessments of whether a foreign educational institution imparts the same quantity and quality of skills, and knowledge as an American institution (Lancee and Bol 2017).

Some researchers (Basran and Zong 1998; Feliciano and Lanuza 2017; Lancee and Bol 2017; Painter 2013; Zeng and Xie 2004) have suggested that the fault with human capital theory is that foreign capital may be limited in transferability for two reasons: skills and the quality of education. Previous studies argue that most human capital has a country-specific component. Skills acquired in one country might not be compatible in another country. Highly skilled immigrants may be underutilized and relegated to jobs not commensurate with education (Arbeit and Warren 2013; Painter 2013). Skills acquired in one country may translate into greater returns in the labor market in that respective country, but not in that of other countries.

Secondly, degrees attained abroad, specifically non-Western countries, may be from lower quality institutions (Feliciano and Lanuza 2017; Kim and Zhao 2004; Lancee and Bol 2017). This is especially harmful for immigrants who do not continue their education in the

United States. Since the educational requirements for occupational access are predominantly defined for American degrees, immigrants with foreign degrees and skillsets will have difficulties in getting formal access to occupations. The unfamiliarity with foreign institutions and the quality of education creates a barrier to the labor market, leading to the decreased transferability of foreign degrees and experience.

The empirical expectation is that American employers will more richly reward American college degrees over foreign degrees, resulting in immigrants' earnings disadvantage (Basran and Li 1998). This paper utilizes the National Survey of College Graduates to examine the relationships between location of education and returns to degrees, testing the transferability of human capital theory, specifically that of foreign capital.

LITERATURE REVIEW

In this section, I discuss the unique positionality of Asians as model minorities in the United States. Next, I examine the effects of the model minority image on the integration of Asians into the United States and possible causal mechanisms for lower returns to degrees for the foreign educated.

Model Minority Myth

In the 1960's, the *New York Times* published an article based on the observation that Asians fare favorably to their minority counterparts on measures of socioeconomic status, giving rise to the popular term "model minority" (Zeng and Xie 2004). The triangulation and portrayal of Asian Americans as a "model minority" serves the purpose of maintaining the existing racial order and racial power by defining Asians according to a two-dimensional standard: superior/inferior and insider/foreigner (Dukhong 2015). Within the racial hierarchy system in the

U.S., Asians are categorized as being between Whiteness and Blackness. Asians Americans are uniquely positioned in that not all groups are able to fulfill the "model minority" myth.

The model minority myth has conflated Asians into a singular group with a singular identity. The conflated identity obscures the differences within the racial group (Hirschman and Wong 1986; Kim and Sakamoto 2010). A key contention of the model minority myth is that the labor market continues to discriminate against Asians Americans and Asian immigrants. Hirschman and Wong's (1984:584) study concludes that "Asian Americans approach socioeconomic parity with whites because of their overachievement in educational attainment." Although the average earnings and occupational attainment of Asian Americans do not differ greatly from that of Whites, Asians tend to overachieve. In order to receive the same socioeconomic rewards as Whites, Asians must make a higher investment in their human capital and obtain more education (Hirschman and Wong 1984).

Although Asians are able to mobilize, they are unable to reach economic parity with Whites. With lower levels of educational attainment (Feliciano and Lanuza 2017) and increasingly high poverty rates (Lo Iacono and Demireva 2018; Takei and Sakamoto 2011), recent Asian immigrants face challenges obscured by the model minority myth. While some established groups, such as Chinese and Japanese, have established economic success, recent immigrants, such as Vietnamese and Cambodian, face difficult circumstances to social and economic integration (Arbeit and Warren 2013; Barringer et al. 1990; Lueck 2018). The model minority myth masks barriers in achieving full equality in the workplace, especially within the Asian racial group (Torres et al. 2006).

Lower Returns for Higher Degrees

The integration of immigrants into the U.S. is an interesting point to explore in relation to highly-skilled migrants. The immigration process is complicated and only a select few from any one country can migrate to the United States. Those who tend to migrate tend to be more educated than their non-migrating counterparts (Feliciano and Lanuza 2017; Lueck 2018). Many Asian immigrants take a different path to immigration than others. In 2012, Asian immigrants had become the largest group of immigrants receiving permanent resident status through employment (Lueck 2018; Omori 2016). Other immigrant groups from North America and South America were granted permanent residency through family reunification (Omori 2016). Though high in demand (Basran and Zong 1998; Lo Iacono and Demireva 2018), highly-skilled immigrants face various obstacles to positive socioeconomic attainments, including racial prejudices in the U.S., lack of transferability of foreign degrees, and lower wages as a result.

Alba and Nee (2005) argue that the social boundaries based in racial/ethnic identity are so deeply rooted that attitudes and behaviors are formed upon these ideas. This suggests that racial/ethnic minority immigrants may not integrate well into U.S. society because they are subject to similar, if not more severe, prejudices as their native-born counterparts (Barringer et al. 1990; Dukhong 2015; Friedman and Krackhardt 1997; Painter and Qian 2016).

To better understand the extent of disadvantages, it is important to examine the impact of a foreign degree. According to human capital theory, educational credentials do not transfer cross-culturally due to country specific skills and unfamiliarity with foreign institutions, specifically non-Western ones. A degree acquired in the U.S. has been shown to have a greater impact on the economic integration and opportunities available to migrants (Arbeit and Warren 2013; Basran and Li 1998; Lancee and Bol 2017; Lo Iacono and Demireva 2018; Painter 2013; Painter and Qian 2016; Tong 2010). Foreign degrees are less rewarded in the job market, as

employers are unsure of the quantity and quality of skills, and knowledge imparted in those institutions.

Human capital appears to be moderated by group membership (Friedman and Krackhardt 1997). Previous studies (Friedman and Krackhardt 1997; Kim and Sakamoto 2010; Kim and Sakamoto 2014; Kim and Zhao 2014; Zeng and Xie 2004) have found that in general, Asians, both foreign and U.S. educated, face an earnings disadvantage compared to the White majority group. Due to the lower value of human capital attained abroad, Zeng and Xie (2004) find that foreign educated Asian immigrants earn 16 percent less than U.S. educated Asian Americans, U.S. educated Asian immigrants, and U.S. educated Whites. Similarly, it was found that there was overachievement by Asians at all levels (Kim and Sakamoto 2010) and an 8 percent earnings disadvantage for Asian men (Kim and Sakamoto 2010; Kim and Sakamoto 2014). Kim and Zhao (2014) find a similar pattern of disadvantage for Asian women. In their study, Asian women were less likely to be employed than White women. Accounting for generational status, none of the groups of Asian women were found to be advantaged in comparison to White women. These studies suggest that returns to education is significantly smaller for Asian employees.

Using the data available from the 2017 National Survey of College Graduates, this research paper aims to add to the current body of literature by examining these causal mechanisms of stratification for Asian Americans and immigrants. I hypothesize that foreign educated Asian immigrants will earn fewer returns to degrees than similarly educated U.S. educated Asian Americans.

METHODS

Data Source

For this study, I use the 2017 National Survey of College Graduates (2017 NSCG) public-use data files. The 2017 NCSG is a biennial survey of non-institutionalized college graduates, under the age of 76, residing in the United States administered by the Census Bureau and sponsored by the National Science Foundation. The survey provides data on the number and characteristics of individuals with a bachelor's or higher degree (National Science Foundation 2017).

Data Collection

The current NSCG uses a rotating panel sample design. A new cohort is selected for each decennial census. College degree-holders were identified using the American Community Survey (ACS). Every panel receives a baseline survey interview and three biennial follow-up interviews before rotating out. The 2017 NSCG includes 124,000 sample cases and a weighted response rate of 71 percent, including samples from the 2009, 2010, 2013, and 2015 ACS.

The NSCG uses three primary methods of data collection: online survey, mail questionnaire, telephone interview. At any time during data collection, respondents can choose to complete the survey using any of the three data collection modes. For further information on how the data were collected, see the 2017 National Survey of College Graduates, available online at https://www.nsf.gov/statistics/srvygrads/#sd (National Science Foundation 2017).

Population and Sample

I created a subset of the NSCG data for self-identified Asian respondents. This analysis includes only single-race Asians, because multi-racial Asians cannot be identified in the NSCG. I restricted the analysis to the adults age 25 to 64 years participating in the labor force, employed

and unemployed. In using the NSCG, my analysis cannot investigate Asians who do not have a college degree. Thus, my subset for this study is composed of 12,372 individuals.

Independent Variable

For the purposes of this study, I use the self-reported locations of the first bachelor's degree. The 2017 NSCG asks respondents "From which academic institution did you receive your first BA degree (country code)?" The survey further differentiates between U.S. and non-U.S. institutions in the code book using the reported country code. Using the NSCG derived data, I created a dummy variable for the place of education, coded as 1 for foreign educated respondents, and 0 for U.S. educated respondents. Due to the limited sample of this study, I include Asian immigrants who received their schooling abroad in any country outside of the United States. I exclude those who do not report a location code.

Dependent Variable

The dependent variable is returns to degree. Using the NSCG, I will be using three variables to measure the expected gains from education: the relationship between the principal job and highest degree, income, and job satisfaction.

Job-degree relatedness. The survey asked respondents "To what extent was your work on your principal job related to your highest degree?" This question measures the degree to which the respondent believes their highest degree is related to their main job. I reverse coded the original variable in order to measure relatedness. 1 is coded as not related, 2 for somewhat related, and 3 for very related. I exclude cases with missing responses.

Income. The NSCG asks respondents "Counting all jobs held in 2016, what was your total earned income for 2016, before deductions?" Respondents are prompted to write in the

answers. Income is coded between 0 and 2 million dollars. I exclude respondents who do not report an income for 2016.

Job satisfaction. To measure job satisfaction, the NSCG asks "How would you rate your overall satisfaction with the principal job you held during the week of February 1, 2017?" This was reverse coded to measure satisfaction as 1 for very dissatisfied, 2 for somewhat dissatisfied, 3 for somewhat satisfied, and 4 for very satisfied. I exclude missing cases.

Control Variables

The control variables are sex, birthplace, and length of residency in the U.S. Sex is coded as 0 for men and 1 for women. Birthplace indicates the country of birth. Residents born in the U.S. are coded as 0 and foreign born as 1.

For their length of residency, the survey asks "In what year did you first come to the United States for six months or longer?" To account for both U.S. citizens and immigrants, I create a variable to measure the proportion of the respondent's life spent in the U.S., ranging from 0 percent to 100 percent. Assuming respondents did not spend significant amounts of time abroad, the length of residency in years was calculated. For U.S. born respondents, residency is equivalent to age. For foreign born respondents, this is calculated by subtracting the year they report arriving from the survey year, 2017. To calculate the proportion, I divide length of residency by age, and multiply by 100 to generate a percentage. Due to several discrepancies in age and length of residency, I exclude 66 respondents whose proportions were greater than 100 percent.

FINDINGS

Univariate

Table 1 presents the means, medians, and standard deviations of all the variables. Figure 1 shows the distribution of the independent variable, place of education. According to Table 1 and Figure 1, about 46 percent of respondents are foreign educated and 54 percent are U.S. educated.

[Insert Table 1 about here]

[Insert Figure 1 about here]

Figure 2 displays the distribution of one of the dependent variables, job to degree relatedness. Table 1 indicates that on average, respondents report that their jobs are somewhat related to their highest degree. According to Figure 2, most respondents report that their job is very related their highest degrees.

[Insert Figure 2 about here]

Table 1 indicates that the average personal income of the sample is \$108,059.53 with a standard deviation of \$162,980.71. Figure 3 shows the distribution of the income variable in increments of \$20,000. The median income of \$84,000 is drastically different from the mean. Therefore, the distribution is heavily skewed to the right. The largest categories for personal income are \$60,000 to \$70,000 and \$80,000 to \$99,999, with about 15% of the sample in each. About eight percent of respondents have an income between \$0 to \$19,999 and about 10% of respondents have an income of \$170,000 or greater.

[Insert Figure 3 about here]

Figure 4 shows the distribution of job satisfaction. Table 1 indicates that the average respondent is somewhat satisfied with his/her job. The standard deviation for this variable was

0.682, revealing that 68 percent of all respondents are composed of somewhat dissatisfied to very satisfied with their jobs. According to Figure 4, most respondents are somewhat satisfied to very satisfied with their current job.

[Insert Figure 4 about here]

Figure 5 displays the distribution of sex. According to Table 1 and Figure 5, 42% of the sample are women and 58 percent are men.

[Insert Figure 5 about here]

Figure 6 shows the distribution of birthplace. Table 1 and Figure 7 show that 71 percent of respondents are foreign born and 29 percent are U.S. born.

[Insert Figure 6 about here]

Figure 7 displays the distribution of the proportion of life spent in the U.S. Table 1 indicates that on average, respondents spend 80% percent of their lives in the U.S. In Figure 8, a bimodal distribution is present, with fewer than 10 percent of respondents spending 40 percent to 99.99 percent of their lives in the U.S. Most respondents have spent 100 percent of their lives in the U.S. According to Table 1, 68 percent of respondent spend between 46 and 100 percent of their lives in the U.S.

[Insert Figure 7 about here]

Bivariate

Table 2 shows the correlation between the returns to degree variables and all other variables.

[Insert Table 2 about here]

The relationships between job relatedness and all other variables are statistically significant. There is a weak and positive relationship between income and job relatedness. The more related

the respondent's job is to their highest degree, the more income the respondent earns. There is a weak and positive relationship between job relatedness and job satisfaction. The more related one's job is to their highest degree, the greater satisfaction with one's job. There is a weak and positive relationship between being foreign educated and job relatedness, meaning that foreign educated Asians are more likely to have greater job relatedness to their highest degree. There is a statistically significant, weak, and negative relationship between job relatedness and the proportion of life spent in the United States. The more time one has spent in the United States, the more related their job is to their highest degree.

There is a statistically significant, weak, and positive relationship between income and job satisfaction. The more income one earns, the greater one's satisfaction with their job. There is no relationship between income and being foreign educated. There is a statistically significant, weak, and negative relationship between being a woman and income. On average, women earn less income. There is no relationship between being foreign born and income. There is a statistically significant, weak, and positive relationship between income and proportion of life spent in the United States. The more time one has spent in the United States, the more income one earns.

There are no statistically significant relationships between job satisfaction and all other variables. There is a statistically significant, weak, and negative relationship between being a woman and being foreign educated. Women are less likely to be foreign educated. There is a statistically significant, strong and positive relationship between being foreign educated and being foreign born. Foreign born respondents are more likely to be foreign education. There is a statistically significant, strong and negative relationship between being foreign educated and

proportion of life spent in the U.S. Foreign educated respondents spend less of their lives in the U.S.

There is a statistically significant, weak and negative relationship between being a woman and being foreign born. Foreign born respondents are less likely to be women. There is a statistically significant, weak and positive relationship between being a woman and proportion of life spent in the U.S. Women spend more of their lives in the United States. There is a statistically significant, moderately strong and negative relationship between being a foreign born and proportion of life spent in the U.S. Foreign born respondents spend less of their lives in the United States.

Multivariate

Job relatedness. As shown in Table 3, 4.6 percent of the variance in job relatedness can be explained by foreign education, being a woman, and the proportion of life spent in the U.S (R2 = .046). With an *F* value of 150.533, the regression equation is significant at the .01 level (p < .001). The significant predictors of job relatedness (p < .001), ordered from largest to smallest, are the proportion of life spent in the U.S. ($\beta = -.155$), foreign education ($\beta = .060$), and being a woman ($\beta = -.052$). The foreign born variable is not statistically significant at the .001 level.

[Insert Table 3 about here]

Table 4 displays an iterative regression of job relatedness on all variables. In models one through four, all significant variables remain significant (p < .001). Additionally, the regression equation remains significant through model 4 (F = 150.533). As seen in the R2 values, explanatory power increases with the introduction of each control variable. Model 4 displays the regression coefficients of job relatedness on all variables. On average, foreign educated Asians

have jobs related to their highest degree. More time in the U.S. is related to lower job relatedness. Women report less job relatedness, on average.

[Insert Table 4 about here]

Income. As seen in Table 3, two percent of the variability in income can be explained by foreign education, being a woman, being foreign born, and the proportion of life spent in the U.S (R2 = .020). The regression is significant at the .001 alpha level (F = 64.333). The significant predictors), ordered from largest to smallest, of income are the proportion of life spent in the U.S. ($\beta = .115$), being a woman ($\beta = -.108$), and being foreign born ($\beta = .041$). The primary independent variable, foreign education, is not statistically significant (p > .001).

Table 5 shows an iterative regression of income on all variables. In all four models, the regression equation is significant (p < .001). As shown in all R_2 values, explanatory power increases with the addition of each control variable. Foreign education is not a significant predictor of income in any model. Being a woman remains significant in all models. Controlling for all else, on average, Asian women earn about \$36,000 less than Asian men. Foreign born becomes significant with the introduction of proportion of life in the U.S. All else being equal, foreign born Asians earn about \$15,000 more than U.S. born Asians. For each additional percentage increase in proportion of life spent in the U.S., respondents earn about \$600 more. [Insert Table 5 about here]

Job satisfaction. In Table 3, 0.1 percent of the variability in job satisfaction can be explained by foreign education, being a woman, being foreign born, and the proportion of life spent in the U.S ($R_2 = .001$). The regression equation is not statistically significant at the .001

alpha level (F = 3.332). All of the independent and control variables are not statistically significant (p > .001).

DISCUSSION

In this study, I sought to answer the following questions: how does the place of education affect the returns to degrees for Asian Americans? More specifically, to what extent do foreign-educated and U.S.-educated Asian Americans differ, if at all? The results support the human capital theory and disconfirm my hypotheses. The bivariate results (see Table 2) indicate that foreign educated Asians experience greater relatedness between their highest degree and principal job than do U.S. educated Asians. There is no significant difference in income and job satisfaction between those educated abroad and those educated domestically.

The multivariate results (see Table 3) are consistent with the bivariate results. Contrary to my first hypothesis, foreign educated immigrants are employed in jobs related to their highest degree. Though both findings are in contrast to the country-specific human capital argument found in the literature, they are consistent with those by Lueck (2018) and Omori (2016). As cited in the literature review, by 2012, Asian immigrants had become the largest group of immigrants receiving permanent resident status through employment (Lueck 2018; Omori 2016). Through employment-based visas, an employer can sponsor a foreign national for permanent residency in the United States based on a permanent job offer.

Employment-based visas fall into three tiers of preference (U.S. Citizenship and Immigration Services, n.d.). First preference includes those with extraordinary ability in the arts, sciences, athletics, education or business, such as multinational executives or outstanding researchers. Second tier includes those who have advanced degrees or who have an exceptional

ability of national interest. Skilled workers, professionals, and unskilled workers constitute the third preferences. In all of the above cases, employment-based immigration requires proof of the relationship between the person's education/experience and relationship to the employment offers. For example, a research university in the New Jersey must prove to the Department of Homeland Security and U.S. Citizenship and Immigration Services that an economics professor from Thailand is uniquely qualified to be employed in the university, as opposed to a professor based in North Dakota.

With greater time spent in the United States, specifically for those who have spent the majority of their lives in the country, there may not be an employment pipeline as direct as employment-based immigration in the United States. Additionally, women experience decreased relatedness between their degree and principal jobs, which could be an effect of the gendering of immigration abroad. It is more common for a man to migrate first and establish roots in the destination country, before the woman migrates. Through the path of family reunification, there is no requirement to demonstrate the abilities of the spouse in relation to an occupation.

The second hypothesis is also disconfirmed. There is no significant difference in income between those who are foreign educated and U.S. educated. Once in the United States, foreign educated Asians do not generally experience a disparity in income as originally hypothesized. However, there may be the presence of a disparity by ethnic membership as cited by Barringer et al. Being a woman has substantial negative impacts on income in the United States. As seen in Table 5, model four shows that Asian women earn \$36,000 less than Asian men when controlling for all else. This is to be expected with the gendered wage gap in the United States.

Foreign born Asians earn \$15,000 more than U.S. born Asians, as shown in Table 5's model 4. Given the high correlation between the foreign educated and foreign born variables (r =

.569), it is possible that foreign born respondents are foreign educated and may be entering the United States through employment-based visas as discussed previously. Contrary to job relatedness, income increases as more time is spent in the United States. For each additional percentage of a respondent's life spent in the country, they earn \$600 more. Respondents who spend half of their lives in the United States earn \$28,000 more. As respondents spend more time in the United States, they acquire English language skills, cultural knowledge, and build connections with others around them. These skills are valued in the job market and are positive factors in social mobility, especially for immigrants.

Turning to job satisfaction, none of the variables are significant predictors of job satisfaction. While job relatedness and income are partially explained, job satisfaction remains unexplained in this study for Asians in the United States. There are many plausible reasons for this, but I believe this might be the result of prioritizing financial security and stability. In the current job market, immigrants and nationals alike are looking for jobs that pay the bills and put food on the table. Coming out of school, many students look to secure a job, related or not to their degree, and begin earning income to sustain themselves. It is possible that demographic characteristics, such as place of education and gender, do not influence satisfaction. However, when looking at the correlations between the three dependent variables, there is a statistically significant relationship present between them. This suggests that job satisfaction is a result of job and financial security. Whether employment results in job satisfaction is unknown and unable to be predicted for this study's population using the variables analyzed.

By investigating the association between place of education and returns to degrees, I have been able to evaluate the human capital theory and whether skills are country-specific. According to the findings presented previously, foreign educated Asians experience greater

returns to degrees than U.S. educated immigrants in the form of job relatedness. This indicates that skills attained in another country can be transferred to the United States, most likely through employment based-visas. Additionally, all else being constant, there is no difference in income nor job satisfaction between foreign educated Asians and U.S. educated Asians. This means that two Asians who possess a bachelor's degree will earn the similar incomes and report similar levels of job satisfaction, regardless of place of education. Thus, human capital theory is supported by my findings.

CONCLUSION

This study analyzed the impact of place of education on the returns to degrees for Asians in the United States. Drawing on human capital theory, I used the 2017 National Survey of College Graduates to analyze a subset of 12,372 Asians in the labor force in the United States between the ages of 25-64 years old. The regression analysis revealed findings that contrast with my original hypotheses. After controlling for other potential predictors for returns to degrees, including gender, birthplace, and time spent in the United States, I found that foreign educated Asians experience more returns to degrees to an extent. Those educated abroad experience more job to degree relatedness that those educated domestically, rejecting my first hypothesis. The second and third hypotheses are also disconfirmed, because the multivariate results suggest that there is no significant difference in income and job satisfaction between the two groups. The results partially support the human capital theory, suggesting that skills may be transferable across cultures and have no country-specific component.

The differences, or lack thereof, between both groups reflect past and present U.S. immigration policies. Different Asian groups have taken different pathways towards immigration since the passage of the Hart-Cellar Act of 1965. Prior to the act, immigration was dictated by

the National Origins Act. Most countries were assigned an immigration quota by the United States, limiting the number of immigrants that could enter the United States in a given year. With the passage of the Hart-Cellar Act, national quotas were eliminated and substantial waves of immigration increased. Particularly, this act gave preference to relatives and highly-specialized workers. With this new standard, highly educated and skilled immigrants began migrating to the U.S.

These patterns may have carried over into the relationship between foreign education and the returns to degrees, particularly job relatedness. The current political climate under the Trump administration has tightened the requirements to enter the United States, specifically requiring more specialized abilities and talents from immigrants. The selective process is intended to lessen the competition between immigrants and natives for jobs and social mobility. According to *Investopedia*, the denial rate for employment based visas rose 15 percent (Investopedia 2019). Asian immigrants who fall under the third tier preference for employment-based visas may be unable to migrate into the United States. Other tiered Asian migrates may experience greater difficulties applying for and being granted the employment-based visas.

Limitations and Future Research

This study has several limitations. For the subset, I was only able to identify single-race Asian respondents due to the design of the NSCG. Multiracial respondents were asked to identify one race and or ethnicity on the NCSG, thereby excluding respondents with any Asian heritage. Additionally, though my sample was robust, I did not have large enough samples of individual Asian ethnic groups. I was not able to disaggregate Asian ethnic identity, instead analyzing the racial group as a whole. By doing so, differences and disadvantages within the race may be obscured. Finally, this study is performed with data from 2017 containing information from

immigrants who came at different points in time. Without the context of time, this study is unable to identify which Asian immigrants experience advantage, with respect to time and ethnic group membership.

For future study, I recommend a quantitative study on the immigration and assimilation of separate Asian ethnic groups during periods of mass migration from respective countries into the U.S. For example, a potential study could examine Vietnamese immigrants coming into the United States during and after the Vietnam War, with a focus on integration into the U.S. labor market.

Despite such limitations, this study provides support for human capital theory, underscoring the partial advantage of foreign educated Asians in contrast to U.S. educated Asians. As research on education as a stratifying mechanism grows, we should keep these findings in mind.

REFERENCES

- Arbeit, Caren A., and John R. Warren. 2013. "Labor Market Penalties for Foreign Degrees among College Educated Immigrants." *Social Science Research* 42(3):852-71.
- Barringer, Herbert R., David T. Takeuchi and Peter Xenos. 1990. "Education, Occupational Prestige, and Income of Asian Americans." *Sociology of Education* 63(1):27-43.
- Basran, Gurcharn S., and Zong Li. 1998. "Devaluation of Foreign Credentials as Perceived by Visible Minority Professional Immigrants." *Canadian Ethnic Studies* 30(3):7-23.
- Feliciano, Cynthia, and Yader R. Lanuza. 2017. "An Immigrant Paradox? Contextual Attainment and Intergenerational Educational Mobility." *American Sociological Review* 82(1):211-41.
- Friedman, Raymond A., and David Krackhardt. 1997. "Social Capital and Career Mobility." *The Journal of Applied Behavioral Science* 33(3):316-34.
- Hirschman, Charles, and Morrison G. Wong. 1986. "The Extraordinary Educational Attainment of Asian-Americans: A Search for Historical Evidence and Explanations." *Social Forces* 65(1):1-27.
- -----. 1984. "Socioeconomic Gains of Asian Americans, Blacks, and Hispanics: 1960-1976." *American Journal of Sociology* 90(3):584-607.
- Investopedia. 2019. "The Impact of Trump's H-1B Visa Crackdown in 5 Charts." https://www.investopedia.com/news/impact-trumps-h1b-visa-crackdown-5-charts/
- Kim, ChangHwan, and Arthur Sakamoto. 2010. "Have Asian American Men Achieved Labor Market Parity with White Men?" *American Sociological Review* 75(6):934-57.
- -----. 2014. "The Earnings of Less Educated Asian American Men: Educational Selectivity and the Model Minority Image." *Social Problems* 61(2):283-304.

- Kim, Chang Hwan, and Yang Zhao. 2014. "Are Asian American Women Advantaged? Labor Market Performance of College Educated Female Workers." *Social Forces* 93(2):623-52.
- Kim, Dukhong. 2015. "White Americans' Racial Attitudes in Multiracial Contexts: The Role of Perceptions of Minority Groups' Socioeconomic Status and Opportunities." *Race, Gender* & Class 22(1/2):358-75.
- Lancee, Bram, and Thijs Bol. 2017. "The Transferability of Skills and Degrees: Why the Place of Education Affects Immigrant Earnings." *Social Forces* 96(2):691-716.
- Lo Iacono, Sergio, and Neli Demireva. 2018. "Returns to Foreign and Host Country Qualifications: Evidence from the US on the Labour Market Placement of Migrants and the Second Generation." *Social Inclusion* 6(3):142-52.
- Lueck, Kerstin. 2018. "Socioeconomic Success of Asian Immigrants in the United States." *Journal of Ethnic & Migration Studies* 44(3):425-38.
- National Science Foundation. 2017. "Overview: National Survey of College Graduates." https://www.nsf.gov/statistics/srvygrads/#sd.
- Ormori, Megumi. 2016. "Educated and Staying at Home: Asian Immigrant Wives' Labor Force Participation in the U.S." *Journal of Comparative Family Studies* 47(4):463-81.
- Painter, Matthew A. 2013. "Immigrant and Native Financial Well-being: The Roles of Place of Education and Race/Ethnicity." *Social Science Research* 42(5):1375-89.
- Painter, Matthew A., II, and Zhenchao Qian. 2016. "Wealth Inequality among Immigrants: Consistent Racial/Ethnic Inequality in the United States." *Population Research and Policy Review* 35(2):147-75.
- Takei, Isao, and Arthur Sakamoto. 2011. "Poverty among Asian Americans in the 21st Century." *Sociological Perspectives* 54(2):251-76.

- Tong, Yuying. 2010. "Place of Education, Gender Disparity, and Assimilation of Immigrant Scientists and Engineers Earnings." *Social Science Research* 39(4):610-26.
- Torres Stone, Rosalie A., Bandana Purkayastha and Terceira A. Berdahl. 2006. "Beyond Asian American: Examining Conditions and Mechanisms of Earnings Inequality for Filipina and Asian Indian Women." *Sociological Perspectives* 49(2):261-81.
- U.S. Citizenship and Immigration Services. n.d. "Green Card for Employment-Based Immigrants." Accessed November 19, 2019. https://www.uscis.gov/greencard/employment-based.
- Zhen Zeng, David R., and Yu Xie. 2004. "Asian-Americans' Earnings Disadvantage Reexamined: The Role of Place of Education." *American Journal of Sociology* 109(5):1075-108.

Variable	Mean	Median	SD
Foreign Educated	0.46	.00	0.498
Job-Degree Relatedness	2.48	3.00	0.720
Total Income	108,059.53	84,000.00	162,980.715
Job Satisfaction	3.26	3.00	0.682
Woman	0.42	.00	0.494
Foreign Born	0.71	1.00	0.452
Proportion of Life Spent in U.S. (%)	79.39	100.00	33.193

Table I. Means, Medians and Standard Deviations for Variables (N = 12,372)

Table 2. Correlations (r) between Returns to Degrees and Five Variables (listwise deletion, two-tailed test, N = 12,372)

Variable	Income	Job Satisfaction	Foreign Educated	Woman	Foreign- Born	Proportion of Life Spent in the U.S.
Job Relatedness	.071*	.170*	.162*	072*	.116*	200*
Income		.080*	.007	105*	.027	.067*
Job Satisfaction			.021	021	.002	020
Foreign Educated				088*	.569*	562*
Woman					082*	.089*
Foreign-Born						393*

*p < .001

Variable	Job Relatedness ß	Income ß	Job Satisfaction ß
Foreign Educated	.060*	.039	.022
Woman	052*	108*	019
Foreign Born	.017	.041*	017
Proportion of Life Spent in the U.S. (%)	155*	.115*	013
R ²	.046	.020	.001
F (4,12,367)	150.533*	6 4 .333*	3.332
*p < .001			

Table 3. Regression of Job Relatedness, Income, and Job Satisfaction on All Variables

Table 4. Linear Regression of Job Relatedness on All Variables (N = 12,372)

	Model I	del I Model 2	Model 3	Model 4
	Ь	Ь	Ь	Ь
Foreign Educated	.234*	.226*	.199*	.087*
Woman		085*	083*	075*
Foreign Born			.053	.027
Proportion of Life Spent in the U.S.				003*
Constant	2.377	2.417	2.390	2.724
F	331.398*	187.768*	128.499*	150.533*
R ²	.026	.029	.030	.046
*- < 001				

*p < .001

Table 5. Linear Regression of Income on All Variables (N = 12,372)

	Model I	Model 2	Model 3	Model 4
	Ь	Ь	Ь	Ь
Foreign Educated	117,884.926	-721.140	-6,056.794	12,628.856
Woman		-34,630.728*	-34,322.151*	-35,696.941*
Foreign Born			10,402.094	14,785.017*
Proportion of Life Spent in the U.S.				562.223*
Constant	107003.421	123006.273	117884.926	62156.856
F	.617*	68.648*	48. 30 *	64.333*
R ²	.000	.011	.012	.020

*p < .001













