

THE UNIVERSITY OF CHICAGO

RACIAL INEQUALITY IN SOCIOECONOMIC STATUS
PERPETUATED BY SOCIAL CAPITAL
WITH A FOCUS ON ASIAN AMERICANS

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ABSTRACT

As the Asian American population continues to increase (e.g., by 50 percent from 2010–2020), it is critically important to chart their assimilate and the factors that contribute to their success. While much has been written about the material wellbeing of Asian Americans, it remains unclear whether their socioeconomic status is on par with white Americans after human capital differences and immigration generation are taken into account. Model minority stereotypes paint the picture of an entire group faring well academically and economically, but this viewpoint is seldom scrutinized sufficiently in the literature. For example, scholarship tends to focus on the economic mobility of Asian immigrants as a group rather than including and accounting for the children of immigrants, who comprise more than half of all Asians in the United States.

Based on Lin's theory of inequality in social capital and segmented assimilation theory, this study examines whether Asian Americans across different generations have equal access to social capital and whether the social capital they do access has the same socioeconomic impact as the social capital of white Americans. It seeks to determine whether and to what degree 1.5 and second generation Asian Americans experience racial disparities in socioeconomic status at the time of early adulthood and after controlling for human capital factors, and whether any remaining differences between white and Asian American socioeconomic outcomes can be explained by access to social capital and its impact. The socioeconomic outcomes under investigation include educational attainment, earnings, supervisory position, and subjective social status measured in young adulthood. Social capital characteristics include measures related to the mentoring relationships and friendship networks of participants. Separate statistical models

are examined by gender and race and immigration groups of white Americans, 1.5 generation, and second generation.

Data were drawn from the National Longitudinal Study of Adolescent to Adult Health (Add Health), a nationally representative study of adolescents attending secondary schools in academic year of 1994-95. The study mainly used data of those who completed an in-home survey questionnaire in waves 1, 3, and 4. The in-school questionnaire, school administrator questionnaire, and parent-survey were used to compliment the in-home survey questionnaire for participants who took it.

In the first empirical chapter, the differences in socioeconomic outcomes between white Americans and each group of Asian Americans are examined after controlling for human capital factors using regression models. These results demonstrate that adjusting for human capital, Asian Americans do not consistently achieve parity with white Americans and there are important differences by generation status, gender, and the socioeconomic outcomes under consideration. For example, Asian Americans show higher educational attainment than white Americans except for women in the 1.5 generation; 1.5 generation Asian American men show parity in all other socioeconomic indicators; second generation Asian American men earn less than white Americans and their subjective social status is lower than their white American counterparts; however, 1.5 generation Asian American women earn more than white women and second generation Asian American women show higher subjective social status than white American women. Thus, there are differences in the socioeconomic outcomes of white and Asian Americans that vary depending on social group and outcome. While the findings for Asian American men are consistent with a segmented assimilation hypothesis, the findings for Asian American women are not.

The second empirical chapter focuses on mentorship and the impact of mentoring. Whether the impact of having a mentor is different among racial and immigration groups is examined using inverse probability treatment weighting (IPTW) methods. Asian Americans were found to be less likely to have a mentor (only about half of Asian American adolescents reported having one while 75 percent of white Americans adolescents reported having one). Asian Americans were also found to have different types of mentors compared to white Americans, depending on their social group. The findings also suggest that the impact of having a mentor is different for white and Asian Americans. While mentoring relationships are closely related to higher socioeconomic status for white Americans, they are not consistently related to socioeconomic status for Asian Americans. The only exception is that relative mentors are related to having a higher supervisory position among 1.5 generation Asian American men. Overall, the results show that Asian Americans are less likely than white Americans to have a mentor and their mentoring relationships show minimal association with later socioeconomic status.

The third chapter examines the nature and impact of friendship networks using regression and structural equation modeling techniques. The friendship characteristics measured include the number and racial heterogeneity of friendships during childhood and young adulthood. Results only partly confirm capital deficit and returns deficit hypotheses of Asian American friendship networks and social capital does not fully explain the racial differences in socioeconomic status. It confirms the capital deficit in that Asian Americans have a smaller number of friends during childhood and the nature of friendship is positively related to SES. However, because the difference in SES is not fully explained by the differences in the number and homogeneity of friendship which means the finding does not fully support capital deficit model. For white

Americans, the number and homogeneity of friendship is positively correlated to higher socioeconomic status. However, the number and homogeneity of friendship is not always positively related to higher socioeconomic status for Asian Americans. While the number of friends in young adulthood is positively related to eventual earnings, all other friendship characteristics are not related to the promotion of socioeconomic status and sometimes a larger number of friends is even negatively related to diminished socioeconomic status. The findings also show that AAs have more racially heterogeneous friendship networks than white Americans during both childhood and young adulthood.

All three empirical chapters together confirm that social capital of Asian Americans is different from that of white Americans; they have lower access to social capital and their social capital is not as impactful. Asian Americans, however, are successful socioeconomically even without social capital embedded in mentoring relationships and friendships. Instead of social capital, human capital factors explain much of the socioeconomic status attainment of Asian Americans. It is also discussed why Asian Americans have lower social capital and their social capital is not as effective in promoting socioeconomic status based on the theory of inequality in social capital and existing empirical research findings. Practice and policy implication to considers how to improve the quantity and quality of the social capital of Asian Americans.

INTRODUCTION

Social capital refers to resources that come from the social relationships one has with relatives, friends, colleagues, and so on (Lin, 2000). Social capital serves both a mobility and a coping function (Henly et al., 2005) for individuals. On the one hand, social relationships can be very important role in promoting socioeconomic status in the United States (Dominguez & Watkins, 2003; Granovetter, 1973; Zippay, 2001), and they can provide psychosocial support and material resources to support mental health and help cope with difficult circumstances (Harandi et al., 2017; Thoits, 1995). This study is focused primarily on the first function of social capital; in particular, how relationships with mentors and friends may be instrumental for helping improve labor market outcomes and socioeconomic status (Almedom, 2005; Granovetter, 1973). The social capital of Asian immigrants within ethnic enclaves has been critical to their survival by reducing hardships and boosting their socioeconomic mobility, especially for Asian immigrants who benefit from rotating credit systems, informal education, and employment opportunities within ethnic communities (P. S. Li, 2004; Zhou & Lee, 2017). Even after middle class AAs leave urban ethnic enclaves seeking better housing conditions, areas like Chinatown and Little Manila remain centers of social capital (Zhou, 2010). That social capital is in turn passed down to Asian high school students, who often translate it into exceptional academic performance (Zhou, 2009). That performance in turn promotes socioeconomic mobility (C. Kim & Sakamoto, 2010).

However, the ways in which the children of Asian immigrants develop and use social capital is not yet well understood. The social capital that helped their parents succeed within the

ethnic enclaves may not be as helpful in the mainstream labor markets in which they often operate (Chin, 2020). The 1.5 and second-generation AAs are forced to develop rather than simply inherit key social relationships (e.g., mentoring and friendship); but how they do so and to what effect has seldom been studied. This dissertation contributes to filling that gap by examining the key social relationships of 1.5 and second-generation Asian American (AA) adolescents and young adults. The study focus is not restricted to relationships that exist within ethnic enclaves. Rather, it considers a wide range of mentoring and friendship ties that may support Asian Americans in early adulthood as they navigate the labor market.

AAs are the fastest growing population in the United States, now accounting for about 7.2% of the population—a number that has doubled since 2000 and projected to increase to 12% of the entire American population by 2040 (Budiman et al., 2019; Roman, 2022). Some are fifth generation while more than half of those living in the United States came as immigrants. They are ethnically, culturally, and linguistically heterogeneous, representing more than 30 countries of origin (Budiman et al., 2019). Across these categories are a wide range of socioeconomic positions and immigration histories. Those driven to migrate due to conditions such as war and persecution arrive as refugees and thus experience higher degrees of economic insecurity in the United States (V. C. Tran & Lara-García, 2020).

This diversity within the AA population is not often acknowledged. Part of the blame for this is the dominance of two stereotypes: the model minority and perpetual foreigner (Chou & Feagin, 2015; Huynh et al., 2011; C. J. Kim, 1999). The stereotypes contribute to the problem of AAs being understudied and underserved in the field of social work and policy. Model minority stereotypes portray AAs as a group that fares well socioeconomically, which may feed into a belief that they do not need social services or policies targeting their socioeconomic challenges.

Also, because of perpetual foreigner stereotypes, they may be understood to be ineligible for social services that usually target U.S. citizens (even when they are eligible). This can discourage the development of innovative programs that target the particular needs of this population.

In this dissertation, there are respective chapters devoted to a literature review and methods, and then three chapters of empirical findings. The literature review includes a discussion of research on the socioeconomic well-being of AAs and theories on segmented assimilation and social capital as it applies to this study. The methods chapter introduces the study itself, including information on data, sample, variable operationalization, and the general analytic plan for the dissertation.

Each empirical chapter includes sections that lays out the research question(s), relevant literature, the specific analytic method used to address the research questions, results, and a discussion of findings. In all empirical chapters, foreign-born (1.5 generation in this study) and US-born Asian Americans are compared to white Americans and differences by gender are also considered. The first empirical chapter compares AAs and white Americans for the following socioeconomic outcomes: educational attainment, earnings, supervisory positions attained, and subjective social status. It hypothesizes that, compared to white Americans, AAs experience disparities in socioeconomic status indicators. It is hypothesized that AAs have higher educational attainment than white Americans, but that once education and other control variables are accounted for their socioeconomic wellbeing will be lower than white Americans. These comparisons are examined separately by gender and generational status.

The second and third empirical chapters explore the social relationships of AAs compared to those of white Americans in order to address the research questions related to social

capital inequality. The second chapter focuses on mentoring relationships and the third chapter on friendships, two forms of social capital that have the potential to facilitate socioeconomic mobility. They investigate how the inequality in social capital—outlined in the literature review chapter—manifests itself across the two populations. They examine whether the AAs studied have similar access to social capital in mentoring and friendships as their white counterparts, which may be important given that such social capital is known to facilitate socioeconomic status attainment, and whether social relationships have a similar impact on socioeconomic status in both populations. It is hypothesized that AAs have lower social capital in the form of mentor and friendship relationships than white Americans and this affects the socioeconomic status of AAs. It is also hypothesized that the social capital AAs do have is not as impactful as that of white Americans in terms of supporting socioeconomic outcomes.

As noted, when empirically examining the relationships of interest, immigration history is considered throughout the study. Conventionally, immigrant generations are defined by the number of generations since a family's first arrival in the host country. First generation immigrants are those born in other countries and who immigrate to the host country. Second-generation American refers to those who were born in the United States to first-generation parents. Third-generation and so forth are those who were born to the previous generation. Among white and Black immigrants, third generations and beyond are often considered American without recognizing them as descendants of immigrants, but because of perpetual foreigner stereotypes, third generation AAs are still perceived as immigrants (Huynh et al., 2011). More recently, the 1.5 generation category was adopted to distinguish immigrants who arrived in the United States as children and completed some years in the American education system from those who immigrated as adults. The 1.5 generation experienced American K-12

education, are fluent in English, and are much more acculturated (C. Kim & Sakamoto, 2010; Okazaki, 2019; Zeng & Xie, 2004).

1.5 generation and second generation AAs may have very different experiences in the United States despite many similarities. For example, some research suggests that parents of 1.5-generation immigrants – who decided to immigrate with their children – likely considered their children to be healthy, resilient, and capable of adapting to a new environment (Zhou & Lee, 2017). Second-generation AAs are more acculturated to white American society than the 1.5 generation. Second-generation AAs are employed in diverse industries with diverse majors in college, while 1.5 generation AAs are densely populated in lucrative STEM major and industry (C. Kim & Sakamoto, 2010). They are different in ethnic and American identity; 1.5 generation AAs show higher ethnic identity and lower American identity in comparisons to second generation AAs (B. Woo et al., 2020). In this study, 1.5 generation and second generation immigrants are treated as separate groups, and the differences between the two groups are also examined.

Throughout the empirical analyses, gender is also considered. It is well-known that female experience various disparities in the labor market (Bleiweis, 2020; Hegewisch, 2018). Furthermore, gender also shapes adolescents' social relationships and the acculturation of Asian Americans. During adolescence, gender socialization intensifies and gender-specific beliefs and interpersonal behavior increases (Liang et al., 2013). Girls and women are in general more likely to seek and receive help from their interpersonal relationships (Hagler et al., 2019) and are known to be more skilled in interpersonal relations (Spencer et al., 2018). These behavior differences are known to contribute to different access to and impact of mentoring relationship and friendship networks by gender (Hagler et al., 2019). Moreover, gender shapes Asian

American adolescents' acculturation. Female Asian Americans show higher rates of acculturation to U.S. society than male Asian Americans (Choi et al., 2018). High acculturation rates may enhance the likelihood for Asian American adolescents to build social relationships. To account for the complexity of gender's effect on the labor market outcomes, mentoring relationships, and friendship, this study analyzes men and women separately.

CHAPTER 1: LITERATURE REVIEW AND BACKGROUND

Model Minority Stereotypes and Socioeconomic Well-being

Asian Americans (AAs) are held up as a model minority based on their generally high academic and economic achievement (Hirschman & Wong, 1986; J. Lee & Zhou, 2017). The model minority stereotype implies that AAs are socioeconomically advantaged as a group because their culture values educational achievement and a strong work ethic which leads to high educational performance and economic success (Nee & Holbrow, 2013). Of course, the model minority stereotype does not adequately recognize the diversity within the AA population; race and immigration scholars have argued that the model minority stereotypes falsely portray AAs' experiences and lives (Chou & Feagin, 2015; Fong, 2002). In fact, several studies have shown that not all AAs fare well, and some AA ethnic groups are more economically unstable than other AA ethnic groups (S. Y. Kim et al., 2008, Lee et al, forthcoming).

In fact, AA is a heterogeneous group that includes more than 30 ethnic groups, and the within-group differences in socioeconomic status (SES) is the largest among all racial groups (Budiman et al., 2019). Some Asian ethnic groups in the United States, such as the Burmese, have a lower average annual household income than other AAs and Americans overall. Mongolians had poverty rates as high as 25% in 2019 (Budiman et al., 2019). As demographic data shows, many AAs experience socioeconomic hardships due to lack of economic resources (Louie et al., 2017; Segal et al., 2002; Vue et al., 2011). They might benefit from targeted programs and interventions such as health insurance programs for small business and refugee settlement programs to improve their socioeconomic well-being. Still, less attention has been given to the socioeconomic well-being of AAs perhaps because of the model minority stereotype.

Despite the heterogeneity, it is true that on average, without controlling for other factors, AAs as a population do show higher educational attainment and earnings in the labor market than other groups, which appears to provide evidence for the model minority stereotype. However, research suggests that the educational and economic achievements of AAs are not attributable primarily to Asian cultural traits brought from the countries of origin. Studies emphasize other factors that explain the socioeconomic achievement of AAs. First, the American immigration system favors Asian immigrants with specific resources that can thrive in American society by filtering Asian immigrants based on educational and academic achievement (Zhou & Lee, 2017). Because the immigration system only accepts those with economic and human capital, Asian immigrants seem to economically perform better and their children perform better at schools and workplaces on average. Thus, selection is one important explanation.

Secondly, AAs' socioeconomic success can be attributed in part to their parents' educational level and neighborhood environment; these factors are already known to improve SES among all Americans as well as Asian Americans. Thirdly, the first-generation sacrifices that can improve children's outcomes has been recognized by scholars as common to all immigrant groups, not just AAs. Although second-generation Asian Americans seem to make significant socioeconomic gains compared to their immigrant parents' socioeconomic status, it is often because first-generation Asian Americans initially experience downward mobility when they first settle in the United States despite their high human capital and educational background accumulated in the country of origin. Many first-generation Asian immigrants who work within ethnic enclaves are underemployed because their educational and professional credentials are not recognized in the United States (De Jong & Madamba, 2001; Slack & Jensen, 2007) and due to lack of English proficiency. The underemployment among the first generation Asian American

leads to the downward mobility among the first generation immigration generation. These findings highlight structural inequalities that AAs and other immigrants, especially those who are racial minorities, also face (Bonilla-Silva, 2004; Slaughter-Defoe, Nakagawa, Takanishi, & Johnson, 1990).

Therefore, after accounting for human capital factors (i.e., years of education and type of educational institutions they attended) and other important in-labor market characteristics (i.e., job field, employment, and the region of residence), some research suggests that AAs do not perform better economically than white Americans, and may also experience racial disparities in the labor market in terms of earnings and supervisory positions (C. Kim & Sakamoto, 2010, 2014; C. Kim & Zhao, 2014; Zeng & Xie, 2004). Many AAs complete several years of education and work in high-paying industries, and nearly half of AAs in the United States live on the West Coast, which has a generally higher cost of living. It is essential to consider these factors in comparing their socioeconomic success to other groups.

Studies of AAs that consider multiple dimensions of socioeconomic status and that take these diverse contributions to success into account are lacking. In particular, few studies examine different measures of SES including objective SES (i.e., individual earnings and having a higher supervisory position at work), subjective SES, and educational attainment in the same research. In some prior work, while average earnings of Asian Americans are relatively higher than white Americans, Asian Americans are nevertheless less represented in higher supervisory and managerial positions considering the proportion of Asian Americans in the workforce and population (Carnoy, 2020; Chin, 2020; D. Woo, 2000). By studying diverse indicators of socioeconomic status, we can have a more comprehensive understanding of AAs' socioeconomic advantages and disadvantages.

Earnings

As noted previously, research shows that AAs, on average, earn more than white Americans, and this is especially true for some ethnic subgroups such as Indian Americans and Filipino Americans. However, there are some AA ethnic groups like Burmese and Hmong whose average household income is lower than the average American household (Budiman et al., 2019). Also, U.S.-born AA men with college degrees earn less than their white counterparts with the same pre-labor market qualifications (e.g., years of education, field of study, types of college that they attended) and in-labor market characteristics (e.g., occupation and region of residence) (C. Kim & Sakamoto, 2010). Furthermore, foreign-born AA men and women without any secondary education in the United States experience more significant earning disparities (C. Kim & Sakamoto, 2010). U.S.-born Southeast AA women do not earn less than white women (Takei et al., 2013).

Depending on gender and immigration status, it is studied that some Asian American subgroups earn equally. For example, Foreign-born AAs with an American secondary education have made earning parity with their white American counterparts. The earning gap between AA and white American women is less prominent (C. Kim & Sakamoto, 2010; Takei et al., 2013).

These findings reveal a lot about the earning parities and disparities of AAs. Still, there is a research gap regarding AAs' earnings because no study has examined those with and without college experience and men and women together.

Supervisory Position

Considering that many workers spend most of their time at work, and develop their social standing from rank and status in the organization, supervisory status is another indicator of SES that has been used in the literature (Fujishiro et al., 2010; Link et al., 1993). A higher supervisory

position may give individuals greater autonomy and authority in the workplace and is typically associated with higher compensation.

In contrast to the findings on earnings, AAs are underrepresented in managerial and supervisory positions even though they experience relatively high employment rates for entry-level positions, attain higher than average educational levels, and have relatively high earnings (Chin, 2020; Takei & Sakamoto, 2008; D. Woo, 2000). The structural barrier AAs face in career advancement has been coined the “bamboo ceiling” (Hyun, 2005). Scholars have shown that AAs are underrepresented in leadership positions in many sectors, including profit, nonprofit, higher education (Chin, 2020; Kawahara et al., 2013), and government (Ricucci, 2009; Woo, 1994). U.S.-born AAs with a college education supervise smaller numbers of employees compared to white Americans and this translates to lower managerial/supervisory authority (Takei & Sakamoto, 2008). Thus, it is important to consider supervisory position as one of the many indicators of the SES of AAs.

Subjective Social Status

Subjective social status (SSS) refers to how individuals perceive their SES based on perceptions about their income, educational attainment, and occupation (Operario et al., 2004). Research shows that indicators of subjective social status better predict health outcomes compared to objective measures of SES such as income, years of education, or external ratings of occupation prestige (Adler et al., 2000). Like among other groups for AAs as well, subjective social status is also closely related to physical and mental health (Gong et al., 2012; Leu et al., 2008), confirming that it is an important socioeconomic indicator in this population for this group. Despite the importance of subjective measures of SES for health and wellbeing, studies investigating how AAs perceive their status in the United States socioeconomic hierarchy are

lacking, while many studies have analyzed how other racial-ethnic groups perceive AAs socioeconomic status (Zhang, 2010a). Furthermore, AAs' subjective social status has not been studied in comparison with other racial groups. This is partly because the sample size of AAs is too small in many studies to compare with other racial groups (Wolff et al., 2010). Studies with large AA samples often only include one or multiple Asian ethnic groups or another marginalized racial group (Leu et al., 2008).

Educational Attainment

Educational attainment is a strong indicator of SES. It is a form of human capital development, which is crucial for upward mobility measured by job-related outcomes and subjective social status (Sewell & Hauser, 1972; Singh-Manoux et al., 2003). On the other hand, educational attainment is also closely related to ascribed parental resources because a large socioeconomic investment is necessary to succeed in the K-12 education system and pursue a higher education degree (Nam & Huang, 2009).

Educational attainment is one of the most heavily studied aspects of AA life (Sue & Okazaki, 1990). This topic receives much attention because of the exceptional academic success of the AA population (Hirschman & Wong, 1986). A high proportion of AA students successfully graduate from high school and continue to higher education, performing well and earning a high grade point average in secondary education (J. Lee & Zhou, 2015). While this would seem to support the model minority stereotype, it is an interesting phenomenon because AAs succeed academically despite many being in disadvantaged conditions. Moreover, Asian immigrant parents are less involved in the United States educational system than native white American parents because of their low English proficiency. The cultural emphasis on education, a hyper-selective immigration system that primarily accepts immigrants with high educational

attainment, and shared social capital within ethnic communities, such as information about college planning, have been used to explain this success (Zhou & Lee, 2017). Although it is well known that AAs show high achievement, examining academic achievement with other SES indicators provides a comprehensive insight into the SES of AAs.

One strength of this dissertation study is that it examines several indicators of socioeconomic – earnings, supervisory position, subjective SES, and educational attainment. Moreover, it recognizes the diversity in immigration status of AAs by analyzing the SES outcomes of both US-born and foreign-born individuals.

Segmented Assimilation and Generation

Immigrants bring norms, values, behaviors, and characteristics that differ from the host country's society. Although they bring many strengths, some of their characteristics are not conducive to a high SES in the host country, such as low language proficiency and educational credentials that are not valid in the host country. Still, according to the canonical assimilation theory, immigrants assimilate to the host society since their families may reside in the host country for many generations. The theory argues that immigrants are expected to become indistinguishable from the majority group at least after the third generation, that is, similar to middle class white Americans in the United States (Park et al., 1925). Assimilation theory was originally applied to early European immigrants in the United States who were racially similar to the majority population and shared similar phenotypes with those who settled earlier. These European immigrants assimilated after living in the United States for one or two generations, and many of them became part of the majority group. Therefore, second and third-generation European immigrants, whose parents were both born in the United States, do not typically have an immigrant identity.

Assimilation theory may not always accurately reflect the experience of later immigrants of color from Latin America and Asia whose racial backgrounds are different from the majority group in the United States. Regardless of how long these immigrants have lived in the United States and how fluently they speak English, they may not be perceived as part of the majority group because racial backgrounds continue to physically distinguish them from white Americans. Segmented assimilation theory argues that non-white immigrants have a more difficult time assimilating and may never assimilate to middle-class white American culture and that their assimilation paths will vary.

Specifically, segmented assimilation theory argues that immigrants will have different socioeconomic assimilation trajectories – some will achieve upward mobility, others will experience downward mobility, and others will maintain the SES in which they had at arrival. Depending on the environment of settlement, immigrants and immigrants' children shows different socioeconomic trajectories of assimilation and acculturation. Many AAs experience downward mobility, which usually happens among the younger second and third generations. AAs' assimilation path is not linear, nor is the goal to become a middle-class white American (Zhou, 2009; Zhou & Bankston, 1998). Thus, existing research on AAs finds greater support for the claims of segmented assimilation than canonical assimilation theory (Greenman & Xie, 2008; Zhou & Kim, 2006).

Because immigration generation backgrounds shape access to resources and socioeconomic mobility and, therefore, trajectories of assimilation, the segmented assimilation theory calls researchers to consider immigration history and generation when studying AAs' SES. The impact of immigration generation is particularly salient among AAs because many are recent immigrants to the United States.

Many first-generation AAs initially experience downward social mobility related to job quality and SES. Despite their middle-class background in their country of origin, first-generation Asian immigrants have limited job opportunities because of their low English proficiency, untransferable educational credentials, and refugee status. Many find employment with small businesses within ethnic enclaves, and some refugees receive public assistance (Zhou et al., 2008).

Research suggests that the 1.5 generation has achieved the greatest upward mobility among Asian immigrants and AAs. The 1.5 generation came to the United States as children when their parents immigrated. To the extent that there is truth to the model minority stereotype, it would be most applicable to this generation. The 1.5 generation of immigrants is a unique group whose parents chose to move to the United States. Their selection into this country increases the likelihood that they will have health and education and family advantages that lead to academic and economic success. Research shows that they perform exceptionally well in school on average, especially in mathematics and science, in part because the curriculum in their country of origin is one or two years ahead of the American curriculum in these subjects. The middle-class cultural capital parents bring from their country of origin also benefits the 1.5 generation (Zhou et al., 2008). Perceived parental sacrifices to support their education to the extent of leaving their country of origin promotes educational performances among 1.5 generation AAs (Okazaki, 2019). The upward mobility the 1.5 generation achieves is overemphasized because their parents experience downward mobility when they move to the United States leading to a faulty comparison (Zhou & Xiong, 2005).

Research based on segmented assimilation theory suggests that in subsequent generations the upward mobility that the 1.5 generation immigrants achieve does not always continue

(Waters et al., 2010). Second generation and third generation AAs born in the United States take diverse paths of socioeconomic assimilation (Alba & Nee, 1997; Portes & Zhou, 1993; Waters et al., 2010). Some are upwardly mobile like the 1.5 generation Asian immigrants and have the advantage of citizenship from being born in the United States. However, some second generation AAs are downwardly mobile and sustain their parents' SES (Jiménez et al., 2018; Okazaki, 2019; Waters et al., 2010). There might be different reasons why some second generation AA experience downward mobilities, but it is still unclear. Studies have pointed out that downward mobility is associated with racial discrimination and consequent racial disparities in job-related outcomes (Gans, 1992; C. Kim & Sakamoto, 2010). Others explain, Unlike 1.5 generation AAs, second generation AAs are more willing to take more diverse career paths outside of STEM and business occupations and take on jobs that are not as high paying in pursuing other values like work-and-life balances (Gambol, 2022). Others also explain that second generation AAs do not have same ethnic social capital that 1.5 generation AAs have access to as they are less likely to speak their ethnic language and practice cultural etiquette (Ong & Viernes, 2012).

Based on the theory and existing empirical literature, this dissertation distinguishes 1.5 and second generation and explores the socioeconomic status of each group. It hypothesizes that the socioeconomic status differences between Asian Americans and white Americans are distinct by generation group.

Social Capital

Socioeconomic Status and Social Capital

In what follows I will first provide the theoretical background for how social connections facilitate socioeconomic success, especially achievement in the labor market, and then move on

to discuss Lin's theory of inequality in social capital, which provides the conceptual framework for this study. Finally, literature on Asian Americans' social capital is reviewed.

Social capital is the sum of resources embedded in social relationships and provides access to cultural capital (i.e., particular ways of being, tastes, attitudes, etc.), which is closely related to the acquisition of economic capital in the labor market. Therefore, social capital is conducive for socioeconomic attainment (Bourdieu, 2011). Coleman (1988) theorized that social networks have characteristics that determine the quantity and quality of social capital and, like Bourdieu, argued that the larger quantity and high quality of social capital is related to higher socioeconomic outcomes. Coleman argued that densely connected networks where everyone knows each other enhance the emergence of human capital by enforcing social norms conducive to educational advancement and socioeconomic attainment.

Some scholars disagree that network closure positively contributes to individual socioeconomic outcomes. By studying job search behaviors and job outcomes, Granovetter (1973) argued that there are two types of social connections: strong and weak ties. According to his definitions, strong ties exist within close-knit members of a network who have frequent interactions while weak ties indicate more ephemeral social relations and less frequent interaction. Strong ties may suggest friends and family, while weak ties could more likely include co-workers in another office, teachers, or professors. The information coming from strong ties, however, are inevitably redundant and may therefore be less useful to supporting outcomes that benefit from novel knowledge. Weak ties have a greater likelihood of offering new information—information that can introduce a job seeker, for example, to a new and better job lead that they would not otherwise know about. As such, Granovetter argues that weak ties should more likely promote positive socioeconomic gains.

If strong ties are *bonding*, weak ties are *bridging* (McEvily & Zaheer, 1999). In his study, Granovetter found that those who obtained jobs through “weak ties” were earning more than those who found a job within densely connected social networks or those who found a job without going through social networks. The weak ties provide bridges to external social capital that may be unavailable otherwise. By studying one’s position within an organization, Burt (2000) argues that loosely connected social networks may contribute to social capital. For example, when a person has a connection to those who are not publicly well connected and who have higher positions within organizational hierarchies, the person gains positional advantage. This can lead to SES attainment, such as promotion to a higher position in the organization. By emphasizing the importance of the position within the organization and how individuals within organization are connected to each other, Burt showed that loosely connected networks might provide one with social capital if one occupies a particular position within a network.

Although scholars do not agree on how social capital is formed, it is less controversial that individuals benefit from additional connection of their own in the aggregate promote one’s socioeconomic status. It is also agreed that bridging type of social connections, i.e., weak ties, are more helpful for mobility and achievement while bonding types of social connections, i.e., strong ties are beneficial for emotional support and maintenance of well-being. Mentoring relationship is traditionally known to be a bridging type of social connections while close friendship is traditionally known as a bonding type of social connection. In the following empirical chapters, mentoring and close friendship is going to be examined, respectively.

Inequalities in social capital

Differences in social capital can reproduce inequality in SES. Some scholars (Lin, 2000; McDonald et al., 2013) have focused on the differences in access and use of social capital by

race and gender. Theories on the positive effects of social capital generally apply to majority racial and gender groups in U.S. society. Studies have reported irregular findings on the benefits of social capital for upward mobility in studies among people of color, immigrants, and women (McDonald et al., 2013). Loury (1977) was one of the first scholars who paid attention to racial stratification through the lens of social capital. He argued that while social capital can influence SES mobility through conscious and unconscious engagement in relationships with others it was important to note that if people's initial SES affects the quantity and quality of their social capital, that social capital may become one of the mechanisms of reproducing stratification. In his discussion of racial income disparity, Loury (1977) uses social capital to dispute the classical human capital explanation that racial disparities in income stem from individual differences in educational backgrounds. Social capital, Loury argued, can better explain differential access to resources related to higher educational attainment. Loury (2009) compared disparities in SES via social ties to historical racial discrimination by laws, which he named "discrimination in contract." He conceptualized discrimination in resource distribution through formal and informal social relations as "discrimination in contact." With this framing, he argued that the economic differences that emerged from discrimination in contract (i.e., laws) in the past would persist as long as discrimination in contact (i.e., social capital) continues (p.99).

Lin (2000) contributed to this literature on inequality in social capital both theoretically and empirically. He first suggested the mechanism by which different racial groups have unequal amounts of social capital. He also developed a framework to describe social capital's role in reproducing racial inequalities. I will follow his rationale to explain the relationship between race, social capital, and SES attainment.

Inequitable social networks across races can be explained by racial stratification and homophily. Racial groups occupy different positions in racial hierarchies (C. J. Kim, 1999; Massey & Denton, 1993) in the United States. For example, white people are much more likely to be in managerial and executive positions than racial minorities (Woo, 2000). This type of racial inequality is observed in many aspects of socioeconomic outcomes, including earnings, managerial roles, educational attainment, and subjective social status (Darity & Nembhard, 2000; Galster & Keeney, 1988). Homophily refers to the general tendency of individuals to interact with others with similar characteristics (McPherson, Smith-Lovin, & Cook, 2001). For example, children and adolescents at school form friendship networks that favor students of their race and gender (Shrum, Cheek Jr, & MacD, 1988). Thus, social group members tend to form networks including members from the same racial group. These two social mechanisms (i.e., social hierarchy by groups and homophiles) work together so that social networks, ties, and capital become unequal across different racial groups. A similar mechanism can apply to hierarchical social groups such as gender groups, immigration status, and socioeconomic levels.

Lin (2002) provides two frameworks that explain the relationships between race, social capital, and SES in terms of racial inequality: capital deficits and return deficits. The frameworks are described in Figure 1. Capital deficits refer to cross-group differences in the quantity of network resources assumed to be helpful in achieving a higher SES. Racial minorities may not benefit from social capital at the same level as majority group members if they do not have as much social capital (in terms of the number of ties) that may lead to higher SES. Racial minorities may experience capital deficit because racial homophily is at work and the number of available people that they connect to is limited or more active form of segregation and discrimination is in play. Furthermore, immigrants may also experience difficulties in building

social connections as they misunderstand social norms when building social relationship in the host society.

Return deficits refer to cross-group differences in the returns from social capital – that is, how useful the contacts are to them. Even if racial minorities have the same number of social connections as majority group members, the return deficit hypothesis states that they will be unable to utilize their ties as effectively as majority group members to advance their SES, such as increasing earnings and receiving a promotion. The poorer returns from social ties may be due to the differential ability to mobilize existing social resources, an unwillingness of their social network to help, or a differential impact of mobilized social resource on socioeconomic advantage (Lin, 2000). For example, AAs may not feel comfortable activating social capital to advance their SES. In one study, an AA college student reported that she thought it was unfair for her to advance her job search by using social contacts because other job applicants may not have such contacts (H. Lee & Chin, 2015). On the other hand, racial minorities with high statuses may not feel confident referring others of their racial/ethnicity group—especially if they do not trust that a member of that group will perform well—because they may be worried about their reputation (Smith, 2005).

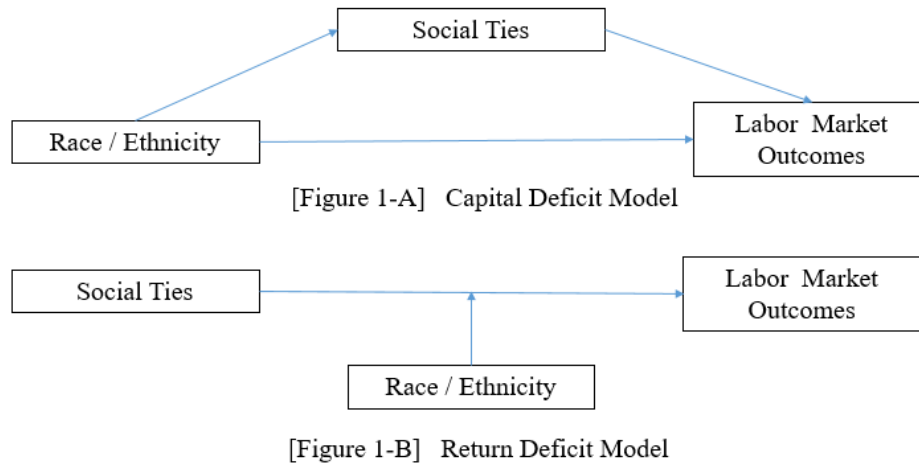


Figure 1-1 Conceptual frameworks of inequality in social capital (Lin, 2000)

Social Capital of Asian Americans in Explaining Socioeconomic Achievement

Research on AA social capital has focused on first generation AAs, with much less focus on how 1.5 and second generation AA develop social capital to promote their SES. In the research on first-generation AA social capital, studies suggest that social capital plays a significant role in their socioeconomic adaptation, acculturation, and enculturation. Their social capital within ethnic communities was beneficial to operating small businesses and helped facilitate a rise in SES (Bates, 1997; Light, Kwuon, & Zhong, 1990; J. M. Sanders & Nee, 1996). Immigrants with limited linguistic and cultural competence in the United States also looked for their jobs using their ethnic social ties, and thus ethnic enclaves gave them a better chance to get a job than in the mainstream economy (J. Sanders, Nee, & Sernau, 2002). First-generation Asian immigrants’ ethnic social capital has been critical to acculturation into American culture and socioeconomic mobility.

The limited research on 1.5 and second generation AA social capital (i.e., the children of the first generation of immigrants) suggests that social capital within ethnic enclaves promotes the educational attainment of 1.5 and second generation AAs (Lee & Zhou, 2014; Pong, Hao, & Gardner, 2005; Zhou & Bankston III, 1994). Hyper-selectivity theory argues that the US

immigration system - which provides access to a select group of Asian immigrants -- collectively created and endorsed a particular Asian American social norm that is different from both Asian norms and mainstream American norms. The norms value the importance of education and particular career paths. Hyper-selectivity theory argues that social norms serve as important social capital for 1.5 and second generation Asian Americans by advancing their educational achievement and by leading them to specific career paths that is lucrative and have lower level of risks. This argument leads to the hypothesis that more homogeneous social connection would lead to higher educational attainment among Asian Americans. Although hyper-selectivity theory does not pay particular attention to job-related outcomes, it could be extended to explain exceptional performance of Asian Americans in the labor market.

This dissertation advances knowledge on the relation between Asian Americans, social capital, and SES by focusing on the 1.5 and second generations. Thus far, academic success and successful career among immigrants' children is often attributed to first generation immigrants' social capital with limited attention to how their own social capital might have contributed to their outcomes. Therefore, the social capital of 1.5 generation and second generation AAs, and its impact on SES, has been relatively under-studied and would benefit from further investigation. In this dissertation, we begin to fill this gap by studying mentoring relationships and close friendships, two forms of social capital that may be related to the SES outcomes of 1.5 and second generation AA immigrants. The literature related to mentoring relationships and friendships is included in the chapters in which they are examined.

CHAPTER 2: RESEARCH METHODS

Research methods that apply to all three empirical chapters are included in this chapter. Research methods that are specific to a certain empirical chapter are included in that chapter.

Data

This dissertation uses the National Longitudinal Study of Adolescence to Adult Health (Add Health). Add Health has followed a nationally representative sample for five waves that was originally collected in 1994-95 academic years. Among five waves, Wave 1, Wave 3, and Wave 4 are used in this dissertation. The participants were in seventh through twelfth grades when the first wave of survey was conducted. Wave 3 was collected in 2001-2002 and participants were 18-26 years old. Wave 4 data was collected in 2008 and participants were aged 25-32 and were in their early adulthood.

A total of 132 secondary schools were selected as primary sampling unit based on region, urbanity, school type, and racial composition. In the first wave, a total of 90,118 students were surveyed at school, and 6,312 Asian or Pacific Islander were sampled. A subsample of 20,745 adolescents participated in an in-home survey and of those 1,584 were of Asian heritage. School administrators also participated in wave 1 ($N = 144$) and wave 2 ($N = 128$). Only the in-home survey participants were followed in subsequent waves. The retention rate is 77.4% at third wave ($N=15,197$) and 80.3% at fourth wave ($N=15,701$) (Harris, 2013).

I restricted the sample to those whose race and immigration generation is documented. In the case of race, I included only those individuals who reported a single race or, in case of reporting more than one race, those who identified as white or Asian when they asked to choose one category that best describes their racial background. In the case of immigration status, I only

included participants who specified whether they and their parents are US citizens. In wave 4, the total 8,498 white Americans and 858 individuals with Asian heritage was included.

By employing Add Health data, this study expands the scope of previous studies (C. Kim & Sakamoto, 2010) by including both college educated and higher individuals and those who do not have a college education. However, this study narrows its scope to those with at least secondary education in the United States because sampling unit of Add Health is secondary schools and the first wave sample is followed without additionally sampling outside of the original sample. Therefore, this study does not attempt to make inference regarding the Asian Americans who did not have any education in the United States (first generation) and who only had postsecondary education in the United States (1.25 generation) which are considered in the previous empirical studies. Also, the range of age distribution is also narrowed to between 25-32 which is early in their adulthood.

Measurements

Outcome Variables

Unless specified otherwise, all socioeconomic outcome variables are measured at wave 4.

Earnings and supervisory position are used to measure prominent objective socioeconomic status at young adulthood. Among Asian Americans, earnings and supervisory positions show opposite tendencies. While Asian Americans shows higher earnings compared to white Americans, they are less represented in supervisory positions. By including both job-related objective indicators of SES, this study investigates the SES of Asian Americans more comprehensively. In addition to objective indicators of SES, this study takes even more comprehensive approach by adding subjective SES and educational attainment.

Earnings. Annual earnings are measured in dollar units and is log-transformed because earnings distributions are positively skewed to a high degree. Those who reported earnings more than 500,000 dollars and less than 1,000 dollars a year were removed from the sample.

Supervisory position. Participants were asked about their supervisory responsibilities and duties of their current or most recent primary job. Answers were in three ordinal categories (0: I do not supervise anyone, 1: I supervise other employees, and 2: I supervise other employees, some of whom supervise others).

Subjective socioeconomic status. This study used the MacArthur Scale of Subjective Social Status to measure the subjective socioeconomic status (Adler et al., 2000). Participants were shown a picture with a ladder and told that each rung represented a hierarchical social position based on wealth and education. Then they were asked where they think they stand on the ladder at the time of doing the survey. This what they were given as a prompt:

Think of this ladder as representing where people stand in the United States. At the top of the ladder (step 10) are the people who have the most money and education, and the most respected jobs. At the bottom of the ladder (step 1) are the people who have the least money and education, and the least respected jobs or no job. Where would you place yourself on this ladder? Pick the number for the step that shows where you think you stand at this time in your life, relative to other people in the United States.

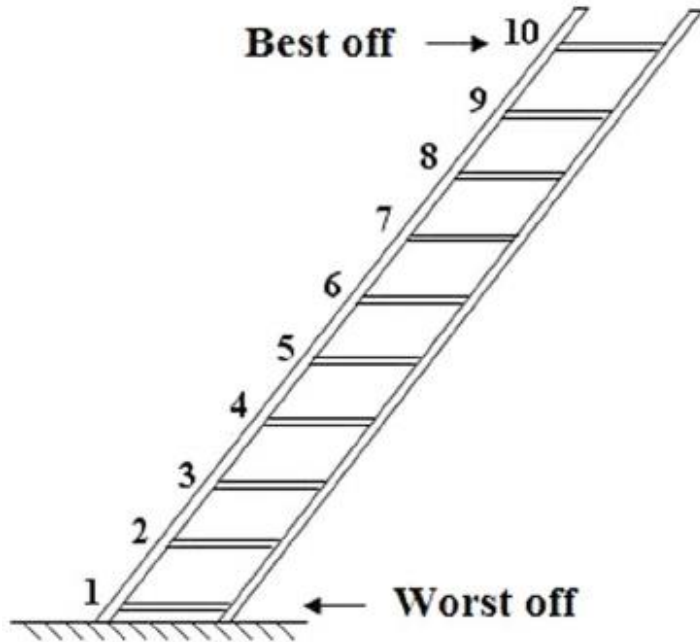


Figure 2-1 A part of question measuring subjective socioeconomic status

Educational attainment. The years of education were recorded by using two variables measured at wave 3 and wave 4. The report at wave 3 was asked in a year unit (continuous) and the report at wave 4 was asked in a categorical form with 13 categories (e.g., 8th grade or less, completed college, some post baccalaureate professional education). If there was no difference between the reports at wave 3 and wave 4, what was reported at wave 3 was used. When participants reported additional education between wave 3 and wave 4, what was reported in wave 4 was used. In converting the categorical form to a continuous form, the usual years of education required to complete the degree was calculated (with a maximum of 21 years). For example, completed a college degree is converted to 16 years of education and completed a doctoral degree is converted to 21 years.

Independent Variables

Race and immigration history group. The main independent variable in this dissertation study is race and immigration history. The reference group is third generation and plus non-Hispanic white Americans who were born in the United States and whose parents were born in the United States. Those with Hispanic heritage are not included as white Americans. Asian Americans are grouped in three categories: 1.5 generation, second generation, and third and plus generation. Asian Americans whose parents were both born in the United States are considered third generation Asian Americans. Second generation Asian Americans are those who were born in the United States and either of their parents were born outside of the United States. In this study, those who were born outside of the United States are considered 1.5 generation Asian Americans.

Other independent variables. Two forms of social capital are studied in this dissertation: mentoring relationships and friendship networks. The specific measures are described in the corresponding chapters.

Control Variables

To examine the net effect of being Asian American on socioeconomic status, other important factors that contribute have to be controlled for in the analytic models (C. Kim & Sakamoto, 2010). Important factors that contribute to young adults' socioeconomic status are individual demographic information, educational background, childhood environmental resources, current family structure, and current job characteristics.

Demographic information relevant to success in the labor market includes age, criminal records, religion, and gender. Age and religion are traditional factors closely related to socioeconomic outcomes in American society (Iannaccone, 1998). It is likely that one's earnings

and supervisory position rise as one gets older until one retires. Compared to those without any religion, Catholic individuals are known to earn more. It is believed that criminal records is also important factors that decides socioeconomic status because it prohibits one from having access to numerous resources including votes and job opportunities (Alexander, 2011; Pager, 2003). Age at wave 4, at which most outcome variables were also measured, was used. Age square was also used for models with earnings. Criminal record is recorded by the self-report of having ever been convicted of any crime. Religion is categorized as: None, Protestant, Catholic, and other religions.

Educational backgrounds contribute greatly to the SES of young adults. Among many resources, the educational backgrounds of parents are closely related to their children's socioeconomic status—both directly and through human capital development (Black et al., 2005; Lareau, 2011), which is also a critical determinant of job outcomes and SSS (Willis, 1986). Educational background and GPA are also very important. To measure parental resources, the highest educational level of each respondent's parents was included. The variable ranges from 1 to 3 (high school degree or lower, some college, and college degree and higher). For the cases with missing data, I set the parent's education variable to the median value (2) and indicator for missing value is also created (McDonald et al., 2007a). Whether respondents are living with two biological parents is asked and included in the model with years of education as an outcome. Whether their parents ever met their best friend's parent is asked in a binary variable. Satisfaction in relationship with father is measured in 5-Likert point scale. GPA* measured at wave 1 is calculated by averaging the four major subjects in secondary education which is English, math, social studies, and science. Educational attainment of individual is measured same ways as it was measured when used as an outcome variable.

Other than parental resources, school and neighborhood environment is critical to building socioeconomic status for both white Americans and Asian Americans. School type measures whether respondents went to a public or private school. School urbanity asks whether school is in an urban area (1) or a suburban and rural area (0). School region has four categories: West (1), Midwest (2), South (3), and Northeast (4). County level median household income was used to measure the socioeconomic characteristics of neighborhoods.

Current family structure and job characteristics are closely related to SES. Whether one is married and has children of certain age shapes how one engages in the labor market. Often marriage and having a child is positively related to higher outcomes in job outcomes among men and negatively among women. Family characteristics at wave 4 is measured to account for the current structure of family is related to the job-related outcomes. Marital status is measured in a categorical variable. Categories are single (0), married (1), and cohabitating (2). Whether the worker has a child under six is measured in a binary variable.

The characteristics of one's current job is closely related to job outcomes and SSS, especially among Asian Americans. Many studies have explained that Asian Americans income levels come from a concentration in highly profitable industries, such as technology and business. To compare each generation of Asian Americans to white Americans, it is important to control for the different industries in which participants work. Further, current region of residency is very important in predicting earnings because many employers pay compensation based on the expected living cost of the cities their organizations. It is particularly important in studying Asian Americans because many of them live in areas with high living cost, as is the case in cities along the West Coast. If one works for the job more than 40 hours a week, it is recorded that the persons' job is full time job. Field of occupation is measured to control the

pattern of 1.5 generation and second generation Asian Americans' participation in the labor market. All other occupation is reference group (0) and STEM occupation (1) and business-related occupation (2) is created as dummy variables. In the reference group service, retail, transportation, agriculture, manufacturing, construction, etc. are included. The region of the labor market that workers are participating is coded into four different categories: Northeast, Midwest, South, and West.

By considering these important already studied determinants of socioeconomic status in the statistical model, this study examines net effect of being Asian American on the job-related outcomes, SSS, and educational attainment.

Analysis Plans

Different analyses methods were used depending on the research questions in three empirical chapters. In the first empirical chapter, ordinary least squares and ordered logistic regression models are used. In the second empirical chapter, logistic regression models and inverse probability treatment weighting (IPTW) regression was used using propensity score methods. In the last empirical chapter, structural equation path modeling and regression models were used. When examining the group differences, multi-group analyses were used. Each of these analytic approaches are described in the respective chapter.

In all analytic models, men and women were analyzed separately. It is well known that women experience disadvantages in the labor market in terms of earnings and being promoted to supervisory positions, and the factors related to the advancement for men and women workers are different have different impact on SES (Altonji & Blank, 1999). The disparities that Asian American men and women face are also known to be different (C. Kim & Sakamoto, 2010; C.

Kim & Zhao, 2014). Thus, having separate models for men and women when examining labor-market related outcomes is strongly encouraged.

CHAPTER 3: RACIAL DISPARITIES IN SOCIOECONOMIC STATUS BETWEEN ASIAN AMERICANS AND WHITE AMERICANS

Introduction

Model minority stereotypes and canonical assimilation theory tend to divert scholars' and practitioners attention from the study of Asian immigrants and Asian American socioeconomic status. According to model minority stereotypes, all Asian Americans are seen as faring well academically and economically and thus outside the need for interventions related to socioeconomic conditions. Canonical assimilation theory, in turn, claims that even if some recent Asian immigrants and Asian Americans do struggle with economic deprivation and insecurity, those problems will resolve themselves over the long run. Thus, given these dominant perspectives, Asian American socioeconomic status is often neglected in research, policy, and practice, including social work practice.

Asian Americans are regarded as the problem-free “model minority,” a population defined by their academic and economic achievement (Hirschman & Wong, 1986; J. Lee & Zhou, 2017). Such stereotypes are supported in research that examines the broad category of Asian Americans using simple descriptive statistics without taking into account group heterogeneity. For example, statistics from the Bureau of Labor Statistics (2019) shows that weekly median earnings of Asian Americans in 2008 through 2018 are higher than those of any other racial group, including white Americans. The Asian American median weekly income among full-time employees in 2018 was \$1,140 (\$965 for white Americans, \$727 for African Americans, and \$710 for Latinx Americans). The unemployment rate is also the lowest for Asian Americans at 3.6% (4.3% for white Americans, 8.4% for African Americans, and 5.8% for Latinx Americans) (Bureau of Labor Statistics, 2017). Lastly, Asian Americans account for 5.9%

of all management occupations in the United States. Considering that Asian Americans currently make up 5.6% of the U.S. population and 6.3% of the total employed, Asian Americans can be viewed as well-represented in management occupations compared to other racial minority groups. For example, African Americans account for only 7.6% of management positions while 12.3% of employees are African Americans, and Latinx Americans account for 10.3% of management positions while they 17.3% of laborers are Latinx. white Americans are over-represented in manager position, 83.9%, compared to their percentage of the labor market (78%).

Thus, the simple descriptive statistics point to the view that Asian Americans are advantaged in income, employment, and management positions. This led to the all-too common misunderstanding about the condition of Asian Americans: that they do not face racial discrimination in the labor market and that their Asian American group membership gives them an advantage over other groups (Nee & Holbrow, 2013). Studies that move beyond simple descriptive emphasize that the Asian American community is highly diverse and heterogeneous in terms of socioeconomic status and, in fact, is marginalized in many ways. Some scholars have exposed the structural and racial inequality that confront Asian Americans and Asian immigrants, showing that like other racial minorities, these inequalities are sometimes ignored or mistaken for individual or cultural faults (Bonilla-Silva, 2004; Slaughter-Defoe, Nakagawa, Takanishi, & Johnson, 1990).

Assimilation theory implies that the current challenges that immigrant communities experience are the natural result of not being fully assimilated to American society and the mainstream economy. According to assimilation theory, the socioeconomic gap that Asian Americans experience, if any, will disappear as their children are integrated into mainstream American society through their fluent English and with American educational credentials.

However, empirical accounts of segmented assimilation theories have shown that immigrant children of racial minorities do not always assimilate to the white, middle-class American culture and sometimes experience downward mobilities compared to their immigrant parents (Portes & Zhou, 1993). This mistaken portrayal of Asian American assimilation is partly to blame for a neglect of Asian Americans in social work research and a lack of targeted interventions despite the many complex problems facing this population.

This chapter builds upon previous studies that compare the earnings of Asian Americans and white Americans. Expanding on past research, this study examines multiple socioeconomic status indicators, including being in a supervisory position, subjective social status (SSS), and educational attainment as well as earnings. Further, it includes a sample of young adults, both men and women, with diverse educational backgrounds and multiple generational statuses and it takes into account a range of covariates, so as not to draw conclusions based on simple descriptive comparisons across the different populations.

Socioeconomic Outcomes and Asian Americans

As noted in the literature review, four important socioeconomic status indicators are used in this chapter and throughout this dissertation study: earnings, supervisory position, subjective social status, and educational attainment. The literature regarding these four socioeconomic status indicators is discussed in the prior review chapter.

Current Study

This study hypothesizes that Asian Americans show higher socioeconomic status than white Americans prior to controlling for covariates; however, these differences are predicted to diminish or reverse when important covariates such as education, past labor market experience, and family structure are considered. On the other hand, this study hypothesizes based on other

empirical work that the differences in educational attainment between Asian and White Americans will not disappear even after other covariates are considered in the model. Based on existing theory, it is hypothesized that 1.5 generation AA men have made parity in earnings and SSS with white Americans but show lower supervisory positions, and second generation Asian American men and all generation women has lower outcomes in comparison to white Americans.

Methods

Information regarding data, sample, and measurement is described in Chapter 2 (Methods).

Analysis Plan

Ordinary least squares (OLS) regression is used for continuous outcomes, i.e., earnings, SSS, and year-of-education. Though SSS is an ordinal variable, the OLS regression model fits the data better than ordered logistic regression because it has more than 5 categories and the distribution is normal. Because it follows normal distributions, using OLS does not violate the important assumptions of OLS regression. In addition, the results from an ordered logistic regression proved to be no different from the reported OLS regression result (result not shown). For the models with supervisory position as an outcome variable, ordered logistic regression is presented.

For labor market-related outcomes, five models are specified. The basic model (Model 1) only includes the independent variable of interest (race and immigration group), age, and age squared. In Model 2 – 5, additional blocks of control variables are added to the previous model. The added blocks are demographic information, Childhood resources, educational background, current family characteristics, and characteristics of the current labor market.

To estimate the year of education, three models are specified. The basic model includes the race-generation groups and demographics of respondents. The second model includes Parental resources and the third model additionally include GPA in high school

Results

Result I: Descriptive Statistics

Descriptively, all three immigration history groups of Asian Americans, i.e. 1.5, second, and third generation Asian Americans show significantly higher level of earnings, SSS, and educational attainment in comparison to white Americans of respective gender (Table 3.1). However, Asian Americans are not more likely to be in higher supervisory position than white Americans except for third generation Asian American men and 1.5 generation Asian American women. When in young adulthood, white American men reported earnings of \$45,604, 1.5 generation Asian Americans reported \$57,477, second-generation Asian Americans reported \$46,860 and third generation Asian Americans reported 46,573 on average. The 1.5 generation Asian American men and third generation Asian American men earned more than their white American counterparts. The difference between white American men and 2nd generation Asian American men is not statistically significant. All three generations of Asian American women earn more than white American women. White American women reported \$31,730 of earnings, 1.5 generation Asian American women \$52,875, second generation AA women \$41,593 and third generation AA women \$37,218.

Table 3.1. Descriptive differences in outcomes by race and immigration group and gender

	white American	1.5 Generation AA	Second Generation AA	Third Generation AA	ALL
Men (n=4,377)					
Earnings	45,604 (53,260)	57,477*** (48,002)	46,860 (30,488)	46,573* (27,361)	46,144 (52,011)
Supervisory Position (%)					
0	55.43	59.64	55.93	47.67	55.46
1	31.49	30.72	28.25	29.07	31.29
2	13.08	9.64	15.82	23.26	13.26
				*	
Subjective Social Status	5.10 (1.74)	5.51** (1.56)	5.47** (1.73)	5.12 (1.62)	5.14 (1.73)
Years of Education	13.77 (2.20)	14.81*** (2.09)	14.99*** (2.28)	14.25*** (2.28)	13.87 (2.23)
Women (n=4,753)					
Earnings	31,730 (33,663)	52,875*** (80,852)	41,593** (28085)	37,218* (27,888)	32,972 (36,739)
Supervisory Position (%)					
0	67.63	58.51	68.53	65.48	67.27
1	24.51	28.19	25.17	25.00	24.68
2	7.85	13.30	6.29	9.52	8.05
		**			
Subjective Social Status	5.02 (1.70)	5.58*** (1.62)	5.81*** (1.65)	5.18 (1.77)	5.06 (1.70)
Years of Education	14.23 (2.30)	14.92** (2.15)	15.34*** (2.41)	14.22 (2.36)	14.29 (2.31)
*** p<0.001, ** p<0.01, * p<0.05, + p<0.1 5					

The different likelihood of being in a higher supervisory position is tested using Chi-square test. The 1.5 generation AA men and second generation AA men are equally likely to be in supervisory position and third generation AA men are more likely to be in higher supervisory position ($\chi^2 = 7.63$, $p < .05$) compared to white Americans. The 1.5 generation AA women are more likely to be in higher supervisory position than their white counterparts but second and third generation AA women are equally distributed within three hierarchical positions.

In SSS, all Asian American gender and immigration history group except for third generation AA men and women reported significantly higher SSS than white Americans. White American men reported that they are located at about 5.10 among 1 through 10 rungs with the standard deviation of 0.71. The 1.5 generation, 2nd generation and 3rd generation Asian American men reported 5.51 (1.56), 5.47 (1.73) rungs, and 5.12 (1.62), respectively. Both 1.5 generation Asian American men ($t=3.04$, $p < .01$) and the 2nd generation Asian American men ($t=2.75$, $p < .05$) reported higher SSS than white Americans. The difference between white American and 3rd generation AA is not significant. Among females, white Americans reported 5.02 on average with the standard deviation of 1.70. Asian Americans reported 5.58, 5.81, and 5.18 in average social status with the standard deviation of 1.62, 1.65, and 1.77, respectively by immigration generation.

All Asian American groups except for third generation Asian American women spend longer years in the educational system than white Americans by about a year. White American men were in educational institutions for 13.77 years on average with the standard deviation of 2.20. The 1.5 generation Asian Americans were educated for 14.81 years (2.09), the second-generation Asian Americans for 14.99 years (2.28), and the third-generation Asian Americans 14.25 years (2.28) on average. White American women spent 14.23 years on average in the educational system with the standard deviation of 2.30. Asian American women spent 14.92 years, 15.34 years, and 14.22 years in the educational system by generation and the standard deviation is 2.15, 2.41, and 2.36 respectively.

Appendix Tables show sample characteristics of men and women respectively by race and immigration generation group. All control variables are presented as characteristics of the sample.

Result II: Association between being Asian American and Socioeconomic Status

Table 3.2 and Table 3.3 presents associations between each socioeconomic status and race and immigration history groups in the final models which consider all control variables among both men and women. 1.5 generation Asian Americans have similar earnings as white Americans, they are similarly likely to be in a supervisory position and perceive their social status to be at a similar level. Their educational attainment is higher than white American men. Second generation Asian American men earn less, and their SSS is lower than white American men, although they are no more likely to be in a higher supervisory position.

Table 3.2 Final models examining relationship between socioeconomic status and race and immigration group among men

b(se)	Earnings	Supervisory position	SSS	Educational attainment
Independent variable (Ref: white American)				
1.5 generation AA	0.11 (0.07)	-0.22 (0.18)	-0.19 (0.14)	0.34* (0.15)
Second generation AA	-0.16* (0.07)	0.05 (0.17)	-0.28* (0.13)	0.32* (0.15)
Demographic information				
Age at wave 4	0.43* (0.21)	0.04* (0.02)	0.01 (0.01)	0.06*** (0.02)
Age squared	-0.01+ (0.00)			
Religion (Ref: no religion)				
Protestant	0.05 (0.04)	0.11 (0.09)	0.06 (0.07)	0.16* (0.08)
Catholic	0.12** (0.04)	0.08 (0.09)	0.22** (0.07)	0.12 (0.08)
Other	0.02 (0.04)	-0.08 (0.10)	0.02 (0.07)	-0.12 (0.08)
Missing	-0.15** (0.06)	-0.14 (0.15)	-0.28* (0.11)	0.03 (0.13)
Criminal Record	-0.07** (0.02)	0.03 (0.05)	-0.10* (0.04)	-0.42*** (0.05)

Table 3.2, Continued.

Childhood resources

Parental education (ref: High school graduation or lower)

Some college	0.07+	-0.02	0.05	0.42***
	(0.03)	(0.08)	(0.07)	(0.07)
College graduate	0.04	-0.02	0.10	1.33***
	(0.04)	(0.09)	(0.07)	(0.08)
Parental education missing indicator	0.05	-0.08	0.10	0.24*
	(0.05)	(0.11)	(0.09)	(0.10)
Living in low income neighborhood	-0.45***	-0.73*	-0.54*	-3.30***
	(0.13)	(0.32)	(0.25)	(0.26)
Growing up in metropolitan area	0.01	0.06	-0.04	-0.33***
	(0.04)	(0.09)	(0.07)	(0.08)
Missing for metropolitan area	-0.06	0.18+	-0.04	-0.52***
	(0.04)	(0.10)	(0.08)	(0.09)

Educational background

Years of education	0.04***	-0.03	0.25***	
	(0.01)	(0.02)	(0.01)	
GPA in secondary school	0.07***	0.08	0.15***	1.14***
	(0.02)	(0.05)	(0.04)	(0.04)

Household Characteristics

Marital status				
Married	0.29***	0.16*	0.23***	0.04
	(0.03)	(0.07)	(0.06)	(0.06)
Cohabiting	0.11**	0.15+	0.05	-0.10
	(0.04)	(0.09)	(0.07)	(0.08)

Within Labor Market Characteristics

Region of participating labor market (ref: Northeast)

Midwest	-0.14**	-0.09	-0.11	
	(0.04)	(0.11)	(0.08)	
South	-0.10*	-0.07	0.02	
	(0.04)	(0.11)	(0.08)	
West	-0.07	-0.12	0.07	
	(0.05)	(0.11)	(0.09)	
Full-time Job	0.54***	0.66***	0.35***	
	(0.04)	(0.10)	(0.07)	
Business occupation	0.31***	0.96***	0.44***	
	(0.04)	(0.10)	(0.09)	
STEM occupation	0.16***	-0.24*	0.23**	
	(0.04)	(0.10)	(0.08)	
Observations	3,815	4,014	4,006	4,099
R-squared	0.19		0.20	0.38

1.5 generation Asian American women earn more than white American women and are likely to be in a higher supervisory position than white American women at a marginal level. Their subjective social and educational attainment is not significantly different from those of white American women. Second generation Asian American women's earnings and their likelihood of being in a supervisory position is not significantly different from those of white American women. Second generation Asian American women's SSS and educational attainment is higher than those of white American women.

Table 3.3 Final models examining relationship between socioeconomic status and race and immigration group among women

b(se)	Earnings	Supervisory position	SSS	Educational attainment
Independent variable (Ref: white American)				
1.5 generation AA	0.23** (0.08)	0.32+ (0.17)	0.12 (0.12)	0.04 (0.14)
Second generation AA	-0.00 (0.09)	-0.31 (0.20)	0.27* (0.14)	0.41* (0.16)
Demographic information				
Age at wave 4	0.32 (0.26)	0.04* (0.02)	0.02 (0.01)	0.10*** (0.02)
Age squared	-0.00 (0.00)			
Religion (Ref: no religion)				
Protestant	-0.02 (0.04)	-0.00 (0.10)	0.04 (0.07)	0.08 (0.08)
Catholic	0.06 (0.05)	0.03 (0.10)	0.12 (0.07)	0.10 (0.09)
Other	-0.09+ (0.05)	0.07 (0.10)	0.03 (0.07)	-0.11 (0.08)
Missing	-0.12+ (0.07)	-0.07 (0.15)	0.01 (0.10)	-0.33** (0.13)
Criminal Record	-0.13** (0.05)	-0.13 (0.11)	-0.14+ (0.07)	-0.34*** (0.09)
Childhood resources				
Parental education (ref: High school graduation or lower)				
Some college	0.08* (0.04)	0.04 (0.09)	0.06 (0.06)	0.47*** (0.07)
College graduate	0.05 (0.04)	0.06 (0.09)	0.23*** (0.06)	1.56*** (0.07)

Table 3.3, Continued.

Parental education missing indicator	0.01 (0.05)	-0.07 (0.11)	0.14+ (0.08)	0.08 (0.09)
Living in low income neighborhood	-0.82*** (0.15)	-0.64+ (0.33)	-1.20*** (0.23)	-3.01*** (0.26)
Growing up in metropolitan area	0.03 (0.04)	-0.13 (0.09)	-0.14* (0.06)	-0.15* (0.08)
Missing for metropolitan area	0.01 (0.05)	-0.06 (0.10)	-0.15* (0.07)	-0.31*** (0.09)
Educational background				
Years of education	0.09*** (0.01)	-0.02 (0.02)	0.23*** (0.01)	
GPA in secondary school	0.12*** (0.02)	0.17*** (0.05)	0.17*** (0.03)	1.29*** (0.04)
Household Characteristics				
Marital status				
Married	0.01 (0.03)	0.06 (0.07)	0.45*** (0.05)	0.07 (0.06)
Cohabiting	0.12** (0.04)	0.06 (0.10)	0.11+ (0.07)	-0.11 (0.08)
Within Labor Market Characteristics				
Region of participating labor market (ref: Northeast)				
Midwest	-0.11* (0.05)	0.05 (0.11)	-0.14* (0.07)	
South	-0.07 (0.05)	-0.09 (0.11)	-0.08 (0.08)	
West	-0.06 (0.05)	0.05 (0.11)	-0.02 (0.08)	
Full-time Job	0.51*** (0.03)	0.55*** (0.07)	0.22*** (0.05)	
Business occupation	0.25*** (0.05)	0.50*** (0.10)	0.26*** (0.07)	
STEM occupation	0.35*** (0.04)	0.25** (0.09)	0.40*** (0.07)	
Observations	3,796	4,416	4,407	4,499
R-squared	0.24		0.24	0.38

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Result III: Changes in Coefficient of Association Between being Asian American and Socioeconomic Status

Associations between socioeconomic status and race and immigration group change as additional blocks of covariates are entered in the model. Tables 3.4. – 3.10. show the changes by each socioeconomic outcome. The results are presented separately by gender.

Earnings. (Table 3.4 and 3.5) Among 1.5 generation male Asian American men, the earning is significantly higher when only demographic information was included. The level of significance drops as childhood resources and educational backgrounds are included. When current household characteristics are included, the coefficient become marginally significant again, but significance disappears after characteristics of the participating labor market is included meaning that 1.5 generation Asian American men earn equally with white American men.

Among second generation Asian American men, the difference is not significant when only demographic information is added but the negative association become stronger as more covariates are included. The significant negative association disappears when household characteristics are included in the model. In the final model that additionally control currently participating

Among 1.5 generation Asian American women, the earnings remain consistently significantly higher regardless of additional blocks of covariates. The coefficient drops the most when educational background is added (Model 3) but it remained relatively consistent when other covariates were added.

Among second generation Asian American women, the differences are only significant when only demographic information is controlled. When the other covariates are continuously added, the significances of coefficients drop and become null in the model 4 and final model.

Table 3.4. Association between earnings and race and immigration group among men

Model	1	2	3	4	5
	b (se)	b (se)	b (se)	b (se)	b (se)
Independent variable (Ref: white American)					
1.5 generation AA	0.20** (0.07)	0.13+ (0.07)	0.08 (0.07)	0.13+ (0.07)	0.11 (0.07)
Second generation AA	-0.06 (0.07)	-0.12+ (0.07)	-0.18* (0.07)	-0.11 (0.07)	-0.16* (0.07)
Demographic information					
Age at wave 4	0.68** (0.23)	0.56* (0.23)	0.47* (0.23)	0.45* (0.22)	0.43* (0.21)
Age squared	-0.01** (0.00)	-0.01* (0.00)	-0.01+ (0.00)	-0.01+ (0.00)	-0.01+ (0.00)
Religion (Ref: no religion)					
Protestant	0.12*** (0.04)	0.14*** (0.04)	0.12** (0.04)	0.07+ (0.04)	0.05 (0.04)
Catholic	0.20*** (0.04)	0.19*** (0.04)	0.18*** (0.04)	0.15*** (0.04)	0.12** (0.04)
Other	0.04 (0.04)	0.04 (0.04)	0.06 (0.04)	0.02 (0.04)	0.02 (0.04)
Missing	-0.24*** (0.06)	-0.25*** (0.06)	-0.22*** (0.06)	-0.20** (0.06)	-0.15** (0.06)
Criminal Record	-0.17*** (0.02)	-0.15*** (0.02)	-0.11*** (0.02)	-0.09*** (0.02)	-0.07** (0.02)
Childhood resources					
Parental education (ref: High school graduation or lower)					
Some college		0.08* (0.04)	0.04 (0.04)	0.05 (0.04)	0.07+ (0.03)
College graduate		0.17*** (0.04)	0.04 (0.04)	0.04 (0.04)	0.04 (0.04)
Parental education missing indicator		0.09+ (0.05)	0.05 (0.05)	0.05 (0.05)	0.05 (0.05)
Living in low income neighborhood		-0.68*** (0.13)	-0.49*** (0.13)	-0.56*** (0.13)	-0.45*** (0.13)
Growing up in metropolitan area		-0.04 (0.04)	0.01 (0.04)	-0.01 (0.04)	0.01 (0.04)

Table 3.4, Continued.

Missing for metropolitan area		-0.16*** (0.04)	-0.09+ (0.04)	-0.08+ (0.04)	-0.06 (0.04)
Educational backgrounds					
Years of education			0.06*** (0.01)	0.06*** (0.01)	0.04*** (0.01)
GPA in secondary school			0.08*** (0.02)	0.08*** (0.02)	0.07*** (0.02)
Household Characteristics					
Marital status					
Married				0.34*** (0.03)	0.29*** (0.03)
Cohabiting				0.14*** (0.04)	0.11** (0.04)
Within Labor Market Characteristics					
Region of participating labor market (ref: Northeast)					
Midwest					-0.14** (0.04)
South					-0.10* (0.04)
West					-0.07 (0.05)
Fulltime Job					0.54*** (0.04)
Business occupation					0.31*** (0.04)
STEM occupation					0.16*** (0.04)
Observations	4,133	4,098	3,976	3,885	3,815
R-squared	0.04	0.06	0.09	0.13	0.19

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 3.5. Association between earnings and race and immigration group among women

Model	1	2	3	4	5
Variables	b (se)	b (se)	b (se)	b (se)	b (se)
Independent variable (Ref: white American)					
1.5 generation AA	0.35*** (0.08)	0.32*** (0.08)	0.25** (0.08)	0.26** (0.08)	0.23** (0.08)
Second generation AA	0.21* (0.09)	0.12 (0.09)	0.01 (0.09)	0.00 (0.09)	-0.00 (0.09)
Demographic information					
Age at wave 4	0.38 (0.28)	0.32 (0.28)	0.25 (0.27)	0.28 (0.28)	0.32 (0.26)
Age squared	-0.01 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Religion (Ref: no religion)					
Protestant	-0.04 (0.05)	-0.00 (0.05)	-0.04 (0.04)	-0.01 (0.04)	-0.02 (0.04)
Catholic	0.14** (0.05)	0.10* (0.05)	0.10* (0.05)	0.11* (0.05)	0.06 (0.05)
Other	-0.14** (0.05)	-0.12* (0.05)	-0.11* (0.05)	-0.09+ (0.05)	-0.09+ (0.05)
Missing	-0.28*** (0.07)	-0.25*** (0.07)	-0.17* (0.07)	-0.13+ (0.07)	-0.12+ (0.07)
Criminal Record	-0.26*** (0.05)	-0.24*** (0.05)	-0.15** (0.05)	-0.17** (0.05)	-0.13** (0.05)
Childhood resources					
Parental education (ref: High school graduation or lower)					
Some college		0.19*** (0.04)	0.08+ (0.04)	0.08* (0.04)	0.08* (0.04)
College graduate		0.32*** (0.04)	0.03 (0.04)	0.05 (0.04)	0.05 (0.04)
Parental education missing indicator		0.01 (0.05)	0.02 (0.05)	0.03 (0.05)	0.01 (0.05)
Living in low income neighborhood		-1.15*** (0.15)	-0.80*** (0.15)	-0.82*** (0.15)	-0.82*** (0.15)
Growing up in metropolitan area		0.00 (0.04)	0.03 (0.04)	0.04 (0.04)	0.03 (0.04)
Missing for metropolitan area		-0.10* (0.05)	-0.02 (0.05)	-0.00 (0.05)	0.01 (0.05)
Educational backgrounds					
Years of education			0.12*** (0.01)	0.11*** (0.01)	0.09*** (0.01)
GPA in secondary school			0.14*** (0.02)	0.14*** (0.02)	0.12*** (0.02)

Table 3.5, Continued.

Household Characteristics

Marital status					
Married				-0.01	0.01
				(0.04)	(0.03)
Cohabiting				0.14**	0.12**
				(0.04)	(0.04)
Within Labor Market Characteristics					
Region of participating labor market (ref: Northeast)					
Midwest					-0.11*
					(0.05)
South					-0.07
					(0.05)
West					-0.06
					(0.05)
Fulltime Job					0.51***
					(0.03)
Business occupation					0.25***
					(0.05)
STEM occupation					0.35***
					(0.04)
Observations	4,084	4,041	3,924	3,849	3,796
R-squared	0.03	0.07	0.15	0.15	0.24

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Supervisory position. (Table 3.6 and 3.7) Among 1.5 generation Asian American men, the likelihood of being in a higher supervisory position is marginally higher than white American men when only demographic information and childhood resources are considered. However, the significance consistently drops as more covariates are added resulting in not a non-significant coefficient in the final model. Among second generation Asian American men, the coefficients are not significant in any model.

Among second generation Asian American men, the likelihood of being on the higher supervisory position is not significant in all models regardless of added blocks of covariates.

Among 1.5 generation Asian American women, the likelihood of being in a higher supervisory position than white American women is significantly in models (1), (2), and (4). It is

when educational backgrounds and current labor market characteristics were further considered that the significant coefficient becomes marginally significant. Also, it was when current household characteristics are considered when marginally significant coefficient become significant again meaning that 1.5 generation Asian American are being in higher supervisory position

Models with second generation Asian women consistently show negative coefficient but the coefficient is never statistically significant meaning that second generation Asian American women are not more or less likely to be in higher supervisory position than white American women and covariates are not related to the significance of the coefficient, either.

Table 3.6. Association between being in supervisory position and race and immigration group among men

Model Variable	1 b (se)	2 b (se)	3 b (se)	4 b (se)	5 b (se)
Independent variable (Ref: white American)					
1.5 generation AA	-0.29+ (0.16)	-0.27+ (0.16)	-0.25 (0.17)	-0.24 (0.17)	-0.22 (0.18)
Second generation AA	0.00 (0.15)	0.00 (0.15)	-0.03 (0.16)	0.03 (0.16)	0.05 (0.17)
Demographic information					
Age at wave 4	0.05** (0.02)	0.05** (0.02)	0.05** (0.02)	0.05** (0.02)	0.04* (0.02)
Religion (Ref: no religion)					
Protestant	0.11 (0.08)	0.16+ (0.08)	0.15+ (0.08)	0.13 (0.09)	0.11 (0.09)
Catholic	0.18* (0.09)	0.16+ (0.09)	0.18* (0.09)	0.16+ (0.09)	0.08 (0.09)
Other	-0.05 (0.09)	-0.04 (0.09)	-0.06 (0.09)	-0.08 (0.09)	-0.08 (0.10)
Missing	-0.25+ (0.14)	-0.24+ (0.14)	-0.21 (0.14)	-0.20 (0.14)	-0.14 (0.15)
Criminal Record	0.00 (0.05)	-0.00 (0.05)	0.01 (0.05)	0.02 (0.05)	0.03 (0.05)
Childhood resources					
Parental education (ref: High school graduation or lower)					
Some college		-0.03 (0.08)	-0.02 (0.08)	-0.02 (0.08)	-0.02 (0.08)

Table 3.6, Continued.

College graduate	-0.03 (0.08)	-0.02 (0.09)	-0.01 (0.09)	-0.02 (0.09)	
Parental education missing indicator	-0.03 (0.11)	-0.05 (0.11)	-0.07 (0.11)	-0.08 (0.11)	
Living in low income neighborhood	-0.79** (0.29)	-0.72* (0.30)	-0.77* (0.31)	-0.73* (0.32)	
Growing up in metropolitan area	0.05 (0.09)	0.05 (0.09)	0.05 (0.09)	0.06 (0.09)	
Missing for metropolitan area	0.13 (0.10)	0.15 (0.10)	0.16 (0.10)	0.18+ (0.10)	
Educational backgrounds					
Years of education		-0.02 (0.02)	-0.02 (0.02)	-0.03 (0.02)	
GPA in secondary school		0.09* (0.05)	0.09* (0.05)	0.08 (0.05)	
Household Characteristics					
Marital status					
Married			0.20** (0.07)	0.16* (0.07)	
Cohabiting			0.21* (0.09)	0.15+ (0.09)	
Within Labor Market Characteristics					
Region of participating labor market (ref: Northeast)					
Midwest				-0.09 (0.11)	
South				-0.07 (0.11)	
West				-0.12 (0.11)	
Fulltime Job				0.66*** (0.10)	
Business occupation				0.96*** (0.10)	
STEM occupation				-0.24* (0.10)	
/cut1	1.83*** (0.48)	1.71*** (0.50)	1.81** (0.56)	1.81** (0.57)	1.81** (0.59)
/cut2	3.51*** (0.49)	3.39*** (0.50)	3.49*** (0.56)	3.48*** (0.57)	3.53*** (0.59)
Observations	4,335	4,296	4,162	4,060	4,014
R-squared					

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 3.7. Association between being in supervisory position and race and immigration group among women

Model Variable	1 b (se)	2 b (se)	3 b (se)	4 b (se)	5 b (se)
Independent variable (Ref: white American)					
1.5 generation AA	0.35* (0.15)	0.34* (0.15)	0.31+ (0.16)	0.33* (0.16)	0.32+ (0.17)
Second generation AA	-0.11 (0.18)	-0.14 (0.18)	-0.19 (0.19)	-0.17 (0.19)	-0.31 (0.20)
Demographic information					
Age at wave 4	0.04* (0.02)	0.04* (0.02)	0.05* (0.02)	0.04* (0.02)	0.04* (0.02)
Religion (Ref: no religion)					
Protestant	-0.04 (0.09)	0.00 (0.09)	-0.01 (0.09)	-0.00 (0.09)	-0.00 (0.10)
Catholic	0.05 (0.10)	0.04 (0.10)	0.06 (0.10)	0.07 (0.10)	0.03 (0.10)
Other	0.03 (0.09)	0.04 (0.10)	0.05 (0.10)	0.06 (0.10)	0.07 (0.10)
Missing	-0.13 (0.14)	-0.12 (0.14)	-0.13 (0.15)	-0.08 (0.15)	-0.07 (0.15)
Criminal Record	-0.20+ (0.10)	-0.17+ (0.10)	-0.15 (0.11)	-0.16 (0.11)	-0.13 (0.11)
Childhood resources					
Parental education (ref: High school graduation or lower)					
Some college		0.10 (0.08)	0.06 (0.09)	0.06 (0.09)	0.04 (0.09)
College graduate		0.14+ (0.08)	0.05 (0.09)	0.07 (0.09)	0.06 (0.09)
Parental education missing indicator		-0.08 (0.11)	-0.08 (0.11)	-0.06 (0.11)	-0.07 (0.11)
Living in low income neighborhood		-0.83** (0.30)	-0.84** (0.31)	-0.86** (0.32)	-0.64+ (0.33)
Growing up in metropolitan area		-0.13 (0.09)	-0.12 (0.09)	-0.12 (0.09)	-0.13 (0.09)
Missing for metropolitan area		-0.09 (0.10)	-0.05 (0.10)	-0.06 (0.10)	-0.06 (0.10)
Educational Backgrounds					
Years of education			0.00 (0.02)	0.00 (0.02)	-0.02 (0.02)
GPA in secondary school			0.18*** (0.05)	0.19*** (0.05)	0.17*** (0.05)

Table 3.7, Continued.

Household Characteristics

Marital status					
Married				0.03	0.06
				(0.07)	(0.07)
Cohabiting				0.07	0.06
				(0.09)	(0.10)

Within Labor Market Characteristics

Region of participating labor market (ref: Northeast)					
Midwest					0.05
					(0.11)
South					-0.09
					(0.11)
West					0.05
					(0.11)
Fulltime Job					0.55***
					(0.07)
Business occupation					0.50***
					(0.10)
STEM occupation					0.25**
					(0.09)
/cut1	1.76***	1.78***	2.49***	2.34***	2.43***
	(0.50)	(0.52)	(0.57)	(0.58)	(0.59)
/cut2	3.48***	3.50***	4.23***	4.09***	4.21***
	(0.50)	(0.52)	(0.57)	(0.58)	(0.60)
Observations	4,744	4,695	4,540	4,460	4,416
R-squared					

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Subjective social status. (Table 3.8 and 3.9) Subjective social status (SSS) of 1.5 generation Asian American men is higher than white Americans when only demographic information is considered. The coefficient is no longer statistically significant when childhood resources are further considered. When educational backgrounds are considered the direction of coefficient changes to negative and remains negative in the final model but the coefficient is not significant.

Among second generation Asian American men, the SSS is higher than white Americans at a marginal level in the model only controlling demographic information. As more covariates

are added, the coefficient become not significant and changes in direction. The coefficient become significant when current participating labor market characteristics are further considered from model 4 to the final model. The final model shows that second generation Asian American men have significantly lower SSS than white Americans.

SSS of 1.5 generation Asian American women is significantly higher than that of white American women in first two models. As more covariates are considered the coefficient becomes not significant.

SSS of second generation Asian American women is significantly higher than that of white American women in all models although the significance becomes smaller meaning that second generation Asian Americans show higher SSS than white American women.

Table 3.8. Association between SSS and race and immigration group among men

Model Variables	1 b (se)	2 b (se)	3 b (se)	4 b (se)	5 b (se)
Independent variable (Ref: white American)					
1.5 generation AA	0.27* (0.13)	0.10 (0.13)	-0.08 (0.13)	-0.11 (0.13)	-0.19 (0.14)
Second generation AA	0.25+ (0.13)	0.06 (0.13)	-0.15 (0.12)	-0.18 (0.13)	-0.28* (0.13)
Demographic information					
Age at wave 4	0.59 (0.42)	0.02 (0.01)	0.02 (0.01)	0.01 (0.01)	0.01 (0.01)
Religion (Ref: no religion)					
Protestant	0.18* (0.07)	0.21** (0.07)	0.13* (0.07)	0.06 (0.07)	0.06 (0.07)
Catholic	0.38*** (0.08)	0.33*** (0.08)	0.29*** (0.07)	0.26*** (0.07)	0.22** (0.07)
Other	0.01 (0.08)	0.03 (0.08)	0.10 (0.07)	0.04 (0.07)	0.02 (0.07)
Missing	-0.30** (0.12)	-0.31** (0.11)	-0.23* (0.11)	-0.27* (0.11)	-0.28* (0.11)
Criminal Record	-0.36*** (0.04)	-0.31*** (0.04)	-0.13** (0.04)	-0.11** (0.04)	-0.10* (0.04)

Table 3.8, Continued.

Childhood resources

Parental education (ref: High school graduation or lower)

Some college	0.20**	0.03	0.05	0.05
	(0.07)	(0.07)	(0.07)	(0.07)
College graduate	0.64***	0.11	0.11	0.10
	(0.07)	(0.07)	(0.07)	(0.07)
Parental education missing indicator	0.20*	0.13	0.11	0.10
	(0.09)	(0.09)	(0.09)	(0.09)
Living in low income neighborhood	-1.41***	-0.58*	-0.59*	-0.54*
	(0.24)	(0.24)	(0.24)	(0.25)
Growing up in metropolitan area	-0.16*	-0.01	-0.04	-0.04
	(0.07)	(0.07)	(0.07)	(0.07)
Missing for metropolitan area	-0.32***	-0.05	-0.05	-0.04
	(0.08)	(0.08)	(0.08)	(0.08)

Educational backgrounds

Years of education		0.26***	0.26***	0.25***
		(0.01)	(0.01)	(0.01)
GPA in secondary school		0.18***	0.18***	0.15***
		(0.04)	(0.04)	(0.04)

Household Characteristics

Marital status				
Married			0.27***	0.23***
			(0.06)	(0.06)
Cohabiting			0.05	0.05
			(0.07)	(0.07)

Within Labor Market Characteristics

Region of participating labor market (ref: Northeast)

Midwest					-0.11
					(0.08)
South					0.02
					(0.08)
West					0.07
					(0.09)
Fulltime Job					0.35***
					(0.07)
Business occupation					0.44***
					(0.09)
STEM occupation					0.23**
					(0.08)
Observations	4,377	4,336	4,201	4,089	4,006
R-squared	0.03	0.07	0.18	0.19	0.20

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 3.9. Association between SSS and race and immigration group among Women

Model	1	2	3	4	5
Variables	b (se)	b (se)	b (se)	b (se)	b (se)
Independent variable (Ref: white American)					
1.5 generation AA	0.44*** (0.13)	0.30* (0.12)	0.16 (0.12)	0.16 (0.12)	0.12 (0.12)
Second generation AA	0.74*** (0.14)	0.48*** (0.14)	0.29* (0.13)	0.41** (0.13)	0.27* (0.14)
Demographic information					
Age	0.03* (0.01)	0.04** (0.01)	0.04** (0.01)	0.02 (0.01)	0.02 (0.01)
Religion (Ref: no religion)					
Protestant	0.12+ (0.07)	0.19** (0.07)	0.12+ (0.06)	0.04 (0.06)	0.04 (0.07)
Catholic	0.26*** (0.08)	0.20** (0.08)	0.20** (0.07)	0.14* (0.07)	0.12 (0.07)
Other	0.01 (0.08)	0.03 (0.07)	0.08 (0.07)	0.02 (0.07)	0.03 (0.07)
Missing	-0.19+ (0.11)	-0.18 (0.11)	0.00 (0.10)	0.02 (0.10)	0.01 (0.10)
Criminal Record	-0.46*** (0.08)	-0.40*** (0.07)	-0.23** (0.07)	-0.17* (0.07)	-0.14+ (0.07)
Childhood resources					
Parental education (ref: High school graduation or lower)					
Some college		0.30*** (0.06)	0.08 (0.06)	0.07 (0.06)	0.06 (0.06)
College graduate		0.85*** (0.06)	0.22*** (0.06)	0.24*** (0.06)	0.23*** (0.06)
Parental education missing indicator		0.11 (0.08)	0.14+ (0.08)	0.15* (0.08)	0.14+ (0.08)
Living in low income neighborhood		-1.85*** (0.22)	-1.10*** (0.22)	-1.24*** (0.22)	-1.20*** (0.23)
Growing up in metropolitan area		-0.21** (0.07)	-0.15* (0.06)	-0.15* (0.06)	-0.14* (0.06)
Missing for metropolitan area		-0.37*** (0.08)	-0.19** (0.07)	-0.19** (0.07)	-0.15* (0.07)
Educational background					
Years of education			0.25*** (0.01)	0.25*** (0.01)	0.23*** (0.01)
GPA in secondary school			0.20*** (0.03)	0.19*** (0.03)	0.17*** (0.03)

Table 3.9, Continued.

Household Characteristics

Marital status					
Married				0.45***	0.45***
				(0.05)	(0.05)
Cohabiting				0.13*	0.11+
				(0.07)	(0.07)
Within Labor Market Characteristics					
Region of participating labor market (ref: Northeast)					
Midwest					-0.14*
					(0.07)
South					-0.08
					(0.08)
West					-0.02
					(0.08)
Fulltime Job					0.22***
					(0.05)
Business occupation					0.26***
					(0.07)
STEM occupation					0.40***
					(0.07)
Observations	4,778	4,729	4,571	4,488	4,407
R-squared	0.02	0.09	0.22	0.23	0.24

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Educational attainment. (Table 3.10 and 3.11) Among both 1.5 generation and second generation Asian American men, the educational attainment is higher than white American men regardless of addition of control variables. The gap becomes narrower, but the differences remain significant.

Among 1.5 generation Asian American women, the educational attainment is higher when only demographic information and childhood resources are considered (Model 2). The gap in model 1 is about half a year in educational attainment and it is smaller than among other Asian American groups. When the GPA is further considered it become not significant and remains not significant when household characteristics are further considered.

Second generation Asian American women shows higher educational attainment than white Americans in all four models. Additional covariates in the model make the coefficients' significance smaller than in models with smaller number of covariates but the coefficient remains significant in the final model.

Table 3.10. Association between educational attainment and race and immigration group among men

Model VARIABLES	1 b (se)	2 b (se)	3 b (se)
Independent variable (Ref: white American)			
1.5 generation AA	0.93*** (0.17)	0.62*** (0.16)	0.35* (0.14)
Second generation AA	1.09*** (0.16)	0.64*** (0.15)	0.39*** (0.14)
Demographic information			
Age	-0.02 (0.02)	0.01 (0.02)	0.05*** (0.02)
Religion (Ref: no religion)			
Protestant	0.25** (0.09)	0.33*** (0.08)	0.20** (0.08)
Catholic	0.31** (0.10)	0.19* (0.09)	0.14+ (0.08)
Other	-0.19+ (0.10)	-0.15+ (0.09)	-0.11 (0.08)
Missing	-0.11 (0.15)	-0.15 (0.13)	-0.03 (0.12)
Criminal Record	-0.72*** (0.05)	-0.60*** (0.05)	-0.42*** (0.05)
Childhood resources			
Parental education (ref: High school graduation or lower)			
Some college		0.59*** (0.08)	0.44*** (0.07)
College graduate		1.77*** (0.08)	1.33*** (0.08)
Parental education missing indicator		0.27* (0.11)	0.24* (0.10)
Living in low income neighborhood		-3.35*** (0.29)	-3.28*** (0.26)
Growing up in metropolitan area		-0.48*** (0.09)	-0.34*** (0.08)
Missing for metropolitan area		-0.82*** (0.10)	-0.55*** (0.09)
Educational background			
GPA in secondary school			1.14*** (0.04)
Observations	4,354	4,313	4,213
R-squared	0.07	0.23	0.38

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 3.11. Association between educational attainment and race and immigration group among women

Model Variables	1 b (se)	2 b (se)	3 b (se)
Independent variable (Ref: white American)			
1.5 generation AA	0.58*** (0.17)	0.35* (0.16)	-0.00 (0.14)
Second generation AA	1.07*** (0.19)	0.59*** (0.18)	0.40* (0.16)
Demographic information			
Age	0.03 (0.02)	0.06** (0.02)	0.11*** (0.02)
Religion (Ref: no religion)			
Protestant	0.14 (0.09)	0.25** (0.09)	0.11 (0.08)
Catholic	0.22* (0.11)	0.09 (0.10)	0.12 (0.09)
Other	-0.16 (0.10)	-0.12 (0.09)	-0.08 (0.08)
Missing	-0.54*** (0.15)	-0.53*** (0.14)	-0.31* (0.12)
Criminal Record	-0.66*** (0.10)	-0.55*** (0.09)	-0.36*** (0.09)
Childhood resources			
Parental education (ref: High school graduation or lower)			
Some college		0.74*** (0.08)	0.49*** (0.07)
College graduate		2.15*** (0.08)	1.58*** (0.07)
Parental education missing indicator		0.01 (0.10)	0.08 (0.09)
Living in low income neighborhood		-3.20*** (0.28)	-3.00*** (0.26)
Growing up in metropolitan area		-0.19* (0.08)	-0.14+ (0.08)
Missing for metropolitan area		-0.52*** (0.10)	-0.31*** (0.09)
Educational background			
GPA in secondary school			1.30*** (0.04)
Observations	4,753	4,705	4,583
R-squared	0.03	0.22	0.38

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Sensitivity Analysis

I conducted a few sensitivity analyses to test the robustness of the final model findings. First, to test the robustness of grouping by race and generation, I re-estimated the model using another grouping for the independent variable. The first two groups are the same as the original models, but I changed the third group to include the third-plus generation. The results of supervisory position, subjective SES, and years of education do not change. The coefficients for the earnings model are different for the second generation only group in the original model and second- and third-generation-plus in this new model. The different result shows that all US-born (second generation and plus) Asian Americans do not earn less than white Americans ($b=-.08$, $p=.147$). This result implies that I should not merge second generation with third and plus generation Asian Americans because they are different groups, although they both include individuals born in the United States.

To test the robustness of measuring socioeconomic status of family of origin with parental education, I replaced it with parents' income in wave 1. Only the earnings model shows any changes with this substitution. Specifically, when parents' income instead of educational level is used to consider parents' socioeconomic status, the difference in earnings between white Americans and 2nd generation Asian Americans become only marginally significant.

As a final sensitivity test, I included a more detailed measure of occupation that includes a variable with 9 categories. All three models with labor market outcomes (earning, subjective SES, and supervisory position) show similar result to those from the main models that used the summary variable for occupation. In the main model, Asian Americans are as likely to have a higher supervisory position, but in the sensitivity test, Asian Americans are less likely to have a higher supervisory position at a marginal level.

Discussion

Higher Educational Attainment among Asian Americans

Even after controlling for several important factors, Asian Americans' educational attainment is higher than that of white Americans, as other empirical studies have shown and as was hypothesized in this study. In the study, demographic information, childhood resources, and GPA in secondary school are considered as control variables, all male and second-generation female Asian Americans spent longer years in educational than their white counterparts. It is a great strength of Asian Americans that they have high educational attainment as a group even after considering variations in these characteristics.

Many scholars have provided explanations for this finding. The first explanation is that the Asian culture that Asian immigrants brought from their country of origin emphasizes education (Mordkowitz & Ginsburg, 1986). It may be true for some ethnic groups such as Chinese and Korean Americans whose country of origin were under the influence of Confucianism, but it does not apply to many other ethnic groups including Filipino Americans, Indian Americans, Japanese Americans and (Sue & Okazaki, 1990). Another explanation is that hyper selectivity of US immigration system filters immigrants based on educational achievement (Zhou & Lee, 2017). This theory argues that Asian immigrants who are filtered by American immigration system show educational attainment that is higher than the average of the United States and the average of country of origin. Hyper selectivity theory provides two reasons why their children also do well in terms of educational attainment. First, because 1.5 generation and second generation Asian Americans are the children of the immigrants who have high educational attainment, their children benefit from it. In this study, parents' education is operationalized in only three categories. More detailed operationalization may explain more

variability in the individuals' education which was not applicable because of small sample size. Second, abundant social resources are formed within ethnic communities because hyper-selective immigrant brings middle class culture that values education and skills. This explanation suggests that information to support children's education is shared widely within ethnic groups even across SES. As a result, all members benefit whether or not they come from a particularly selective group originally. In this study, whether Asian American individuals benefit from ethnic social capital in particular is not considered. This factor may explain how Asian Americans have higher educational attainment.

Asian American Women's Advantages

Earnings of 1.5 generation Asian American women and the SSS of second generation Asian American women were significantly higher than those of white American women even after controlling for important covariates. These results go against the hypothesis that Asian Americans' descriptive advantage is explained by the important predictors of socioeconomic status. The results show that even after controlling for many characteristics, being Asian is still related to higher socioeconomic status for women. When interpreting these results, it is important to consider that the reference group is white American women, whose earning and SSS is already suppressed compared to white American men (Hegewisch, 2018). Descriptively in this study, white American women earn about \$15,000 less than white American men and their SSS is lower by about 0.1 although the differences are not very large. Also, because the earnings in this study is individual earnings not household earnings, white women may have opted out of higher-paying jobs because they have a partner who has a high-paying job and chosen to get paid less. Of course, this is also possible for Asian American women. Because the focus of this study is racial differences that Asian Americans experience in comparison to white

Americans, socioeconomic gaps were not investigated between Asian American women and white American men. In a future study, the interaction between race and gender should also be considered.

Another interesting point from these results is the mismatch in higher objective and subjective socioeconomic status of Asian American women. While 1.5 generation Asian American women shows higher earnings, which is an objective form of socioeconomic status, their subjective form of socioeconomic status is not higher than white American women. On the other hand, second generation Asian American women do not earn more than white American women, but they report higher SSS than white American women. The results confirm that how one perceives one's social status is not determined by objective indicators (Jackman & Jackman, 1973). It further suggests that objective and subjective socioeconomic status is explained by different factors (Demakakos et al., 2008).

Although the findings in this dissertation do not show why forementioned mismatch in objective and subjective socioeconomic status happens across generations of female AAs, immigration history and status may be the cause. Employment is a great source of immigration status support among immigrants without legal permanent resident status. It is likely that 1.5 generation AA women stay in the labor market during early motherhood to maintain their visa status and it gives advantages in terms of earnings (Greenman, 2011). However, second generation AA women are U.S. citizens and they do not have to stay in the labor market to get a visa through employment. In addition, with citizenship by birth, second generation AA women may subjectively perceive that their social status is higher than 1.5 generation AA women as many studies have shown the effect of being immigrant on subjective well-being (Bernal et al., 2022; Garza et al., 2017).

Parities in Job Outcomes and Segmented Assimilation Theory

After considering the important factors that contribute to the socioeconomic outcomes, many of the significant descriptive differences by race and immigration group disappear. To summarize, 1.5 generation Asian American men are not different in any job-related outcomes with white American men. Second generation Asian American men reported the same likelihood of being in higher supervisory men with white American men. 1.5 generation Asian American women reported equal SSS and second generation Asian American women reported equal earnings and supervisory position with white American women. These findings show that the Asian Americans' higher socioeconomic status is often attributed to differences in other factors rather than their presumed advantage as a racial group. Characteristics of Asian Americans in childhood resources such as parental educational level and neighborhood environment, their own educational backgrounds and the characteristics of participating in labor market explain much of the descriptive differences.

Disparities in SES

Importantly, the results indicate that some SES advantage disappears and even reverses when covariates are considered in the model. First, second-generation Asian American men have lower earnings and lower SSS than white American men in the final models. The results confirm the hypothesis that Asian American men experience disparities in socioeconomic status in earnings and SSS (C. Kim & Sakamoto, 2010). Specifically, Asian American men in a similar position earn about 15% less than white American men. What is more interesting is that the results also dispute the canonical assimilation theory (Alba & Nee, 1997; Chiswick, 1978) that as immigrants live longer in the United States and assimilate to the society, their socioeconomic status also increases. According to the theory, second-generation Asians would show higher

socioeconomic indicators than 1.5 generation Asian Americans. In fact, second generation Asian Americans experience a greater earnings gap and report lower SSS as compared to 1.5 generation Asian Americans. It may mean that race plays an important role in assimilation theory blocking immigrants of color from finding the same footing as middle class white Americans, as canonical assimilation theory suggests (Portes & Zhou, 1993). Such an argument implies that third and fourth generation AA may experience an even greater disparity in socioeconomic status compared to white Americans, as segmented assimilation theory would suggest. These findings underscore the importance of attending to the experiences of U.S.-born Asian Americans who have settled in the United States in prior generations, rather than solely focusing on the immigrant experience, as is done in most studies of Asians in the United States.

Second, although not statistically significant, results consistently show that 1.5 generation Asian American men are less likely to be in higher supervisory positions compared to their white male counterparts. The significance disappears when educational backgrounds are first entered in the model. Unlike earnings and SSS, being in a higher supervisory position is not significantly related to longer years of education for both men and women models. It is related to GPA positively and to poverty rate of childhood neighborhood negatively in the expected directions, respectively. This result may mean that Asian Americans' higher educational attainment does not always favorably contribute to being in a higher supervisory position. Considering the consistence in the negative direction, and the concern regarding the bamboo ceiling in the literature (F. Lee, 2019; D. Woo, 2000; Yu, 2020), further research is needed to examine the lower likelihood of being in the supervisory position among 1.5 generation Asian American men. In this study, how the supervisory position is measured may help explain why the model did not show significant differences between white American and 1.5 generation Asian American men.

Supervisory position is measured only by three ordered categories which restricts the variation in the outcome variable. Unfortunately, the current way of measuring it cannot differentiate the frontline managers in retail stores whose compensation is very similar to those whom they supervise (Lambert & Henly, 2012) from the managers in the headquarter offices of those retail stores. Future studies could use the number of workers that they supervise and actual title of positions within the organizations they are employed (Guajardo, 2016; R. A. Smith, 2002). Furthermore, within-organization studies could also be helpful because they allow researchers to have more control over other important factors including the type of industry and workplace characteristics.

Explanatory Factors

The socioeconomic gaps narrowed between Asian Americans and white Americans as covariates were entered in the models and most covariates had similar impact on all indicators of socioeconomic status. Some blocks of covariates had a stronger impact than others, but the general tendency was additional covariates were related to lowering the gap, demonstrating that those covariates explained a large portion of variation in socioeconomic status between white Americans and Asian Americans.

However, the general tendency does not hold for two variables: marital status and STEM occupation. Marital status sometimes widens the gap between white Americans and Asian Americans and the variable of STEM occupation is associated differently depending on the measure of socioeconomic status examined. In some models, adding marital status to model 3 resulted in coefficients implying higher or lower disadvantage for Asian American groups. For example, when marital status is added to model three, the earning advantage that 1.5 generation Asian American men had over white American men became marginally significant and the

significant earning disadvantage that second generation Asian American men had against white American became not significant. Among second-generation Asian American women, advantage in SSS is exaggerated. Thus, the marital status indicator suggests that Asian Americans' marriage characteristics do not promote socioeconomic outcomes while it does among white Americans. In general, being married and cohabiting is related to higher socioeconomic status than being single, although causal relationships may be mutual and bidirectional (Averett et al., 2021; Karney, 2021). The descriptive results show that white Americans are more likely to be married and cohabitating than Asian Americans and Asian Americans are more likely to be single than white Americans. The differences in marital status by racial group may explain the unexpected changes of coefficients from model 3 to model 4. Furthermore, the strengths of correlation between marital status and socioeconomic outcome also varies by racial group resulting in interaction effects of marital status and racial group. Although it was not the main research question of this study, the correlations between marital status and socioeconomic outcomes are stronger among white Americans regardless of gender.

Secondly, being in a STEM occupation is differentially related to the various outcomes. With earnings and subjective social class, having a STEM occupation is related to higher outcomes regardless of gender. In contrast, having a STEM occupation is negatively related to being in the higher supervisory position among male participants. The result may be related to the common argument that Asian Americans experience stagnation in career promotion because they are in technical positions (Sy et al., 2010) where they have limited interaction with other individuals. Without such interaction, it may be especially difficult to achieve a promotion into supervisory position within organization (Bailyn & Lynch, 1983; Tang, 2000).

On the other hand, having a STEM occupation is positively related to being in higher supervisory position among female workers and it explains some of the high achievement among female Asian Americans. It is very interesting that having a STEM occupation has the opposite relationship for men and women, in general. It may be because even though it is aggregated as a STEM job, female workers may work in different types of STEM industries than male workers. While male workers are in technology, female workers in STEM area are in health sciences including nursing and the healthcare industry, where they may experience more social interactions that could lead more easily to promotion (Hegewisch, 2018). Furthermore, job characteristics explains being in a higher position among 1.5 generation Asian Americans and widens the gap that second generation Asian American women experience though it is not significant. According to the descriptive results, Asian American women are almost twice as likely to be in a STEM occupation than white American women and being in a STEM occupation is related to a higher supervisory position in bivariate relationship ($\chi^2_2 = 14.87$, $p < 0.01$). The results show that 1.5 generation Asian American women are more likely to be in a supervisory position than white American women and second generation Asian American women are equally likely to be in supervisory position by having STEM occupation. Having a STEM occupation has an opposite impact on Asian American men and women.

Conclusion

Asian Americans seem to have advantages when it comes to socioeconomic attainment in descriptive comparisons. The descriptive advantages that Asian Americans have in socioeconomic status is explained primarily by human capital and the characteristics of jobs that they have. For other domains like earnings, subjective socioeconomic status, and supervisory positions, Asian American men are still experiencing disparities when compared to white

American men. Asian American women shows even higher socioeconomic status than white American women whose job related outcomes are already suppressed in comparison to white American men. This sheds lights on the interaction of the race and gender effects and salient gender gap in socioeconomic status.

Appendix

Appendix Table 3.1. Sample characteristics of men by race and immigration group and gender

	white America n	1.5 gen AA	Men Second gen AA	Third gen AA	ALL
Age	28.55 (1.77)	29.62 (1.56)	28.66 (1.65)	28.46 (1.81)	28.60 (1.77)
Ever convicted (%)	21.10	4.00	10.44	13.80	19.86
Religion (%)					
None	24.95	19.77	18.68	22.99	24.45
Protestant	29.66	14.69	13.74	5.75	27.96
Catholic	19.08	34.46	37.91	25.29	20.57
Other	19.77	29.38	24.73	41.38	20.77
Parental Education (%)					
HS and lower	26.93	14.69	12.64	19.54	25.73
Some college	39.89	51.41	45.05	44.83	40.65
College graduate	33.18	33.9	42.31	35.63	33.62
Neighborhood poverty rate	0.16 (0.11)	0.12 (0.07)	0.11 (0.07)	0.11 (0.07)	0.15 (0.11)
Grow up in urban area (%)	14.27	19.21	23.63	9.2	14.75
GPA	2.75 (0.78)	2.97 (0.74)	3.03 (0.76)	2.78 (0.82)	2.77 (0.78)
Marital status (%)					
Single	40.22	46.43	55.21	56.98	41.35
Married	41.72	41.67	32.52	26.74	41.08
Cohabiting	18.06	11.9	12.27	16.28	17.57
Region (%)					
Northeast	13.84	8.47	6.04	2.3	13.08
Midwest	31.17	11.3	18.13	5.75	29.36
South	38.23	11.3	9.34	2.3	35.3
West	16.76	68.93	66.48	89.66	22.26
Full time status (%)	84.51	81.36	87.91	85.06	84.54
Business occupation (%)	11.66	31.33	26.55	17.44	13.12
STEM occupation (%)	9.23	17.47	13.56	15.12	9.83

Appendix Table 3.2. Sample characteristics of women by race and immigration group and gender

	white American	1.5 gen AA	Second gen AA	Third gen AA	ALL
Age	28.30 (1.77)	29.41 (1.58)	28.87 (1.70)	28.45 (1.78)	28.36 (1.77)
Ever convicted (%)	6.37	1.59	3.4.5	2.38	6.03
Religion (%)					
None	20.53	7.94	17.24	23.81	20
Protestant	33.89	11.11	10.34	11.9	31.93
Catholic	17.79	51.32	37.93	25	19.82
Other	21.34	23.81	28.28	34.52	21.86
Parental Education (%)					
HS and lower	28.82	15.87	10.34	17.86	27.58
Some college	39.6	46.56	46.9	52.38	40.31
College graduate	31.58	37.57	42.76	29.76	32.11
Neighborhood poverty rate	0.16 (0.11)	0.14 (0.11)	0.11 (0.09)	0.10 (0.06)	0.16 (0.11)
Grow up in urban area (%)	15.87	19.58	23.45	7.14	16.09
GPA	2.97 (0.76)	3.21 (0.73)	3.14 (0.71)	2.90 (0.90)	2.98 (0.76)
Marital status (%)					
Single	31.58	38.92	48.92	37.04	32.46
Married	49.92	48.65	35.25	39.51	49.27
Cohabiting	18.5	12.43	15.83	23.46	18.27
Region (%)					
Northeast	14.89	6.35	6.21	5.95	14.15
Midwest	31.77	8.47	13.1	9.52	29.93
South	35.96	14.29	8.28	4.76	33.76
West	17.38	70.9	72.41	79.76	22.16
Full time status (%)	66.83	66.67	76.55	73.81	67.23
Business occupation (%)	12.47	22.34	27.27	16.67	13.38
STEM occupation (%)	10.67	10.11	20.28	11.90	10.95

CHAPTER 4: RACIAL DISPARITY IN ACCESS TO INFORMAL MENTORING AND ASSOCIATION WITH SES

Introduction

Mentors during adolescence are conceptualized as non-parental adults who have the potential to make a positive impact on an adolescents' life by providing support, guidance, and acting as a role model (McDonald et al., 2007b). Mentoring relationships can provide a reservoir of social capital that young people and adults can draw on when needed; therefore, access to mentoring relationships is used as a way to measure access to social capital. Mentors can help adolescents continue on in the educational system by providing guidance, get a certain job with high job qualities, provide information about job openings, as well as help them as they prepare recruiting process, and sometimes can directly provide jobs.

Among mentors, informal mentors occur naturally within adolescents' existing networks unlike formal mentors who are matched by mentoring programs such as Big Brothers and Big Sisters. Thus far, literature has focused on examining whether or not the formal and informal mentoring relationship is significantly beneficial for adolescents' development (Kammeyer-Mueller & Judge, 2008). The findings of prior studies suggest that informal mentoring relationships have positive impacts on adolescent development though the highlighted domains of development may vary ranging from psychological well-being through educational attainment and political engagement (DuBois & Silverthorn, 2005; McDonald & Lambert, 2014; Miranda-Chan et al., 2016). Informal mentoring may be more effective in facilitating adolescents' development than formal mentoring because the relationship tends to be stronger and lasts longer (Inzer & Crawford, 2005).

Although both formal and informal mentoring relationships can be important sources of social capital, there is limited research to date on informal mentors, and in particular on differences in access to informal mentoring relationships of different types (such as peers, teachers, and relatives) or the individual and community factors that explain access to informal mentors. Individuals with marginalized social positionality may have less access to mentoring relationships as compared to less marginalized individuals given that they have lower and unequal access to other types of social relationships depending on factors like race, gender, and immigration status (Lin, 2000; McDonald et al., 2013). Furthermore, among informal mentoring relationships, individuals with marginalized positionality may show differences in the types of mentors that they have. While there is some research on Black and Latinx racial minorities (McDonald et al., 2013), less is known about the experience of Asian American adolescents.

To fill this gap in the literature, this study examines whether Asian American adolescents have the same access to mentoring relationships in comparison to white Americans. This study further examines whether Asian American adolescents have the same access to specific types of mentoring relationship such as peer mentor, teacher mentor, and relative mentor. Lastly, if any gap in access is observed between Asian Americans and white Americans, it is tested whether the difference can be explained by the proportion of the Asian American population within the total population, that is, Asian American population density.

Importance of Mentoring Relationship in Adolescence

Informal social relationships are critical to human existence; they bring meaning to our everyday lives, providing hope, joy, and encouragement, direction and guidance in decision making, and so on. Informal relationships sometimes take the form of mentorship by providing guidance, information, and role modeling. While parents may serve these roles, not all parents do

and sometimes support and advice is more effective when it comes from non-parental adults (Avery, 2011; Inzer & Crawford, 2005). Informal mentors are those who adolescents acknowledge as an adult who made important impact in their lives. Informal mentors are usually older than the mentees. Relatives such as grandparents, uncle and aunts, teachers, community leaders, social workers, and even school friends who are a couple of years ahead of them can be counted as mentors.

Informal mentoring relationships during adolescence play an important role for youth in various domains: higher academic attainments and performance (DuBois & Silverthorn, 2005; Erickson et al., 2009; Fruht & Wray-Lake, 2013; Reynolds & Parrish, 2018; Seeta Prabhu & Iyer, 2001), lower delinquent behaviors and psychological well-being (DuBois & Silverthorn, 2005; McDonald & Lambert, 2014), civic engagement, and higher job-related outcomes (DuBois & Silverthorn, 2005; Hagler & Rhodes, 2018; McDonald & Lambert, 2014). It is noteworthy that informal mentoring relationships during adolescence positively impact educational attainment and labor market outcomes in young adulthood beyond the context where the mentoring relationship was originally formed (Hagler & Rhodes, 2018; McDonald et al., 2007b; McDonald & Lambert, 2014). More specifically, in transition from adolescence to young adulthood, those who had a mentor during adolescence were found to more likely be employed as young adults (McDonald et al., 2007b), have higher job satisfaction (McDonald & Lambert, 2014), and have higher educational attainment and earnings (Hagler & Rhodes, 2018). These results emphasize the importance of informal mentors for the development of adolescents.

For Asian Americans, the few studies that have been conducted show that having a mentor during adolescence has a positive impact on cultural adjustment, mental health, behavior outcomes, and educational attainment (Haddad et al., 2011; K. K. Tran et al., 2015), but the

benefit in the domain of employment has not been investigated among this population. Some studies include Asian American adolescents as a part of their larger sample and show that mentoring relationships have a positive impact on educational outcomes and later career-related outcomes (Hagler & Rhodes, 2018; McDonald & Lambert, 2014), but no quantitative studies examined Asian Americans exclusively.

Although studies focused on Asian Americans are lacking, studies do show that mentoring relationships have a positive impact on the socioeconomic status of adolescents of racial minorities in general and those with an immigration history. Among African American adolescents, having an informal mentor is related to positive long-term educational attainment (Hurd et al., 2012; Hurd & Sellers, 2013), vocational aspiration (Hellenga et al., 2002), and career development (Klaw & Rhodes, 1995). Latinx adolescents also benefit from informal mentors in terms of its relationship to higher educational attainment and greater expectation for labor market success (Sanchez et al., 2008). Despite the importance of mentoring relationships, not all adolescents have a mentoring relationship and studies have found that racial minorities are less likely to have a mentor (McDonald et al., 2013).

Theoretical Backgrounds: Inequality in Social Capital

Despite the importance of mentoring relationships during adolescence, not all adolescents have access to a mentoring relationship and not everyone's mentoring relationship is equally helpful in promoting one's socioeconomic outcomes. To understand these differential access and mobilization functions, I consider informal mentoring relationships as a form of social capital.

According to Lin's theory of inequality in social capital (Lin, 2000), white Americans have particular advantages of social capital as compared to racial minorities because of the dual

forces of homophiles and racial stratification (McPherson, Smith-Lovin, & Cook, 2001; Small & Sukhu, 2016). White Americans are more likely to have access to white American ties who are likely to have more power in racial hierarchy. On the contrary, racial minorities are likely to have access to racial minorities and they likely to have lower power.

As discussed in Chapter 1, Lin (2002) classified inequality in social capital in two different ways: capital deficits and return deficits. Capital deficits are related to access and refer to cross-group differences in the total magnitude of social capital. Applying Lin's notion of capital deficits to a mentoring relationship, racial minorities may be less likely to have any mentoring relationship, have a smaller number of mentoring relationships, or have mentors whose socioeconomic status is lower. Return deficits are related to mobilization and refer to cross-group differences in what is received through one's social capital, holding constant the total amount of resources in one's network. For example, racial minorities' mentoring relationships may not be as effective as white Americans' even if racial minorities have the same access to mentoring relationships in their networks. A figure describing capital deficit and returns deficit is included in chapter 1

Determinants of Having a Mentoring Relationship

While applying a social capital lens to studying mentoring, mentoring researchers have also suggested two other arguments related to the mentoring experiences of adolescents: the rising star and struggling children hypothesis. These hypotheses explain the process of mentoring-relationship formation from an individual level. Both hypotheses assume that mentors have control over who to choose to mentor and mentees have the agency to attract mentors with their individual characteristics.

The rising star hypothesis, from the career mentoring scholarship (Singh et al., 2009), has been adopted to the adolescent mentoring scholarship literature (Fruht et al., 2021). It suggests that adolescents who seem promising are more likely to attract mentors. Empirical studies have shown that adolescents who have characteristics suggestive of academic and career success are more likely to have mentors. For example, studies have found that adolescents from more advantaged families (Erickson et al., 2009; Fruht et al., 2021; Gowdy et al., 2020a; Miranda-Chan et al., 2016), showing higher levels of sociability (Erickson et al., 2009; Miranda-Chan et al., 2016), and of a racially white background are more likely to have a mentor (Erickson et al., 2009; Fruht & Chan, 2018), because they are believed or stereotyped to be successful academically and economically.

Unlike the rising star hypothesis, the struggling child hypothesis argues that adolescents with more challenges are more likely to attract mentors. Non-parental adults, such as school teachers and community leaders, may be more willing to provide support and guidance to the adolescents that look struggling because the adults perceive more needs of intervention (Fruht et al., 2021). This process of selection into mentoring relationships may also happen from the mentees' side. Struggling adolescents may tend to seek help from adults other than their parents (Rhodes et al., 2008). These two-way selection processes may enable the formation of informal mentoring between a struggling adolescent mentee and a caring non-parental mentor. Empirically, studies have found that the likelihood of having an informal mentoring relationship is higher among children who are experiencing academic difficulties (Fruht et al., 2021), and economic hardships (Gowdy et al., 2020b).

Asian Americans and Mentoring Relationships

It is not clear from existing research whether Asian American adolescents are less likely or more likely to have an informal mentoring relationship than their white peers or whether their mentoring relationships are helpful to their later socioeconomic success. No studies to date have quantitatively examined Asian American adolescents' mentoring relationships in comparison to white American adolescents. In many previous studies Asian Americans are classified as one of "other" group with Native Americans and Multiracial individuals (McDonald & Lambert, 2014) presumably because of low sample size.

In qualitative studies, Asian American adolescents have reported that they lack mentors of their race and gender, and it is suggested that mentors who share their cultural backgrounds would be better prepared to promote psychological well-being (Augsberger et al., 2015) and help develop leadership qualities (Kawahara et al., 2013). Qualitative studies also suggest that Asian American adolescents' mentoring relationships may not be as helpful to them, even when they exist. For example, Asian Americans may not seek help from their mentors when they look for job opportunities because they may think it is unfair to advance their job search process using social contacts (H. Lee & Chin, 2015) due to cultural influences. Furthermore, extending findings from qualitative work on Black job seekers, Asian Americans of high status may not feel confident referring others of their race/ethnicity group because they may be worried about their reputation, as was found in a Black sample (Smith, 2005). These qualitative studies suggest that Asian Americans may have differential mentoring relationships in regard to access and impact in comparison to white Americans.

The racial positionality of Asian Americans may also shape their experience of mentoring relationship. Asian Americans are stereotyped as model minorities and often perceived as

“deserving” immigrants who work hard and reap benefits from the hard work academically and economically. The model minority stereotypes of Asian American adolescents may position them as “rising stars” in schools and communities (S. J. Lee, 2015), even beyond their true performance. The stereotype may make Asian American adolescents, according to the rising star hypothesis, attract more non-parental adults who are willing to provide supports and guidance. On the other hand, unlike the model minority stereotype, Asian Americans experience struggles growing up in immigrant families. Their immigrant parents often cannot navigate the school systems as their white American counterparts which results in struggles among Asian American adolescents (J. Li et al., 2008; Wong, 2008). Also, many Asian American adolescents report high level of intergenerational conflicts (Choi et al., 2020) which makes it harder to rely on the guidance of their parents. These struggles of Asian American adolescents may attract caring adults who are willing to provide advice to struggling adolescents, according to the struggling children hypothesis. These characteristics of Asian Americans may facilitate access to a mentoring relationship. Thus, Asian Americans occupy a very interesting position, and the position has characteristics of both “rising stars” and struggling adolescents.

Racial-Ethnic Density in the Neighborhoods

Racial-ethnic density refers to the relative proportion of a certain racial-ethnic group in comparison to other racial-ethnic groups within a neighborhood. Asian density is proportion of Asian among the entire population (Mok, 1999). Racial density of their own racial group determines how racial minority adolescents interact with individuals of the same or different racial-ethnic group (Syed & Juan, 2012). It is likely that a high Asian density neighborhood heightens the likelihood that Asian American adolescents develop a mentoring relationship within school and community. First, the numerical odds may increase for Asian American

adolescents to find a same-race mentor when Asian American population density is high. Although no study examined the level of mentoring relationships, studies have reported that individuals living in neighborhood of higher ethnic density reported higher social support (Shell et al., 2013; Viruell-Fuentes et al., 2013; Vogt Yuan, 2007). Chinese Americans specifically reported that ethnic density is associated with high social support from individuals of the same ethnic group (Tseng et al., 2021). Second, potential non-Asian mentors may be more willing to become a mentor to Asian American adolescents in a neighborhood with higher Asian density. Higher number of intergroup contacts due to Asian density reduces prejudice toward Asian American adolescents and helps potential mentors understand Asian American culture (Allport et al., 1954; Pettigrew & Tropp, 2006). Reduced prejudice against and increased understanding of Asian Americans may result in non-Asian become more willing to mentor Asian American adolescents in the neighborhood. Therefore, this study hypothesizes that low Asian population density in a neighborhood may explain disparities in the likelihood of having any mentor between Asian Americans and white Americans.

Types of Mentors

Informal mentoring relationships arise from existing ties of various kinds. To account for the diversity of background of mentors, studies use different definitions and operationalizations of mentor. Some studies use the research participants' report of having a mentor regardless of the relationship types (Erickson et al., 2009). Many studies, however, define and operationalize mentor based on a set of criteria such as being at least one generation ahead (Gowdy et al., 2020b; McDonald et al., 2007b); excluding siblings, friends, spouses (DuBois & Silverthorn, 2005; Greeson et al., 2010). Other studies take relationship duration into account (Ahrens et al.,

2008). Other studies consider nonrelatives such as teachers as mentors as mentors (Gastic & Johnson, 2009; Shanahan et al., 2007).

One of the most common types of mentoring relationships is adolescents' extended families; grandparents and siblings of parents could become an influential adult for adolescents (Erickson et al., 2009; Hagler & Rhodes, 2018; McDonald et al., 2007b). Relative mentors may be more willing to provide help to the mentee because they are in a close and enduring relationship. However, their help may not be as effective in promoting socioeconomic outcomes because the information within a closely knit network might be is redundant (Granovetter, 1974). Among Asian immigrant families, relatives also serve important roles because they share ethnic languages and Asian immigrant families may show stronger bonds within family (Blumenberg, 2008; Yeh et al., 2006). However, Asian American adolescents' access to their relatives will depend on proximity – access may prove difficult if immigrant relatives remain in the home country. On the other hand, immigrant families may live in close proximity to other family members if multiple generations have immigrated together using the family invitation immigration program (C. Lee, 2015).

Recently, the mentoring literature also sheds lights on peer mentoring relationships. Peer mentor refers to a type of mentor that similarly provide mentees with advice, guidance, and role model but they are often a similar age or position as a mentee (Bynum, 2015; Castleman & Page, 2015). Based on those literature, this study includes peer mentors as a type of informal mentor. In medical literature, patients without professional backgrounds are referred to as peer mentors and they provide information on successful management of chronic illnesses such as diabetes (Heisler, 2007). In the adolescent literature, siblings, friends, romantic partner, and classmates are the most common relationships in which peer mentoring develops. Peer mentoring

relationship is particularly important to consider in research on adolescence because peer influence becomes particularly important in adolescence (Crosnoe, 2000) and numerous advantages of peer mentoring has been found in psychosocial outcomes and professional growth (Bynum, 2015). Qualitative studies with Asian American adolescents consistently reported that their relationships with their peers made significant impact in their life in positive ways (J. K. Kim & Gasman, 2011; Palmer & Maramba, 2015).

Research consistently reports the importance of informal peer mentors among Asian Americans in particular. Asian Americans reported that their siblings, cousins, and friends who had already gone through certain processes served as important mentors for them when they applied for college and navigated through college (J. K. Kim & Gasman, 2011; Palmer & Maramba, 2015). Asian American adolescents report their peers as important sources of information because their parents are unavailable to provide such information about the American educational system. Because their parents do not have experience in secondary and higher education in the United States, Asian American adolescents and college students are inclined to rely on peers who are a few more years ahead (Palmer & Maramba, 2015) and many report that those who help are critical in their success. Therefore, it is important to include peer mentors as one important type of mentoring relationship when studying the mentoring relationship of Asian American adolescents.

Current Study

This study quantitatively examines whether Asian Americans experience different access to and impact of mentoring relationships in comparison to white Americans. In addition, I examined differences between 1.5 generation and second generation Asian Americans. Beyond any mentoring relationships, I examined whether Asian Americans are more or less likely to

have specific types of mentoring relationship in comparison to white Americans and the impacts of the specific types of mentoring relationships on socioeconomic status. To reflect the heterogeneity by generation and gender, 1.5- and second-generation Asian Americans are respectively compared to white Americans and analyses were conducted in separate models by gender. Comparison between 1.5 generation and second generation is also conducted.

Based on the inequality in social capital theory, I hypothesize that Asian Americans are less likely to have a mentoring relationship and the mentoring relationships that they do have are not as effective in promoting socioeconomic mobilities among Asian Americans as among white Americans. It is hypothesized that second generation Asian Americans have a higher access to mentoring relationships than white Americans. Regarding the access to and impact of specific types of mentoring relationship, this study takes an exploratory perspective without specific hypotheses. However, some empirical qualitative studies reported that Asian Americans value peer mentors. Furthermore, because of their status as immigrants, Asian Americans may be less likely to have a family mentor and adult family mentor. This study is the first quantitative study that examines the likelihood of having a mentoring relationship and the specific type of mentoring relationship among Asian American adolescents.

Methods

Measures

Race and generational groups. This study categorizes groups considering both race and immigration status. The reference group is third and plus generation white Americans whose parents were born in the United States. Those with Hispanic heritage are not included as white Americans. Asian Americans are grouped in three categories based on immigration history: (1) those born outside of the United States, 1.5 generation Asian Americans; (2) those born in the

United States and either of their parents are born outside of the United States, second generation Asian Americans; (3) those whose parents were born in the United States, third and plus generation Asian Americans.

Socioeconomic status. Four socioeconomic status indicators were used as dependent variables: earnings, supervisory position, subjective social status (SSS), and educational attainment. The operationalization is included in the method chapter of this study.

Mentoring relationships. Whether the respondents had any mentoring relationship is recorded 1 and all other were recorded 0.

Types of mentors. Five types of mentors were examined: adult mentor, peer mentor, teacher mentor, relative mentor. The group with specific type of mentor is recorded 1 and the reference group is recorded 0. The reference group of the types of mentors varies depending on the analysis model because of the purpose of the question. When examining the likelihood of having certain type of mentor over other types of mentors in regression models, the reference group is those who have other four types of mentors. Those who do not have any mentor were recorded as missing and was not considered in the analysis model. In the models that tests the treatment effect of having a mentor, the reference group is those who do not have any mentor.

Adult mentor Among respondents who has a mentor, those who reported that they have a mentor that is a generation or more ahead was recorded 1. **Peer mentor** Among respondents who have a mentor, those who reported that they have a peer mentor were recorded 1. The peer mentors include siblings, younger or older, friends, and spouse. **Teacher mentor** Among the respondents who reported that they have a mentor, those who reported that their mentors are teacher or guidance counselor are recorded 1. **Relative mentor** Among the respondents who reported that they have a mentor, those who reported that their mentor is one of family members is recorded 1.

Adult relative mentor Among the respondents who reported that they have a family member mentor, those who reported that their mentor is grandparents, uncle, and aunt are recorded 1 and all others were recorded 0.

Covariates. The covariates are variables related to the factors that could make the individual adolescents look a “rising star” or struggling adolescent. To account for the characteristics of Asian Americans as rising star and struggling adolescents, various covariates are necessary to include in the analysis to measure the net impact of being Asian American in likelihood of having a mentor. Covariates with asterisk+ are continuous variables. Covariates with asterisk* were recoded to binary indicators from categorical variables collapsing the categories to positive versus neutral and negative (Gowdy et al., 2020c).

Five types of covariates are included: demographic characteristics (gender, age+, and region of residence, religion), parental resources (family structure, parental educational level, and parents having met best friends’ parent*, parent-child relationship*), environments (school types, perception on whether neighborhood look out for each other, neighborhood low income rate), individual characteristics (GPA+, interviewers’ rating of personality attractiveness*, happy in school*, see friends three or more times a week*, and think they will likely go to college), and proportion+ of Asian population in the neighborhood. Region of residence has four categories, i.e., West, South, Midwest, and Northeast. Religion is categorized into four categories, none, Protestant, Catholic, and others. Parental education has three categories of high school graduation and lower, some college education, and college degree.

Analytic Plan

The proportions of having any mentor and having specific types of mentors, i.e., adult mentor, peer mentor, teacher mentor, relative mentor, and adult relative mentor are analyzed by

immigration generation and gender. Four race and generation groups are included in the bivariate analyses: third and plus white Americans, 1.5 generation Asian Americans, second generation Asian Americans, and third generation and plus Asian Americans. Whether proportions of Asian American groups are different from that of white Americans is analyzed using Chi-square in the bivariate relations.

In the multivariate analysis, the differences in having any type of mentor and specific types of mentors are examined using logistic regression models. Only white Americans, 1.5- and second-generation Asian Americans were included. Third generation Asian Americans are not included in the multivariate models because of small sample size. The analysis is conducted with the combined sample of both boys and girls, and separately by gender. In examining the gap between white Americans and Asian Americans, control variables are included stepwise to understand the changes in the gap as additional control variables are included in the model. In total four models are investigated, and each model has an additional block of covariates. The blocks are individual demographic information, environmental level factors, individual characteristics, and Asian American population density of neighborhood. Asian Americans of two generations, i.e., 1.5 generation and second generation, are compared using logistic regression models.

Table 4.1. Model specification

Variable Block	Model 1	Model 2	Model 3	Model 4
Demographic	o	o	o	o
Parental resource		o	o	o
School and neighborhood		o	o	o
Individual Characteristics			o	o
Asian Population Density				o

The effects of mentoring relationships are examined using propensity score inverse probability treatment weighting (IPTW) to measure the average treatment effect of having a mentoring relationship in comparison to not having any mentor during adolescence with the consideration of selection bias into each treatment group (Hong, 2015). Propensity score is calculated using logistic regression with all the covariates used in Model 4 which includes all covariates including Asian population density. After calculating the propensity score, common support was identified by comparing the distribution of the propensity score between the reference and treatment groups. The common support is the range of propensity score within which the two distributions of propensity score overlap. When identifying the range of propensity scores to include in the control group, the range is wider than the actual propensity score in the treatment groups by 20% of the standard deviation of each logit score in order to take into account prediction error. Individuals in both groups that do not have overlapping propensity score were dropped from the following analyses and this study can claim causal inferences with the limit of those with overlapping propensity scores. By employing IPTW, this study weights to transform the group composition and the control group composition such that the probability of treatment assignment in the weighted sample would resemble that in a hypothetical randomized design, which enables casual inferences of the interpretation. Before calculating the treatment effect, balance between control group and treatment groups are checked using standardized mean differences and the variances after weighting. The threshold for balance is standardized differences below 0.25 and variance fall between 0.5 and 2.

Results

Descriptive Result

The first column of Table 1 shows descriptive differences in the rates of having any mentor among different immigration and generation groups by gender. The asterisks in the table show whether the proportions of each group of Asian Americans is significantly different from that of white Americans. Compared to male white Americans, 1.5 generation male and female AAs are significantly less likely to have a mentor. Among male individuals, 78% of third and plus generation white Americans reported that they have mentor, 68% of 1.5 generation AAs, 74% of 2nd and 3rd generation AAs reported that they have a mentor. Among all female individuals, 81% of white Americans, 74% of 1.5 generation, 80% of second-generation, and 79% of third generation Asian Americans reported that they had a mentor.

The second to the rest of columns of Table 1 presents descriptive differences in the rate of having specific types of mentors among those who reported that they have a mentor by gender. Among male groups, the proportions of having a family mentor and adult family mentor is not significantly different, although second generation are less likely to have an adult family mentor at a marginal level. Male second generation group is less likely to have an adult mentor and more likely to have a peer mentor by 13% and male 1.5 generation group is more likely to have a teacher mentor by 11% than white American counterparts.

Among female group, 1.5 generation and third generation Asian Americans are more likely to have a family mentor. Female Asian Americans are equally likely to have an adult and teacher mentor as white Americans. Female Asian Americans are less likely to have an adult family mentor and more likely to have a peer mentor.

Table 4.2. Descriptive differences in having a mentor between white Americans and Asian Americans

	All Mentor	Family mentor	Adult mentor	Teacher mentor	Adult Family Mentor	Peer mentor
white American (n=7,113 / 5,681)	80%	31%	67%	21%	19%	33%
1.5 Generation AA (n=317 / 225)	71%***	34%	63%	29%**	12%*	37%
2 nd Generation AA (n=284 / 219)	77%	31%	57%**	23%	12%*	43%**
3 rd generation AA (n=158 / 121)	77%	39%+	64%	19%	24%	36%
Total (n=7,872 / 6,246)	79%	31%	66%	21%	19%	34%
Male						
white American (n=3,276 / 2,570)	78%	28%	68%	19%	17%	32%
1.5 Generation AA (n=152 / 100)	68%**	28%	70%	30%**	13%	30%
2 nd Generation AA (n=156 / 116)	74%	30%	55%**	26%+	10%+	45%**
3 rd generation AA (n=78 / 58)	74%	33%	57%+	17%	17%	43%+
Total (n=3,662 / 2,847)	78%	29%	67%	20%	16%	33%
Female						
white American (n=3,837 / 3,111)	81%	33%	66%	22%	21%	34%
1.5 Generation AA (n=165 / 122)	74%*	39%*	57%	28%	12%*	43%*
2 nd Generation AA (n=128 / 103)	80%	32%	59%	19%	15%	41%
3 rd generation AA (n=80 / 63)	79%	44%*	71%	21%	31%+	29%
Total (n=4,210 / 3,399)	81%	33%	65%	22%	20%	35%

Multivariate Results

Table 3 presents multivariate comparisons between white Americans and 1.5 and second generation Asian Americans. Because the models used logistic regression, odds ratios and standard errors are presented. The first panel shows analyses for the full sample and the second and the third panel show male and female sample results, respectively. Table 4 shows comparisons between 1.5- and second-generation Asian Americans. In both tables, all four models are presented showing how odds ratios change as additional blocks of covariates are added in the model.

Comparison between white Americans and Asian Americans. The results are presented in Tables 4.3. and 4.4.

Any mentor. Asian American adolescents are less likely to have a mentor than white Americans regardless of their generation. In the model only with the demographic information (model 1), 1.5 generations are 47% and 2nd generations are 30% less likely to have a mentor than equivalent white American. The gap between white Americans and Asian Americans becomes larger as more covariates are added up to model 3 to by 52% and 38% and the gap decreases slightly in model 4 that additional includes racial composition in the neighborhood to model 3. Gaps between white Americans and Asian American consistently decreased in the gender specific models.

In model 1 of male group, 1.5 generation AA men are less likely to have a mentor by 46% and 2nd generation AA men are 29% less likely to have a mentor, but it is only marginally significant. The gap become larger as covariates are added through model 2 and 3. The coefficients of both generations become significant in model 3 and the gap is 51% and 36 % respectively for 1.5- and second generation. In model 4, the gap shrinks to 46% but still significant at 99% level among 1.5 generation. However, the gap between white American and second generation Asian American became not significant in model 4 that additionally control the racial composition of neighborhood. Among females, the gap which is 47% is only significant among 1.5 generation in model 1 and not among second generation female Asian Americans. The gaps become larger as covariates are included from model 1 through model 4. In model 3, 1.5 generation female Asian Americans are 53% less likely and second generation female Asian Americans are 40% less likely to have a mentoring relationship than white Americans. In model 4, the differences become larger to 57% and 45%, respectively.

Adult mentor. In combined group of male and female, second-generation Asians Americans are less likely to have an adult mentor by 32%, 30% and 34% respectively in model 1

through 3. The coefficient become not significant when the Asian American population density is further controlled in model 4. Unlike second-generation, 1.5 generation Asian Americans do not show lower likelihood of having an adult mentor. The models with male Asian Americans show the similar result with models with full sample. The gaps are 39%, 35%, and 38% among second generation respectively. 1.5 generation female Asian Americans are 33% less likely to have an adult mentor and 2nd generation Asian Americans are not significantly less likely to have a mentor than white female Asian Americans.

Peer mentor. In combined and male only sample, second-generation Asian Americans are more likely to have a peer mentor than white Americans in model 1 through 3. However, the significance disappears in model 4. In model 3 of female only model, female 1.5 generation are 50% more likely to have a peer mentor than white women. The difference between second generation female Asian Americans and white Americans is not significant.

Teacher mentor. In all models, 1.5 generation Asian American men, women, and together are more likely to have a teacher mentor than white Americans. The associations become weaker when individual characteristics are additionally controlled (model 3) in all three samples and the significance disappears among 1.5 generation women. However, when the proportion of Asian Americans in the neighborhood is added (model 4), the association become even stronger and Asian Americans are almost twice as likely to have a teacher mentor than white Americans. Second generation Asian Americans are not more or less likely to have a teacher mentor than white Americans except in the model 1 of males. In the model, second generation Asian American men are about 60% more likely to have a teacher mentor than their counterpart male white Americans.

Table 4.3. Differences in odds ratios of having any mentor and specific types of mentors between white Americans and generations of Asian Americans

Model	All				Male				Female			
	1	2	3	4	1	2	3	4	1	2	3	4
Any Mentor												
1.5 gen	0.53*** (0.07)	0.53*** (0.08)	0.48*** (0.07)	0.49*** (0.08)	0.54** (0.10)	0.53** (0.11)	0.49*** (0.10)	0.54** (0.12)	0.53** (0.11)	0.54** (0.11)	0.47*** (0.10)	0.43*** (0.10)
2 nd gen	0.70* (0.11)	0.66** (0.10)	0.62** (0.10)	0.63** (0.11)	0.71+ (0.14)	0.68+ (0.14)	0.64* (0.14)	0.72 (0.17)	0.69 (0.17)	0.65+ (0.16)	0.60* (0.15)	0.55* (0.15)
Adult Mentor												
1.5 gen	0.91 (0.14)	0.97 (0.15)	0.88 (0.13)	1.03 (0.18)	1.24 (0.28)	1.38 (0.33)	1.26 (0.30)	1.47 (0.38)	0.72+ (0.14)	0.74 (0.15)	0.67* (0.14)	0.79 (0.18)
2 nd gen	0.68** (0.10)	0.70* (0.10)	0.66** (0.10)	0.78 (0.13)	0.61* (0.12)	0.65* (0.13)	0.62* (0.13)	0.72 (0.17)	0.77 (0.17)	0.76 (0.17)	0.73 (0.16)	0.86 (0.21)
Peer mentor												
1.5 gen	1.10 (0.16)	1.03 (0.16)	1.14 (0.18)	0.97 (0.17)	0.81 (0.19)	0.72 (0.17)	0.79 (0.19)	0.68 (0.18)	1.39+ (0.28)	1.35 (0.275)	1.50* (0.311)	1.27 (0.293)
2 nd gen	1.47** (0.22)	1.43* (0.21)	1.51** (0.23)	1.28 (0.22)	1.65* (0.33)	1.55* (0.32)	1.63* (0.34)	1.39 (0.33)	1.30 (0.28)	1.31 (0.29)	1.38 (0.30)	1.17 (0.28)
Teacher Mentor												
1.5 gen	1.81*** (0.29)	1.82*** (0.30)	1.62** (0.27)	1.97*** (0.37)	2.15** (0.51)	2.18** (0.53)	1.91** (0.47)	1.97* (0.53)	1.56* (0.35)	1.57* (0.36)	1.41 (0.32)	2.00** (0.52)
2 nd gen	1.25 (0.21)	1.21 (0.21)	1.13 (0.20)	1.36 (0.26)	1.58* (0.36)	1.56+ (0.37)	1.41 (0.33)	1.45 (0.38)	0.93 (0.25)	0.90 (0.24)	0.88 (0.24)	1.21 (0.35)
Relative mentor												
1.5 gen	1.05 (0.16)	1.07 (0.17)	1.10 (0.17)	1.10 (0.19)	0.96 (0.23)	0.96 (0.23)	1.00 (0.24)	1.00 (0.26)	1.14 (0.23)	1.17 (0.24)	1.21 (0.26)	1.22 (0.29)
2 nd gen	1.00 (0.16)	1.01 (0.16)	1.00 (0.16)	1.00 (0.18)	1.04 (0.23)	1.00 (0.22)	1.01 (0.23)	1.01 (0.26)	0.96 (0.22)	1.02 (0.23)	0.99 (0.23)	1.00 (0.26)
Adult Relative Mentor												
1.5 gen	0.62* (0.14)	0.63* (0.14)	0.64* (0.14)	0.64+ (0.15)	0.71 (0.23)	0.72 (0.23)	0.73 (0.24)	0.77 (0.27)	0.55* (0.17)	0.56+ (0.17)	0.57+ (0.18)	0.56+ (0.19)
2 nd gen	0.62* (0.14)	0.64* (0.14)	0.62* (0.14)	0.62+ (0.156)	0.58+ (0.19)	0.58+ (0.19)	0.59 (0.20)	0.63 (0.22)	0.65 (0.20)	0.69 (0.2)	0.64 (0.20)	0.62 (0.22)

Relative mentor. Male and female Asian American adolescents are not less or more likely to have a relative as a mentor than white Americans regardless of model. However, among those with a family member as a mentor, Asian Americans are less likely to have an adult relative mentor. In combined sample of male and female, 1.5 generation and second-generation Asians Americans are less likely to have an adult relative by almost 40% in models 1 through 3. In

model 4, the coefficients are only marginally significant. In gender specific models, only female's model 1 show significant differences and the gap is 44% and the significance disappears as additional covariates are added.

Comparisons between 1.5 generation and 2nd generation Asian Americans. Among both male and female Asian Americans, 1.5 generation and second generation are equally likely to have a mentor. However, the two generational groups have different types of mentors, and the difference is prominent among male Asian Americans. Second generation male Asian Americans are less likely to have an adult mentor and more likely to have a peer mentor than their 1.5 generation counterparts in model one through three. The gap is not significant when the Asian American population density is considered in the model 4.

Table 4.4. Differences in likelihood of having any mentor and specific types of mentors between 1.5 and 2nd generations of Asian Americans

Model	All				Male				Female			
	1	2	3	4	1	2	3	4	1	2	3	4
Any Mentor												
2 nd gen	1.31 (0.25)	1.25 (0.24)	1.29 (0.25)	1.29 (0.25)	1.31 (0.34)	1.27 (0.33)	1.30 (0.35)	1.34 (0.36)	1.30 (0.38)	1.22 (0.36)	1.28 (0.38)	1.28 (0.38)
Adult Mentor												
2 nd gen	0.68** (0.10)	0.70* (0.10)	0.66** (0.10)	0.78 (0.13)	0.61* (0.12)	0.65* (0.13)	0.62* (0.13)	0.720 (0.17)	0.768 (0.17)	0.762 (0.17)	0.727 (0.16)	0.856 (0.21)
Peer Mentor												
2 nd gen	1.47** (0.22)	1.43* (0.21)	1.51** (0.23)	1.28 (0.22)	1.65* (0.33)	1.55* (0.32)	1.63* (0.34)	1.39 (0.33)	1.30 (0.28)	1.31 (0.29)	1.38 (0.30)	1.17 (0.28)
Teacher Mentor												
2 nd gen	0.69+ (0.15)	0.66+ (0.15)	0.70 (0.16)	0.69+ (0.16)	0.74 (0.23)	0.72 (0.22)	0.74 (0.23)	0.74 (0.23)	0.60 (0.19)	0.57+ (0.19)	0.63 (0.20)	0.61 (0.20)
Relative Mentor												
2 nd gen	0.95 (0.20)	0.95 (0.20)	0.91 (0.19)	0.91 (0.19)	1.08 (0.33)	1.05 (0.32)	1.01 (0.31)	1.02 (0.31)	0.84 (0.24)	0.87 (0.25)	0.83 (0.24)	0.82 (0.24)
Adult Relative Mentor												
2 nd gen	1.00 (0.30)	1.02 (0.30)	0.97 (0.29)	0.97 (0.29)	0.82 (0.36)	0.81 (0.35)	0.82 (0.36)	0.82 (0.36)	1.17 (0.47)	1.23 (0.50)	1.12 (0.46)	1.12 (0.46)

Also, second generation female Asian Americans are less likely to have a teacher mentor at a marginally significant level than their 1.5 generation counterparts in model 2. The marginal significance disappears when individual characteristics are further controlled. Among those who have mentors, 1.5 generation and second generation Asian Americans are equally likely to have a relative mentor and an adult relative mentor.

Impact of Mentoring Relationship on Socioeconomic Status by Race and Immigrational Generation Group and Gender

Table 4.5. shows the impacts of having a mentoring relationship on socioeconomic status among male participants by race and immigration group. Among white American men, having *any mentor* in adolescence is associated with both higher educational attainment and being in a higher supervisory position. It is not related to earning more or reporting higher subjective SES. At a marginal significance level, having a mentor is related to being in higher supervisory position among second generation Asian American men.

Among white Americans, having all types of mentors except for a teacher mentor is related to being in a higher supervisory position and having an adult mentor and teacher mentor is related to having higher educational attainment. All types of mentoring relationship do not have significant impact on earning and subjective SES. Among 1.5 generation Asian American men, having a peer mentor is marginally significantly related to higher educational attainment. Having a relative mentor is related to higher subjective SES. Among second generation Asian Americans, having a relative mentor is significantly related to a higher supervisory position. At a marginally significant level, having a peer mentor is related to subjective SES and having a teacher mentor is related to higher supervisory position.

Table 4.5. Impact of having a mentor on socioeconomic status indicators among male adolescents

	white		1.5 generation		2 nd generation	
	Coef. (SE)	Obs.	Coef. (SE)	Obs.	Coef. (SE)	Obs.
Any Mentor						
Earning Supervisory Position	0.03 (0.04)	2276	0.20 (0.12)	109	-0.13 (0.17)	108
Subjective SES	0.08* (0.04)	2383	0.09 (0.12)	111	0.22+ (0.12)	114
Education	0.10 (0.09)	2391	0.22 (0.34)	117	-0.51 (0.34)	117
	0.36*** (0.10)	2380	0.80 (0.62)	116	0.14 (0.33)	117
Adult Mentor						
Earning Supervisory Position	0.04 (0.04)	1710	0.07 (0.14)	86		
Subjective SES	0.08* (0.04)	2383	0.10 (0.12)	88		
Education	0.13 (0.09)	2391	0.05 (0.42)	93		
	0.51*** (0.11)	2380	0.56 (0.78)	92		
Peer Mentor						
Earning Supervisory Position	0.03 (0.05)	1039	0.22 (0.30)	53	0.04 (0.21)	61
Subjective SES	0.08* (0.04)	1794	0.35 (0.96)	56	0.24 (0.15)	65
Education	0.00 (0.10)	1802	0.81 (1.21)	58	-0.71+ (0.42)	68
	0.04 (0.12)	1792	1.27+ (0.75)	57	-0.04 (0.42)	68
Relative Mentor						
Earning Supervisory Position	0.04 (0.05)	980			-0.03 (0.31)	43
Subjective SES	0.09* (0.04)	1091	-0.12 (0.24)	28	0.57** (0.20)	47
Education	0.01 (0.10)	1091	0.94*** (0.26)	45	-0.53 (0.54)	49
	0.10 (0.12)	1086	-0.89 (1.90)	46	-0.65 (0.57)	49
Adult Relative Mentor						
Earning Supervisory Position	0.05 (0.06)	771				
Subjective SES	0.11* (0.05)	1033			0.04 (0.85)	21
Education	0.13 (0.12)	1036			-1.43 (1.21)	22
	0.20 (0.14)	1027			-1.57 (1.09)	22
Teacher Mentor						
Earning Supervisory Position	-0.01 (0.06)	823	-0.32 (0.24)	50	-0.18 (0.26)	47
Subjective SES	0.03 (0.05)	814	-0.14 (0.25)	53	0.39+ (0.22)	53
Education	0.15 (0.12)	817	-0.45 (0.58)	55	-0.35 (0.37)	55
	1.09*** (0.14)	809	0.82 (1.04)	54	0.56 (0.62)	55

The results on impact of having an adult relative mentor among 1.5 generation AA and adult mentor among second generation AA samples is not analyzed and not presented because the propensity scores between two groups with and without the adult relative mentor were not balanced in propensity scores. It means that the two groups do not have any overlap in the propensity scores and they are two different groups in terms of likelihood of having an adult relative mentor so that the impact is not comparable.

Table 6 shows the impact of having a mentor among female adolescents by race and immigration group. Having any mentor is related to being in a higher supervisory position and more years of education among white American women. Having a mentor is not related to any of the outcomes among 1.5 generation Asian American women. The treatment effects of having a mentor could not be calculated among second generation Asian American women because the propensity scores of the two groups were significantly different even after weighting.

Among white American women, all types of mentors except for peer mentors are associated with more years of educational attainment. Having an adult mentor and peer mentor are associated with being on higher supervisory position at a marginal level. Among 1.5 generation women, having an adult mentor is related to higher educational attainment. Among second generation Asian American women, no types of mentoring relationship have impact on the socioeconomic outcomes. The propensity scores for having an adult mentor and a teacher mentor are balanced but the treatment effects are not significant.

Table 4.6. Impact of having a mentor on socioeconomic status indicators among female adolescents

	white		1.5 generation		2 nd generation	
	Coef. (SE)	Obs.	Coef. (SE)	Obs.	Coef. (SE)	Obs.
Any Mentor						
Earning Supervisory Position	0.03 (0.05)	2444	0.01 (0.25)	114		
Subjective SES	0.06* (0.03)	2809	-0.02 (0.15)	128		
Education	0.11 (0.08)	2822	-0.57 (0.39)	129		
	0.47*** (0.10)	2,813	0.68 (0.45)	129		
Adult Mentor						
Earning Supervisory Position	0.05 (0.05)	1766	-0.16 (0.18)	74	-0.43 (0.41)	57
Subjective SES	0.06+ (0.03)	2020	-0.08 (0.16)	83	-0.25 (0.52)	64
Education	0.13 (0.08)	2031	-0.53 (0.35)	83	0.73 (0.90)	66
	0.52*** (0.11)	2022	1.18* (0.43)	83	1.17 (1.06)	66
Peer Mentor						
Earning Supervisory Position	0.01 (0.06)	1118	0.06 (0.28)	65	-0.43 (0.54)	44
Subjective SES	0.06+ (0.03)	1310	-0.01 (0.18)	73	0.14 (0.27)	55
Education	0.05 (0.09)	1320	-0.58 (0.52)	74	-0.17 (0.45)	55
	0.37*** (0.11)	1312	0.24 (0.39)	74	0.67 (1.50)	55
Relative Mentor						
Earning Supervisory Position	0.04 (0.06)	1076	-0.12 (0.41)	57		
Subjective SES	0.05 (0.03)	1262	0.01 (0.20)	67		
Education	0.09 (0.09)	1269	-0.08 (0.70)	67		
	0.46*** (0.11)	1259	0.72 (0.53)	67		
Adult Relative Mentor						
Earning Supervisory Position	0.07 (0.06)	838	0.01 (0.25)	114		
Subjective SES	0.04 (0.04)	984	-0.02 (0.15)	128		
Education	0.10 (0.10)	992	-0.57 (0.39)	129		
	0.49*** (0.13)	981	0.68 (0.45)	129		
Teacher Mentor						
Earning Supervisory Position	0.05 (0.07)	905	-0.12 (0.41)	57	-0.43 (0.54)	44
Subjective SES	0.05 (0.04)	1033	0.01 (0.20)	67	0.14 (0.27)	55
Education	0.15 (0.10)	1045	-0.08 (0.75)	67	-0.17 (0.45)	55
	0.87*** (0.13)	1038	0.72 (0.53)	67	0.67 (1.50)	55

Discussion

Racial Differences in Access to Mentoring Relationship

To summarize the findings about access to mentoring relationships, (1) 1.5 generation and Asian American boys and girls are less likely to have a mentor than their white peers, (2) 1.5 generation Asian American boys and girls are more likely than their white peers to have a teacher mentor, (3) second generation boys and girls are less likely to have an adult mentor and more likely to have a peer mentor than their white peers, (4) between 1.5 generation and second generation AA, 1.5 generation are more likely to have an adult mentor while second generation are more likely to have a peer mentor, and (5) some statistical significances of relationships disappear when racial composition of neighborhood is controlled.

The findings lend some support to the hypothesis based on inequality in social capital theory. Both 1.5 and second generations of Asian Americans are less likely to have a mentor and experience adolescent mentoring relationships differently than white Americans, confirming both capital deficit and return deficit hypotheses (Lin, 2000). Even after accounting for demographic, neighborhood, and individual factors as a means of accounting for the rising star and struggling children theories (Fruht et al., 2021), Asian Americans are less likely to have any mentoring relationship than white Americans and the inequalities becomes even larger after controlling for factors related to these alternative theories. This suggests that there is an independent race/immigration effect above and beyond any effect that might result from exhibiting particularly strong or concerning characteristics, factors that might attract mentorship. This finding suggests that it might be necessary to encourage mentorship formation, perhaps by implementing a mentoring program targeting Asian American adolescents that helps them find useful mentors that can provide support, guidance, and advice.

Impacts of Mentoring Relationships among Asian Americans

To summarize the findings about the impact of mentoring relationships on economic mobility, (1) among white Americans, having a mentor and having most types of mentor is associated with being in a higher supervisory position and longer years of education and the significances do not change when racial composition is further considered in calculating the propensity scores of having a mentor, (2) among 1.5 generation AA men, having a peer mentor and relative mentor is related to higher supervisory position and SSS in young adulthood, (3) among second generation AA men, having a mentor is not related to higher outcomes except for the positive effect of relative mentor on supervisory position, (4) female 1.5 generation AAs have longer years of education if they have a mentoring relationship, and (5) among second generation AAs, balance between those who have a mentor and those who do not is not achieved.

The findings also partially support the return deficit hypothesis from inequality in social capital theory. The positive impacts of mentoring relationships on two socioeconomic outcomes, higher supervisory position and longer educational attainment, are consistently prominent among white Americans regardless of gender. On the contrary, mentoring relationships do not have as consistent and strong impacts on socioeconomic status among Asian Americans except for the positive impact shown for a relative mentor among male Asian Americans and the positive impact shown for an adult mentor among 1.5 generation female Asian Americans. This suggests that even if Asian American adolescents have a mentor, they do not benefit as much from their mentoring relationship in terms of socioeconomic mobilities.

According to the literature, there are several reasons why racial minorities may not get the same returns from their mentoring relationship as whites. Asian American adolescents may not be as skilled in leveraging the mentoring relationship to promote their job, for example by

asking for a favor, getting or giving advice to seek help in getting a better employment opportunity. A qualitative study has found that some Asian college students think asking people with authority to help with job searches would be an unfair use of their social connections against other job seekers (H. Lee & Chin, 2015). Another reason may lay in the differences in mentoring relationship quality that AAs have from that of white Americans. Asian American adolescents are likely to have an Asian mentor according to the racial homophile theory. The Asian mentor may not be in a socioeconomic position to promote AA mentee's job prospects, considering lower representation of Asian workers in managerial and executive positions (Chin, 2020). Finally, like African American workers, Asian mentors may also feel hesitant to refer other Asian Americans to their workplace for employment in fear of losing their face in case the employ that one refer does not do a good job (S. S. Smith, 2005). Beyond matching mentors to Asian American adolescents, Asian American adolescents may need culturally-relevant education regarding the utilization of social networks to promote ones' job prospects.

Although the positive impacts of mentoring relationships among Asian Americans were not as consistent as among white Americans, some mentoring relationships were significantly and positively related to on socioeconomic mobility for Asian American men and women.

Relative mentors are associated positively to subjective SES among 1.5 generation AA men and on supervisory position among second generation AA men. It is interesting that relative mentors are helpful in promoting Asian Americans' socioeconomic status while many other types of mentors are not, especially considering strength-of-tie arguments in the broader literature (Granovetter, 1973). Specifically, it is argued that while strong ties like relatives are motivated to help, the information between strong ties is likely redundant, and therefore less helpful in job advancements (Granovetter, 1973). Thus, my finding that relative mentors may be

helpful in promoting job advancements among Asian Americans runs counter to a strong-ties hypothesis, although not contrary to the ethnic enclave literature which emphasizes the labor market help provided within same-ethnic ties many of whom are relatives. It may be because of Asian culture that values family and relatives (Lew, 2007) and relative mentors of such culture are more willing to help their relative mentee. Asian American small businesses draw upon family and relative human and social capital when establishing and operating (Sanders & Nee, 1996). Relative mentors who are small business entrepreneur may provide a job to their relative mentee at a family-owned businesses. As a family member of an owner, the mentee likely to be promoted to a supervisory position and perceive themselves in higher social status while they do not have higher earnings as they work for a small business. Future research should further examine why relative mentoring relationship can be so powerful among Asian American young adults' labor market outcomes, as they were in this study.

Peer mentors have only a marginally significantly positive impact on education among 1.5 generation men when compared to those without any mentor but with the same characteristics. Many studies with immigrant adolescents and young adults reported that the advice from the older siblings and school seniors were critical for adolescents' lives (Martinez, 2013). Peer mentors are helpful, because they have recently navigated the relevant life-course stage and can provide most up-to-date information about the career development and educational system. The results quantitatively confirm that the helpfulness of peer mentors applies to foreign-born male Asian American adolescents as it does among other recently immigrated Latino population.

Types of Mentoring Relationship

The 1.5 generation Asian Americans are more likely to have a teacher mentor than white Americans. The association remains significant even in the model that includes individual characteristics including GPA, whether one has an at-risk friend, and attractiveness in personality. This may mean that being a 1.5 generation AAs can lead teachers to offer support. From students' perspectives, 1.5 generation Asian American adolescents also may seek mentors among school teacher because they are advised to be obedient and pay respect to teachers by their immigrant parents who may value Confucianism (Sue & Okazaki, 1990). From teachers' perspectives, they may reach out based on the model minority stereotype that attracts teachers to Asian American students due to their assumption that AA students perform well academically. Relatedly, because 1.5 generation Asian Americans are recent immigrants, some caring teachers may also have paid more attention to these struggling but promising children and provided mentoring relationship. These two-way interactions may have enabled higher likelihood of mentoring relationship.

Although 1.5 generation AAs are more likely to have a teacher mentor overall, the positive effect of having a teacher does not hold among Asian Americans. In general, teacher mentors are known to be very beneficial in educational performance and attainment (Gastic & Johnson, 2009; Shanahan et al., 2007) and it applies to white Americans in this study as well regardless of gender. It is unclear why having a teacher mentor is not significantly related among 1.5 and second generation Asian American men, but some potential reasons are as follow: (1) Among 1.5 generation Asian Americans, there may be other aspects that contribute to higher educational attainment such as sacrificing parents for their education and information that is shared within ethnic society (Zhou & Lee, 2017); (2) Although Asian Americans considered

some of their teachers as their mentor, their relationships were not as close as those between white students and their teacher mentors; (3) the power may be too low because of small sample size of Asian Americans studied.

Second generation Asian American men are more likely to have a peer mentor than both than 1.5 generation Asian Americans and white Americans. However, among second generation Asian American men, peer mentors do not have significant positive impact on outcomes. Rather, those who reported having a peer mentor show even lower subjective socioeconomic at marginal level status than that of those who do not have any mentor. Peer mentors of second generation Asian American men are easily available mentor but not as effective mentor. Although peers can be very good mentors (Martinez, 2013), peer mentors may not be the best option for second generation Asian Americas men in promoting SES. This study asked participants to name one adult who was the most influential in their life instead of listing everyone who was helpful for the respondents. To this question, reporting a peer as the most important adult may mean there were no other as helpful and influential adults in the adolescent's life as the peer mentor.

Contrary to the hypothesized expectation, Asian Americans are not less likely to have a family member mentor than white Americans. I had hypothesized that Asian Americans are less likely to have a family member mentor because they would have fewer extended family members in the United States. It could be that while Asian Americans may have fewer family members beyond the nuclear unit, they have closer relationships with those extended family members. Moreover, due to the age hierarchy among siblings and cousins in Asian culture, older siblings and cousins may be expected to serve as mentors (Pyke, 2005). Descriptive results show that, many Asian American participants did report siblings and cousins as their mentor.

Asian Density in the Neighborhood

Asian density within a neighborhood plays a very important role in determining access to a mentoring relationship especially among second generation Asian Americans. When Asian population density is additionally considered, significance disappears in differences between white American men and second-generation Asian American men in the likelihood of having any mentor and an adult mentor. Furthermore, after controlling for Asian population density, second generation Asian American men are not significantly more likely to have a peer mentor either. As hypothesized, higher Asian population density in a neighborhood may increase the number of potential Asian mentors and have non-Asian more willing to become a mentor to a second generation Asian American men. The availability of an Asian mentor would naturally increase as the number of Asian Americans increases, and the lowered prejudice against Asian Americans due to more frequent contact may indeed facilitate relationships between an Asian adolescent and a non-Asian mentor.

APPENDIX

Appendix Table 4.1. Comparisons between those with and without any mentor

	All		Male		Female	
	No (n=1,592)	Yes (n=6,139)	No (n=798)	Yes (n=2,802)	No (n=794)	Yes (n=3,306)
Demographic Information						
Age	21.98 (1.78)	21.85 (1.76)	22.08 (1.78)	21.96 (1.74)	21.87 (1.78)	21.76 (1.76)
Region						
West	18.47	21.85	20.68	21.34	16.25	22.27
Midwest	31.78	34.64	32.58	34.19	30.98	35.01
South	35.93	29.54	33.96	31.01	37.91	28.30
Northeast	13.82	13.98	12.78	13.45	14.86	14.42
Religion						
None	26.26	21.12	29.57	23.29	22.93	19.30
Protestant	27.31	31.22	24.05	29.54	30.58	32.63
Catholic	19.19	19.93	18.90	20.58	19.48	19.39
Other	26.69	27.55	27.12	26.41	26.26	28.51
Parental Resources						
Parent Education						
High school graduation or lower	33.03	24.88	31.29	23.39	34.77	26.13
Some college	40.16	39.47	39.63	40.08	40.69	38.95
College graduate or higher	26.81	35.65	29.08	36.53	24.54	34.92
Parents having met best friend's parent	71.22	76.42	70.67	76.29	71.76	76.52
Have a good relationship with father	63.47	65.85	66.38	70.46	60.54	61.99
School and Neighborhood Environment						
Hang out with friends more than 3 times/week	70.48	69.42	72.64	70.74	68.31	68.31
Neighbors look out for each other	66.48	74.35	64.29	74.50	68.68	74.23
Population with low income	0.17 (0.12)	0.15 (0.11)	0.17 (0.11)	0.15 (0.11)	0.18 (0.12)	0.15 (0.11)
Individual Characteristics						
GPA	2.72 (0.81)	2.94 (0.76)	2.61 (0.82)	2.83 (0.76)	2.83 (0.78)	3.03 (0.75)
Think I will attend college	69.86	80.10	64.66	76.08	75.09	83.47
Personality attractiveness rated by interviewer	47.54	54.08	40.37	47.73	54.75	59.40
Feel happy at school	60.64	66.44	60.98	68.21	60.30	64.96

CHAPTER 5: RACIAL DISPARITIES IN ACCESS AND IMPACT OF FRIENDSHIP NETWORKS

Introduction

Friendship is an important contributor to positive health and wellbeing. Friends can bring laughter and joy, and they can help people make it through difficult times. In addition to providing coping capital and sustaining emotional wellbeing, friends can also provide mobility capital. They can connect people to resources such as job leads and they can use their influence to help make advancements in the labor market.

Given a workplace culture that value credits from reliable references, the social capital within friendship networks can be an important influence on job-related outcomes. Friends might provide informal referrals, they may connect someone to a formal recruitment system, and they offer support and guidance during the recruiting process. Depending on the characteristics of individuals' social networks, the social capital embedded within the networks may be different in quantity and quality. Ultimately, these characteristics may determine whether friendship networks support mobility and increase socioeconomic status. According to Lin's theory of inequality in social capital, we might expect that racial minorities have lower levels of social capital (capital deficit) within their friendship networks, and their social capital may therefore be less impactful (return deficit).

No studies to date have tested Lin's framework by strictly focusing on the friendship networks of Asian American or the impacts friendship networks have on social and economic mobilities. Considering the particular positionality of Asian Americans in the racial hierarchies of the United States, it may well be that Asian Americans indeed benefit from the social capital garnered through their friendship networks and that, in turn, this social capital contributes to a

rise in their socioeconomic status. It is also possible, of course, that friendships do not serve this function of social capital accumulation for Asian Americans and may have no effect on mobility outcomes in the labor market. Friendship networks may also be associated to negative mobility outcomes, as when, for instance, friendship networks bring individuals into social circles that do not value academic achievement and engage in delinquency behavior. This negative role of friendship networks has been demonstrated in some studies of Asian American youths (Chin, 2020; Iwamoto et al., 2007; T. E. Kim & Goto, 2000).

To better understand the friendship networks of Asian American adolescents and young adults, these networks and their characteristics and impact on the socioeconomic outcomes of interest to this dissertation will be compared to those of white Americans. Before providing the current study's methods and results, in the following literature review, studies regarding the impact of friendship networks on socioeconomic status are reviewed.

Literature Review

Relationship between Socioeconomic Outcomes and Friendship

To date, many studies on the role of friendship in the lives of adolescents and young adults have focused on the potential of friends to negatively influence youth and young adults. For example, studies show that adolescents with a higher number of friends who are involved in risky behaviors—such as smoking, substance use, suicidal behavior, and sexual activities—are more likely to engage in those same risky behaviors (Jeon & Goodson, 2016; Schaefer, 2018). However, a network of close friends can also be a source of positive social capital for adolescents and young adults, and function to promote eventual increases in socioeconomic status (SES) by improving educational attainment and job-related outcomes (Granovetter, 1973; Ioannides & Datcher Loury, 2004). Close friends might be helpful in promoting SES by

providing the practical and emotional supports often required for success during schooling and in the labor market. For example, they can provide information about job openings, refer one another for positions, help sustain each other during difficulties in job and educational programs, and encourage each other to make positive life changes throughout the crucial stages of development into adulthood (Pettit et al., 2011; Pinkston, 2012).

Studies of friendship networks have looked at a range of factors when examining the degree to which these friendship networks elevate socioeconomic status, with the *number* of friends and *racial homophily* of the friendship networks receiving the most attention.

Numerically, more friends are thought to mean, in most cases, more total, accumulated social capital through their ability to increase the amount of information and support available (Pettit et al., 2011). Studies of this sort have shown, for example, that the wages of Mexican migrant workers rise the greater the number of friends they have in the United States prior to arrival, regardless of the immigration status (Amuedo-Dorantes & Mundra, 2007). Likewise, the number of friends and the position within the friendship network have been shown to improve school performance for all students (Calvó-Armengol et al., 2009).

These empirical studies on the effect of network size are limited. First, many studies only looked at the number of perceived friends rather than focusing on whether an individual is viewed as a friend by others. This reciprocal aspect of conceptualizing friendship is significant because a perceived friend of “ego” may not share useful information or otherwise support ego if the perceived friend does not reciprocate the view that ego is indeed a friend. While the number of perceived friends presents how an ego views others and perhaps how sociable a person is at school (Kamis & Copeland, 2020), the number of nominating friends (that is, how others perceive ego) indicates how popular a person is as a friend to other schoolmates (J. Kim & Park,

2022). Each measures distinct dimension of friendship networks during adolescence and also is related to various behavioral outcome differently (Kamis & Copeland, 2020). Sociable adolescents are able to build and sustain friendship with others. Popular adolescents as determined by friends' nomination have been found to occupy social prestige, and tend to be more affiliative, helpful, academically engaged, and influential in their peer groups. On the other hand, popular adolescents are sometimes not well-liked by their friends and these children are sometimes perceived as aggressive, stuck up, vulgar, bullies, and academically disengaged. Some literature refers to this type of popularity as "populistic" (De Bruyn & Cillessen, 2006). In this study, the first type of popularity is studied because it is determined by friends' nomination rather than children's perception about popularity. While sociability (i.e., ego's perceived friends) shows strong association with mental health outcomes (Ho, 2016), popularity (i.e., nominated friends) has been found to be associated with positive outcomes in young adulthood (Shi & Moody, 2017).

Second, another gap in existing literature is the understudied nature of friendship characteristics in Asian American youth and young adults. Research has shown that American workers and workers in Poland with prolonged relationships with friends from high school show later earnings impacts in the labor market (Galeotti & Mueller, 2005; Słomczynski & Tomescu-Dubrow, 2005). But Asian American networks are of course different from the "average" American or Polish working male and may generate quite different impacts on the SES of Asian American men and women. Moreover, these studies do not consider immigration status.

How *racial homogeneity* may contribute to social capital accumulation depends on the reasons for the racial homogeneity in a friendship network. Potential reasons for such racial homogeneity are: (1) racial segregation within a diverse society, (2) voluntary preferences of an

racial in-group, and (3) the racial uniformity of a smaller social environment (Mele, 2020; Wilson & Rodkin, 2011; Wimmer & Lewis, 2010).

Regardless of the reason for racial homogeneity, research shows that Asian American adolescents are more likely to be friends with other Asian individuals (Kiang et al., 2011; Mehra et al., 1998; Portes & Zhou, 1993). This tendency of preferring Asian individuals as friends does not decrease as immigration generations become younger, which suggests that there is no trend toward assimilation to white American culture (Cherng et al., 2014; Quillian & Campbell, 2003) and that others are less likely to initiate friendships with Asian Americans (Zhang, 2010b). As a result of these factors, Asian American adolescents are known to develop highly homogeneous friendship networks (Way et al., 2006).

Involuntary segregation within a school or neighborhood may mean that Asian American adolescents are segregated within larger network and have lower access to resources and information that would promote upward mobility in SES (McDonald, 2011). Voluntary preference for in-group friends, however, may still have a positive impact on SES if those friends provide supports that encourage mobility. Of significance may be the social position of the group within a racialized society that creates hierarchies based on ascriptive differences. It is also important to add, even if the in-group generally has more resources, a diverse network for resources may be especially important to SES mobility. At the same time, in-group friends may certainly be more helpful regardless of the total amount of resources they provide because the social capital that is provided by the in-group friends who share information readily may be then easier to activate (P. S. Li, 2004). Finally, one may be situated in an environment that is racially uniform in ways that have a complicating impact on the socioeconomic outcomes. For instance, if an individual is living in a segregated neighborhood that is ostracized by middle class

mainstream Americans, the homogeneity is likely to be detrimental to positive socioeconomic mobilities (Neckerman, 2008). However, if a child is living in a very selective environment that is racially homogeneous and is protective for the development of the children the homogeneity may not be harmful and indeed beneficial.

Asian Americans' Friendships

Race and immigration history both play an important role in the shaping of friendships during adolescence and young adulthood (Coll et al., 1996). Many studies on the friendships of such adolescents and young adults have been concerned with social isolation and small networks of friends (Cherng, 2017; Quillian & Campbell, 2003). Some research finds that Asian American adolescents tend to have smaller friendship networks due to factors that range from prejudice and discrimination, cultural bias, and language barriers (Perreira et al., 2006; Tsai, 2006; Yeh et al., 2008). Asian Americans are perceived to be left-out and lacking communication and social skills in comparison to white, Black, and Latinx Americans in these studies. Studies have also shown that Asian American adolescents interact less with the friends that they do have (Cherng, 2015; Quillian & Campbell, 2003; Way et al., 2001). In addition, low-income Asian American high school students are less likely than members of other racial minority groups to receive support from a friend when they are in need (Way et al., 2006).

The research on the characteristics of co-ethnic Asian Americans friendship networks is relatively new and few studies have focused on the impact of their characteristics on socioeconomic outcomes. Some have found that Asian Americans perform better in school when they have co-ethnic friends and are racially segregated (Medina, 2020; Ryabov, 2013) while others determined that such relationships were a bad influence on mental health outcomes and contributed to greater rates of substance abuse (Hahm et al., 2004). Although close friends

provide helpful emotional support in terms of sustaining mental health, such perceived helpfulness is thought to create a barrier to using professional mental health services among Asian Americans (S. Lee et al., 2009). Also, as much as Asian Americans are a very heterogeneous group, the co-ethnic Asian Americans friendship networks may be in other aspects such as parental socioeconomic status. Despite different socioeconomic backgrounds, AA adolescents build friendships which greatly benefit some of AA adolescents from lower socioeconomic backgrounds (J. Lee & Zhou, 2017).

Current Study

This chapter helps fill this gap in the friendship literature through an investigation into the characteristics and impacts of the friendship networks of adolescent and young adult Asian Americans. Its focus is on how friendship ties are associated with socioeconomic status. It examines: 1) whether Asian Americans have smaller or larger friendship networks than WA, 2) whether Asian Americans have more or less racially homogeneous friendship networks, 3) whether their friendship network size and homogeneity mediates different socioeconomic status indicators between AA and WA, and 4) whether nature of friendship networks determines SES in group-specific models. The examined characteristics of friendship networks is number and racial homogeneity of perceived friends and those who nominated ego as a friend during adolescence and the perceived number and homogeneity of friends during young adulthood. As was the case in previous chapters, SES is measured by educational attainment, earnings, and supervisory position, but not SSS.

This study is a case of theory testing in that it tests Lin's theory of inequality in social capital, outlined in Chapter 2. The mediation model tests the capital deficit model and the group specific model tests the returns deficit model. However, because the results from Chapter 4 (the

first empirical chapter) show that some Asian American groups gender and immigration generation do not experience a disadvantage in SES in comparison to their white American counterparts.

Based on inequality in social capital theory and the empirical studies to date, it is hypothesized that Asian American adolescents have fewer friends, and their friends are more homogeneous than their white American counterparts regardless of developmental stages (i.e., adolescent and young adult). It is also hypothesized that a higher number and homogeneity of friends leads to higher SES. In the mediation, it is hypothesized that the nature of friendship explains the differences in socioeconomic status between groups regardless of the direction of differences. In the group specific models, it is hypothesized that it is hypothesized that while higher number of friends and homogeneity is related to higher socioeconomic status among WA, it is not among AAs.

Methods

Measures

The number and racial homogeneity of perceived friends and those who nominated an ego as a friend (nominating friends) during childhood are the primary indicators of social capital in this chapter. In addition, during adulthood, perceived number of friends and racial homogeneity of perceived friends are also used as measures of social capital.

Childhood close friend networks. In the wave 1 in-school questionnaire, children were given a roster of their school and asked to nominate their friends of their same gender and opposite gender (up to five individuals in each category). Because the questionnaire is completed by most of students in school, the data has information on perceived friends who an ego nominated as friends and nominating friends who nominated the ego as a friend.

The number of perceived friends in adolescence is measured by counting the number of friends that an ego nominated as a friend regardless of gender. By the nature of the measurement, it ranges between 0 and 10. The number of nominating friends in childhood is measured by counting the number of friends that nominated the ego as a friend. The range is not capped and goes from 0 to 37.

Racial homogeneity among friends in adolescence is measured by calculating the proportion of same race individuals with the respondents among the friends. For Asian Americans, the proportion of Asian individuals is calculated, and proportion of white individuals is calculated for white Americans. Like the number of friends, perceived friends and nominating friends are measured separately resulting in two measures of proportions of same race among perceived friends and nominating friends.

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Close friends in young adulthood. In wave 4, respondents were asked “How many close friends do you have?” with the definition provided that “close friends include people whom you feel at ease with, can talk to about private matters, and can call on for help.” The options for answer were one through five (1 = “none”, 2 = “1 or 2 friends”, 3 = “3 or 5 friends”, 4 = “6 or 9 friends”, and 5 = “10 or more friends”). During young adulthood, only perceived number of friends are measured and nominating friends are not measured.

To measure the homogeneity of friends, respondents were asked what proportion participant's close friends is composed of participant's own race or other races using 7 point Likert scale (7 = "all your race", 6 = "almost all your race", 5 = "mostly your race", 4 = "about half your race", 3 = "mostly other races", 2 = "almost all other races", and 1 = "all other races").

Socioeconomic status and control variables

Socioeconomic status examined in this chapter is educational attainment, earnings, and supervisory position and control variables outlined in the previous empirical chapters were used here.

Analysis Plan

A descriptive analysis of the close friends was conducted by gender and race and immigration groups. For the descriptive analyses white Americans, 1.5 generation Asian Americans, second generation Asian Americans, and third generation Asian Americans are included.

To examine the mediating role of friendship networks, three different analyses are conducted. Whether characteristics in friendship networks are related to each of socioeconomic outcomes is examined using OLS and ordered logistic regression model by gender without considering the race and immigration history group. To examine whether being each generation of AA is related to the nature of friendship networks, structural equation model is used. Being each group of Asian American is constrained on each nature of friendship for both adolescence friendship and young adulthood friendship. Control variables are also considered even though it is not included in the diagram presenting the result (Figure 5.1.). Finally, in the regression models with main independent variable (race and immigration history group) and control

variables, nature of friendship networks is included. For each outcome, several models are examined to investigate the mediating effect of the nature of friendship networks (see Table 5.1.). The base model only includes the independent variable and covariates. Model 1-3 is about adolescence friendship networks, and model 4-6 is about young adulthood friendship networks. For educational attainment, only the base model and models 1-3 are examined. In addition to the base model, model 1 includes the numbers of friends during adolescence, and model 2 includes the homogeneity of nominating and perceived friends in adolescence. Model 3 includes both numbers and homogeneity of friendship networks during adolescence. In addition to the base model, model 4 includes number of young adulthood friends, model 5 includes the homogeneity of young adulthood friendship networks, and model 6 includes both the number and homogeneity of friendship.

Table 5.1. Model specification

Model	Base	1	2	3	4	5	6
Main predictor and covariates	O	O	O	O	O	O	O
Adolescence friendship networks							
Number of nominating friends		O		O			
Number of adolescence perceived friends		O		O			
Homogeneity of nominating friends			O	O			
Homogeneity of perceived friends			O	O			
Young adulthood friendship networks							
Number of perceived friends					O		
Homogeneity of perceived friends						O	O

In group-specific regression model, four adolescence friendship characteristics are entered together and two young adulthood friendship characteristics are entered together in respective models. Adolescence friendship networks are entered in models examining all three outcomes, i.e., education, earnings, and supervisory position, and young adulthood friendship networks characteristics are entered in models examining earnings and supervisory position.

Results

Friendship Networks Characteristics by Group

Table 1 shows descriptive characteristics of friendship networks by gender and racial and immigration generation group. During young adulthood, the number of friends is not different among groups regardless of gender. All groups reported a little higher than 3-5 and lower than 6-9 close friends, on average. Homogeneity shows that white Americans have more racially homogeneous friends reporting that their close friends are mostly white Americans. Asian Americans answer ranges from that their close friends are mostly other races to about half are your race. Among Asian Americans, as generations become younger, the close friends become less racial homogeneous in young adulthood. In all groups, females' friendship groups are slightly more racially homogeneous.

During childhood, the number of nominating friends among white American is about 5 and the number of perceived friends is also about 5 for both boys and girls though the number is slightly higher among girls. The tendency that girls have more friends is consistently true for all other groups except for the number of perceived friends among third generation Asian American girls and boys. Among 1.5 generation and second generation boys, the number of nominating friends is on average 3 and the numbers of perceived friends are 3.56 or 3.91 which are slightly higher than the number of nominating friends. Among third generation Asian American boys reported about 4 for both nominating friends and perceived friends. Among immigration generation groups of boys, the numbers of friends continuously increase as generation goes.

All generations of Asian American girls reported about 4 nominating and perceived friends, although the number varied in decimal level. In all Asian American girl groups, the number of perceived friends is larger than the number of nominating friends. Among three

immigration generations second generation Asian Americans reported the largest numbers of friends even though the number is smaller than white American girls by one person.

About 80% of white children’s friends are other white children regardless of whether it was nominating or perceived friends’ homogeneity. The homogeneity among boys and girls are the same as well. Asian Americans reported less homogeneous friendship networks during childhood. The percentage of Asian friends ranged from 44% to 68%. As generation goes, Asian American children’s friendship networks become less homogeneous racially.

Table 5.2. Friendship networks characteristics by gender and group

	Young Adulthood friendship		Adolescence Friendship			
	Number of friends	Homogeneity	Number of nominating friends	Number of perceived Friends	Homogeneity of nominating friends	Homogeneity of perceived friends
Male						
white Americans (N=3659)	3.31 (1.05)	4.92 (1.41)	4.65 (3.91)	4.65 (3.11)	0.81 (0.25)	0.80 (0.27)
1.5 Generation AA (n=238)	3.34 (1.02)	3.30 (1.89)	3.05 (2.58)	3.56 (3.01)	0.62 (0.41)	0.65 (0.40)
Second Generation AA (n=207)	3.52 (1.01)	3.23 (1.83)	3.27 (2.81)	3.91 (3.05)	0.58 (0.39)	0.61 (0.39)
Third and plus generation AA (n=89)	3.30 (1.06)	2.79 (1.74)	3.84 (2.86)	4.15 (4.29)	0.44 (0.34)	0.44 (0.37)
Female						
white Americans (N=3659)	3.18 (0.93)	4.96 (1.34)	5.28 (3.88)	5.21 (2.77)	0.80 (0.24)	0.80 (0.26)
1.5 Generation AA (n=238)	3.29 (0.93)	3.67 (1.80)	3.51 (2.51)	3.76 (2.43)	0.67 (0.40)	0.68 (0.38)
Second Generation AA (n=207)	3.40 (0.95)	3.35 (1.90)	4.20 (2.53)	4.41 (3.24)	0.57 (0.38)	0.57 (0.38)
Third and plus generation AA (n=89)	3.43 (0.99)	2.86 (1.79)	3.55 (2.47)	3.91 (3.26)	0.46 (0.32)	0.46 (0.38)

Mediation Models

Relationship between Friendship Networks and Socioeconomic Status. The relationship between the nature of adolescent and young adulthood friendship networks and their respective outcomes are here examined without considering race and the role of immigration (Table 5.3.). The nature of each friendship network is entered into the model individually with covariates.

In the friendship networks of adolescent males, the number of nominating friends is positively related to educational attainment and earnings, and the number of perceived friends is positively related to educational achievement and eventually having a higher supervisory position. Homogeneity within adolescent friendship networks is not related to any of the outcome variables. During young adulthood, the number of friends is positively related to all outcomes, and homogeneity of friends is negatively related to educational achievement and working in a higher supervisory position.

Among the adolescent friendship networks of girls, the number of nominating friends is positively related to educational attainment and earnings, and the number of perceived friends is positively related to educational attainment. Homogeneity of friends in the networks of adolescent girls is not related to any outcomes in young adulthood. The number of perceived friends during young adulthood is positively related to all outcomes, while the homogeneity of young adulthood friendships is not related to any outcomes.

Table 5.3. Relationship between nature of friendship networks and socioeconomic status before considering race and immigration history

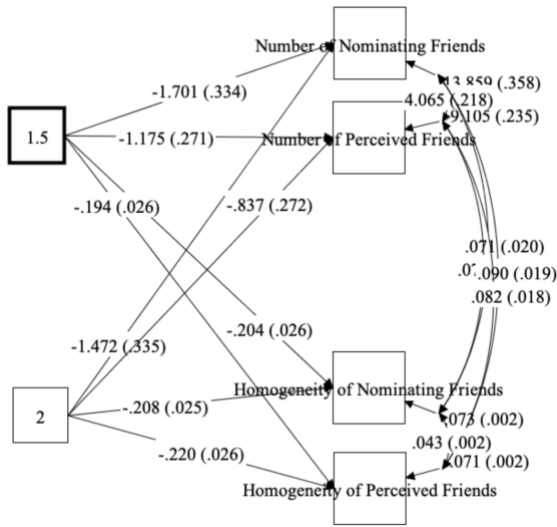
	Education	Earnings	Supervisory Position
Male			
Adolescence Friendship Networks			
Number of nominating friends	0.01* (0.00)	0.01** (0.00)	0.01 (0.01)
Number of perceived friends	0.02*** (0.01)	-0.00 (0.00)	0.02* (0.01)
Homogeneity of nominating friends	0.01 (0.05)	-0.05 (0.05)	-0.07 (0.12)
Homogeneity of perceived friends	0.04 (0.06)	-0.03 (0.06)	-0.03 (0.15)
Young adulthood Friendship Networks			
Number of perceived friends	0.07*** (0.01)	0.06*** (0.01)	0.11*** (0.03)
Homogeneity of perceived friends	-0.02* (0.01)	0.02+ (0.01)	-0.05* (0.02)
Sample size	3,040	2,774	2,913
Female			
Adolescence Friendship Network			
Number of nominating friends	0.01** (0.00)	0.01** (0.00)	0.01 (0.01)
Number of perceived friends	0.02** (0.01)	0.01 (0.01)	0.00 (0.01)
Homogeneity of nominating friends	0.02 (0.05)	0.08 (0.06)	0.10 (0.13)
Homogeneity of perceived friends	0.02 (0.06)	0.09 (0.07)	0.00 (0.15)
Young adulthood Friendship Networks			
Number of perceived friends	0.10*** (0.02)	0.09*** (0.02)	0.07* (0.04)
Homogeneity of perceived friends	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.02)
Sample size	3272	2742	3181

Differences in the nature of friendship networks by race and immigration group. As presented in the Figure 5.1., SEM results show that during adolescence, both generations of AA men and women have a lower number of nominating and perceived friends, and their friendship

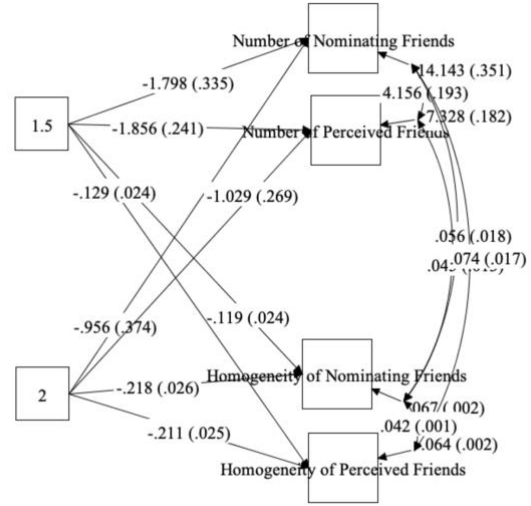
networks are less homogeneous than that of WAs. During young adulthood, both generations of AA men and women have equal number of friends and their friendship networks are less homogeneous.

Male: mediating role of the nature of friendship networks. In Table 5.4., the changes in coefficient of being 1.5 and second generation Asian American male (reference: white American male) is presented as nature of friendship is added in the model.

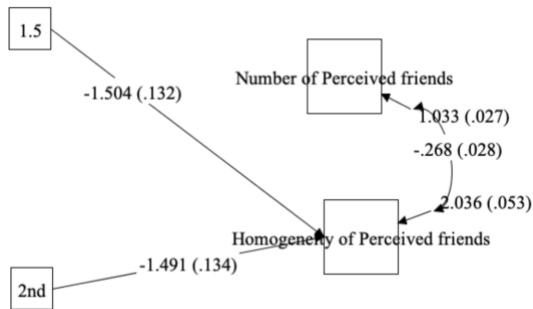
Educational attainment. In the base model, the 1.5 and second generation Asian American men show significantly higher educational attainment than white American men. In model 1, the number of friends is significantly related to outcomes in a positive way. At the same time, the positive relationship between education and being 1.5 and second generation Asian American is larger in model 1 than in base model. It means that Asian Americans show higher educational attainment regardless of the number of friends that they have. In model 2, the newly added social capital variables do not have a significant relationship with outcomes. The relationship becomes weaker among the 1.5 generation and stronger among the second generation in models 2 and 3.



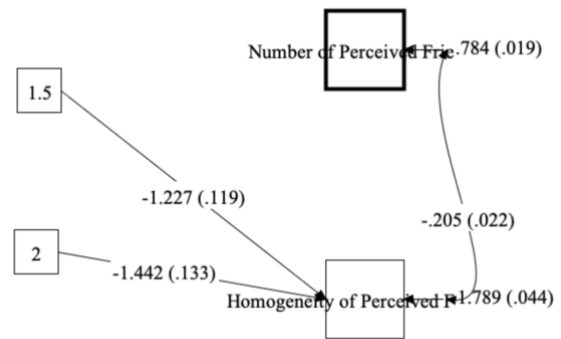
a. Nature of adolescence friendship networks among males



b. Nature of adolescence friendship networks among females



c. Nature of young adulthood friendship networks among males



d. Nature of young adulthood friendship networks among females

Figure 5.1. Structural equation model predicting the nature of friendship in adolescence and young adulthood by gender

Earnings. In the base model, second generation AA men earn less than white American men. In model 1 -3, which further consider childhood networks, the difference between white American and second generation AAs become even larger and the number and the homogeneity of nominating friends is significant and marginally significant, respectively. It means that

adolescent friendship networks do not explain the differences in the earnings between white American and second generation AA men.

In models 4-6, however, after the nature of young adulthood friendship is further, the coefficients show prominent changes. The significance of the difference between white American men and second generation AA men become significant at marginal level in model 5 and 6 and 1.5 generation Asian American men significantly earn more than white American men in model 6. The coefficient of being second generation only drops when the homogeneity of friendship is further considered (Models 5 and 6), and homogeneity in friendships is marginally significant in model 5 and significant in model 6. It means the degree of homogeneity in the networks of the second generation is related to higher earnings. The coefficient of being 1.5 generation become significant in model 6 when homogeneity if further considered. It means that 1.5 generation AA men earn equally as WA men despite not as homogeneous friendship which is helpful for higher earnings.

Supervisory positions. In the base model, the differences between white Americans and the two Asian American groups are not significant. The significances of the coefficients do not change as additional friendship characteristics are considered. In model 5, when the homogeneity of friendships in young adulthood is considered, being 1.5 generation AA is marginally related to being in a lower supervisory position or not in a supervisory position at all, and the homogeneity of friendships is negatively related to outcomes at 95% confidence interval. It means that the negative gap become even larger when friendship homogeneity is considered. Although it is only marginal significance between independent variable (1.5 generation) and dependent variable (supervisory position), it may mean that even though 1.5 generation Asian American men have heterogeneous friendships, it does not help them achieve a higher supervisory position.

Table 5.4 Changes in coefficient in being each generation of AAs among male individuals as friendship nature is additionally considered in regression models

Model	Base	1	2	3	4	5	6
Educational attainment (N=2,386)							
Independent Variable (ref: white Americans)							
1.5 generation	0.54***	0.58**	0.44*	0.50*			
Asian American	(0.16)	(0.18)	(0.21)	(0.21)			
Second generation	0.62***	0.86***	0.85***	0.87**			
Asian American	(0.16)	(0.18)	(0.21)	*(0.21)			
Adolescence Friendship Networks							
Number of nominating friends		0.04***		0.03**			
		(0.01)		*(0.01)			
Number of perceived friends		0.04***		0.04**			
		(0.01)		(0.01)			
Homogeneity of nominating friends			0.08	0.11			
			(0.17)	(0.17)			
Homogeneity of perceived friends			0.05	-0.04			
			(0.17)	(0.17)			
Earnings (N=2,175)							
Independent Variable (ref: white Americans)							
1.5 generation	0.10	0.15+	0.11	0.14	0.12	0.14+	0.16*
Asian American	(0.08)	(0.08)	(0.09)	(0.09)	(0.08)	(0.08)	(0.08)
Second generation	-0.18*	-0.19*	-0.25**	-0.21*	-0.18*	-0.15+	-0.14+
Asian American	(0.08)	(0.08)	(0.09)	(0.09)	(0.08)	(0.08)	(0.08)
Adolescence Friendship Networks							
Number of nominating friends		0.01***		0.01**			
		(0.00)		(0.00)			
Number of perceived friends		-0.01		0.00			
		(0.01)		(0.01)			
Homogeneity of nominating friends			-0.13+	-0.12+			
			(0.07)	(0.07)			
Homogeneity of perceived friends			0.07	0.04			
			(0.07)	(0.07)			
Young Adulthood Friendship Networks							
Number of perceived friends					0.06***		0.06***
					(0.01)		(0.01)
Homogeneity of perceived friends						0.02+	0.03**
						(0.01)	(0.01)

Table 5.4, continued.

Supervisory Position (N=2,279)

Independent Variable (ref: white Americans)

1.5 generation	-0.29	-0.05	-0.07	-0.01	-0.27	-0.33+	-0.30
Asian American	(0.19)	(0.22)	(0.25)	(0.25)	(0.19)	(0.19)	(0.19)
Second generation	0.03	0.23	0.00	0.05	0.03	-0.04	-0.02
Asian American	(0.19)	(0.22)	(0.25)	(0.25)	(0.19)	(0.19)	(0.19)

Adolescence Friendship Networks

Number of nominating friends	0.00	(0.01)	0.00	(0.01)
Number of perceived friends	0.02	(0.01)	0.02	(0.02)
Homogeneity of nominating friends			0.10	(0.20)
Homogeneity of perceived friends			-0.15	(0.20)
			0.11	(0.20)
			-0.16	(0.20)

Young Adulthood Friendship Networks

Number of perceived friends			0.10**	(0.03)	0.09**	(0.03)
Homogeneity of perceived friends					-0.05*	(0.02)
					-0.04+	(0.02)

Female: mediating role of the nature of friendship networks. In Table 5.5., the changes in coefficient of being 1.5 and second generation Asian American female (reference: white American female) is presented as nature of friendship is added in the model.

Educational attainment. In the base model, being 1.5 generation is positively related to educational attainment only marginally and being second generation is significantly related to higher educational attainment. In model 1, the number of friends is positively related to educational attainment. The coefficient of being each generation of Asian Americans did not change greatly, but the gap becomes larger in the 1.5 generation and smaller in the second generation. It means the number of friendships partly explains the high educational attainment of second generation Asian American women. In model 3, homogeneous friendship is positively related to higher educational attainment, and the marginal significance disappeared among 1.5

generation Asian Americans, and the gap became larger amongst second generation Asian Americans. It means a homogeneous friendship network explains some of the 1.5 generation Asian American women's higher educational attainment but does not explain it for second generation Asian American women. It means that second generation Asian Americans show high educational attainment regardless of how homogeneous their friendship are. In model 3, while the numbers of friends remained significant, the homogeneity-of-friendship's impact becomes only marginally significant, and second generation Asian American women's positive relationships become more prominent.

Earnings. In the base model, 1.5 generation AA women earn significantly more than white American women. The difference in earnings is not significant between white Americans and second generation Asian American women. Although the number of friends in adolescence and young adulthood is significantly related to earnings, the changes in coefficient of being 1.5 generation does not change in significance.

Supervisory position. In the base model, being 1.5 generation AA is marginally significant for achieving a higher supervisory position and being second generation AA is not significantly related to a higher supervisory position. The nature of adolescent friendship networks is not significantly related to supervisory positions. Although the coefficient of being in the 1.5 generation becomes significant in model 1, the nature of adolescent friendship networks is not related to the change. In models 4-6, the coefficients of each generation of AA do not change as friendship network characteristics are considered.

Other than on educational attainment, adding the nature of friendship to the regression model does not explain the differences in SES between WA and each generation of AAs.

Table 5.5. Changes in coefficient in being each generation of AAs among female individuals as friendship nature is additionally considered in regression models

Model	Base	1	2	3	4	5	6
Educational attainment <i>N</i>=2,885)							
Independent Variable (ref: white Americans)							
1.5 generation	0.29+	0.33+	0.19	0.29			
Asian American	(0.17)	(0.19)	(0.22)	(0.22)			
Second generation	0.75***	0.73***	1.00***	1.04**			
Asian American	(0.18)	(0.20)	(0.22)	*(0.21)			
Adolescence Friendship Networks							
Number of nominating friends		0.05***		0.05**			
		(0.01)		*(0.01)			
Number of perceived friends		0.03**		0.05**			
		(0.01)		*(0.02)			
Homogeneity of nominating friends			0.35*	0.34+			
			(0.17)	(0.17)			
Homogeneity of perceived friends			0.04	-0.04			
			(0.17)	(0.18)			
Earnings (<i>N</i>=2,395)							
Independent Variable (ref: white Americans)							
1.5 generation	0.18*	0.21*	0.20+	0.22+	0.19*	0.17+	0.19*
Asian American	(0.09)	(0.10)	(0.11)	(0.12)	(0.09)	(0.09)	(0.09)
Second generation	-0.04	0.04	0.01	0.02	-0.02	-0.05	-0.03
Asian American	(0.09)	(0.11)	(0.11)	(0.12)	(0.09)	(0.10)	(0.10)
Adolescence Friendship Networks							
Number of nominating friends		0.01*		0.01*			
		(0.00)		(0.01)			
Number of perceived friends		0.00		0.01			
		(0.01)		(0.01)			
Homogeneity of nominating friends			0.05	0.08			
			(0.09)	(0.09)			
Homogeneity of perceived friends			0.10	0.08			
			(0.09)	(0.10)			
Young Adulthood Friendship Networks							
Number of perceived friends					0.09***		0.09***
					(0.02)		(0.02)
Homogeneity of perceived friends						-0.01	0.00
						(0.01)	(0.01)

Table 5.5, continued.

Supervisory Position (N=2,776)

Independent Variable (ref: white Americans)

1.5 generation	0.32+	0.48*	0.27	0.28	0.34+	0.28	0.31
Asian American	(0.19)	(0.22)	(0.25)	(0.25)	(0.19)	(0.19)	(0.19)
Second generation	-0.29	-0.21	-0.29	-0.26	-0.28	-0.30	-0.29
Asian American	(0.21)	(0.24)	(0.26)	(0.26)	(0.21)	(0.22)	(0.22)

Adolescence Friendship Networks

Number of nominating friends	0.01	(0.01)	0.01	(0.01)
Number of perceived friends	-0.00	(0.02)	0.02	(0.02)
Homogeneity of nominating friends			0.30	(0.21)
Homogeneity of perceived friends			-0.26	(0.21)
			0.27	(0.22)
			-0.17	(0.22)

Young Adulthood Friendship Networks

Number of perceived friends			0.08*	(0.04)	0.06+	(0.04)
Homogeneity of perceived friends					-0.02	(0.02)
					-0.01	(0.02)

Regression Models by Race and Immigration Generation Group

Among WA men, a higher number of perceived friends is related to higher educational attainment. A larger number of nominating friends is related to higher earnings. None of adolescence friendship network characteristics is related to being in a higher supervisory position. The number and homogeneity of friends in young adulthood are significantly positively related to earnings, and the number of friends is positively related to a supervisory position.

Among 1.5 generation AA men, the number of nominating friends during adolescence is negatively related to earnings at a marginal level. None of adolescence friendship networks is related to earnings, and the number of perceived friends is positively related to being in a higher supervisory position. In young adulthood, the number of friends is related to higher earnings, but the number and homogeneity are not related to a supervisory position.

Among second generation AA men, none of adolescence friendship characteristics is related to socioeconomic outcomes. The number of friends during young adulthood is related to higher earnings, while homogeneity is not. The number and homogeneity of friends during young adulthood are not related to a supervisory position.

Table 5.6. Association between the nature of friendship networks and outcomes by race and immigration history group among males

	Educat ion	Earnin gs	Superv ising	Earnin gs	Supervi sing
white Americans					
Adolescence Friendship Networks					
Number of nominating friends	0.01 (0.01)	0.01** (0.00)	0.00 (0.01)		
Number of perceived friends	0.02* (0.01)	0.00 (0.01)	0.01 (0.02)		
Homogeneity of nominating friends	0.05 (0.10)	-0.13+ (0.08)	0.07 (0.22)		
Homogeneity of perceived friends	0.14 (0.10)	0.07 (0.08)	-0.16 (0.22)		
Young adulthood Friendship Networks					
Number of perceived friends				0.06*** (0.01)	0.09** (0.03)
Homogeneity of perceived friends				0.03*** (0.01)	-0.03 (0.03)
1.5 generation Asian Americans					
Adolescence Friendship Networks					
Number of nominating friends	-0.07+ (0.04)	-0.04 (0.03)	0.00 (0.15)		
Number of perceived friends	0.04 (0.04)	0.01 (0.03)	0.27* (0.13)		
Homogeneity of nominating friends	-0.45 (0.37)	0.16 (0.29)	0.31 (1.25)		
Homogeneity of perceived friends	0.23 (0.36)	-0.23 (0.28)	0.43 (1.24)		
Young adulthood Friendship Networks					
Number of perceived friends				0.13* (0.05)	0.02 (0.19)
Homogeneity of perceived friends				-0.01 (0.03)	-0.14 (0.11)

Table 5.6, continued.

2nd generation Asian Americans

Adolescence Friendship Networks

Number of nominating friends	-0.03 (0.03)	0.03 (0.05)	-0.02 (0.11)
Number of perceived friends	0.06 (0.04)	-0.01 (0.05)	0.13 (0.11)
Homogeneity of nominating friends	-0.07 (0.34)	-0.10 (0.41)	0.45 (1.04)
Homogeneity of perceived friends	-0.05 (0.35)	0.21 (0.45)	0.01 (1.05)

Young adulthood Friendship Networks

Number of perceived friends		0.24* (0.10)	-0.21 (0.22)
Homogeneity of perceived friends		-0.04 (0.05)	0.03 (0.10)

Among WA women, a higher number of nominating friends is marginally related to higher educational attainment, and the number of perceived friends and homogeneity of nominating friends is related to higher educational attainment. The number of nominating friends is related to higher earnings, and other characteristics are not related to earnings. None of adolescence friendship characteristics are related to a higher supervisory position. The number of perceived friends during young adulthood is related to higher earnings. None of the young adulthood friendship characteristics is related to being in a higher supervisory position.

Among 1.5 generation AA women, none of adolescence friendship networks characteristics is related to education and earnings. Homogeneity of nominating friends during adolescence is significantly related to a higher supervisory position. None of the young adulthood friendship characteristics is related to earnings and supervisory position.

Among second generation AA women, none of the adolescence friendship network characteristics is related to education and earnings. Homogeneity of nominating friends during

adolescence is related to a lower supervisory position at a marginal level. None of the young adulthood friendship characteristics is significantly related to earnings and supervisory position.

Table 5.7. Association between the nature of friendship networks and outcomes by race and immigration history group among females

	Educatio n	Earnin gs	Supervisi ng	Earnings	Superv ising
White Americans					
Adolescence Friendship Networks					
Number of nominating friends	0.01+ (0.01)	0.01** (0.01)	0.02 (0.01)		
Number of perceived friends	0.02* (0.01)	0.00 (0.01)	0.01 (0.02)		
Homogeneity of nominating friends	0.27** (0.09)	0.16 (0.10)	0.26 (0.23)		
Homogeneity of perceived friends	-0.07 (0.10)	0.09 (0.10)	-0.16 (0.24)		
Young adulthood Friendship Networks					
Number of perceived friends				0.09*** (0.02)	0.06 (0.04)
Homogeneity of perceived friends				0.00 (0.00)	-0.03 (0.00)
1.5 generation Asian Americans					
Adolescence Friendship Networks					
Number of nominating friends	0.02 (0.04)	-0.02 (0.05)	0.09 (0.11)		
Number of perceived friends	0.02 (0.05)	0.01 (0.06)	0.10 (0.14)		
Homogeneity of nominating friends	0.61 (0.41)	-0.68 (0.48)	2.88* (1.18)		
Homogeneity of perceived friends	-0.58 (0.40)	0.19 (0.43)	-0.90 (1.03)		
Young adulthood Friendship Networks					
Number of perceived friends				0.12 (0.08)	0.10 (0.18)
Homogeneity of perceived friends				-0.02 (0.04)	0.04 (0.10)

Table 5.7, continued.

Second generation Asian Americans

Adolescence Friendship Networks

Number of nominating friends	0.03 (0.03)	-0.05 (0.06)	-0.12 (0.13)
Number of perceived friends	0.05 (0.05)	0.04 (0.09)	0.14 (0.18)
Homogeneity of nominating friends	-0.15 (0.45)	0.57 (0.89)	-3.00+ (1.56)
Homogeneity of perceived friends	-0.11 (0.47)	-0.21 (0.87)	0.38 (1.54)

Young adulthood Friendship Networks

Number of perceived friends	0.02 (0.14)	0.15 (0.26)
Homogeneity of perceived friends	0.01 (0.07)	0.14 (0.13)

Discussion

The characteristics of friendship networks of Asian American adolescents and young adults and their impact on socioeconomic outcomes are outlined below.

Asian Americans Have Smaller Number of Friends during Childhood

Asian American adolescents have fewer friends during adolescence than white Americans, regardless of gender. This finding is aligned with the many previous empirical studies which found Asian Americans have fewer of friends (Cherng et al., 2014; Quillian & Campbell, 2003; Yeh et al., 2008). This study extends previous findings by including the number of nominating friends as well as the number of perceived friends. The study shows that Asian American adolescents are nominated less frequently than white American adolescents by from 1 to 2 people. Given the average number of friends is five, the number of nominating friends is about 20 percent lower among Asian Americans. Furthermore, the number of nominating friends is smaller than perceived number of friends among both generations of male Asian Americans. Thus, Asian Americans' perceived friendship is not always reciprocated by their perceived

friends. Given the lack of reciprocation, they may not receive social capital to support SES from their perceived friends.

The gap in the number of friends decreases over generations and this is the case for both male and female AA adolescents. Among females, the numbers of nominating and perceived friends decreased from almost two to one person. Among males, the number slightly dropped from 1.7 to 1.3 for nominating friends and from 0.9 to 0.7 for perceived friends. This may suggest that Asian American adolescents do acculturate to the social environments of American schools and that Asian Americans can achieve equity in the number of friends over generations, just as assimilation theory suggests possibilities for Asian Americans to reach equity in social relationships with white American adolescents in later generation as assimilation theory suggests (de Souza Briggs, 2007).

Unlike inequality in social capital theory and the hypotheses of this study in general, some group of Asian Americans shows higher or equal socioeconomic outcomes even after controlling for the nature of friendship networks. In fact, for some socioeconomic outcomes such as educational attainment and earnings, the positive gap become larger. This finding implies that even without social capital from friendship networks, Asian Americans are able to perform better than White Americans socioeconomically.

Asian Americans Have Equal Number of Friends during Young Adulthood

During young adulthoods, Asian Americans do not have a smaller number of friends and therefore, it is not likely that the number of friends explains any differences in socioeconomic status. It is interesting and unexpected that Asian Americans whose friendship networks were smaller during adolescence did not report smaller number of friends during young adulthood. It

is unclear what explains the increase in the number of friends from childhood to young adulthood, but Asian American young adulthood literature provides some clues.

It may be due to facing a diminished academic burden and escaping parental control after graduating from secondary school, entering college where Asian American young adults have more chances to meet others like themselves, and living a part with their parents among Asian Americans. Many Asian American parents assume authoritarian parenting style (Chua, 2011; S. Y. Kim et al., 2013). One characteristics of authoritarian parenting is controlling the friends-making behavior of children outside of school (Way et al., 2006) and young adults Asian Americans are not under such parenting anymore. Also, it may be an issue of measurement because of how the question was asked is very different between two waves. During adolescence, children were asked name their friends up to 10 people or find their friends name from schools' roaster, but respondents were asked how many friends they have in five point Likert scale ranging from none (1) to 10 or more friends (5) during young adulthood. Because of the changes in the measurement, the characteristics of nominating friends are not examined. Still, it is interesting to find that Asian American young adults do not have fewer friends than white American young adults and further research may be needed.

Differential Impact of Number of Friends

The size of adolescence friendship networks has differential impacts on socioeconomic outcomes by race, immigration generation, and gender. Some of these findings (but importantly not all of them) confirm Lin's return deficit framework and the theory of inequality in social capital—that existing social capital may be only helpful for those occupying higher racial positions. While white Americans show expected positive relationships for most of the elements

that contribute to socioeconomic status, this is not the case for both generations of Asian Americans.

These findings show that the friendship networks of Asian American adolescents are not positively related to socioeconomic status. It is unclear why the friendships of Asian American adolescents is not helpful in promoting one's socioeconomic status. According to Lin's theory mentioned in the chapter 1, racial minorities have lower socioeconomic status within racially stratified society and racial minorities are likely to have social ties of similar background because of homophiles. It may apply to Asian Americans that Asian Americans' friendship networks have lower level of social capital because their friends are likely to be other Asian Americans and Asian Americans have lower racial position within racial hierarchy than white Americans. For example, white Americans' white friend are more likely to be in a position that can provide support for one to get a high-paying job.

Considering the importance of friends during adolescence, it is necessary to understand what happens to Asian American adolescents and their friend relationships and why their socioeconomic outcomes do not benefit from the social capital generated by their networks. Furthermore, it is also necessary to understand what positive role friendship plays (e.g., emotional support and emergency aids) other than promoting socioeconomic status among Asian American adolescents. With the findings, it is necessary to help Asian American parents and adolescents understand the benefits of having friends in the long-term beyond their school work. In addition, it is necessary to help Asian American adolescents so that they can build helpful friendship networks.

Asian Americans Have Less Homogeneous Friendship Networks

Asian Americans have less racially homogeneous friendship networks than white Americans regardless of gender and immigration generation—both in adolescence and young adulthood. These results do not conform to hypotheses based on theories and empirical studies that emphasize racial homophiles and stronger homophiles among Asian immigrants (Kao & Joyner, 2006). Although Asian Americans may more likely be attracted to others in the Asian population than to peers of other races, because there are not as many Asian individuals, Asians Americans may have a higher degree of different friends than white Americans despite their in-group preferences. The identity of non-Asian friends was not indicated by this study. They may be more diverse racial minorities such as African Americans or Latino Americans, or they could be white Americans rather than other racial minorities. Further research is needed to understand the true picture of heterogeneity of Asian Americans' friendship networks.

Conclusion

Friends and social capital within friendship has the potential to offer great resources for Asian American adolescents and young adults, just as for other Americans. Given that increased number of Asian Americans participating mainstream economy, friendship social capital becomes more important. Findings regarding Asian Americans' friendship networks, however, suggest that they have limited benefits to the SES of Asian Americans. Further research is needed to understand why it is that the friendship networks of Asian Americans are not related to their SES.

CONCLUSION

By exploring the relationship between race and immigration status, types of social capital (i.e., mentoring and friendship ties) and several aspects of socioeconomic status, this study shows that the disproportionately positive economic outcomes of Asian Americans compared to white Americans are explained largely by their significant human capital investments, with social capital from mentoring and friendship ties playing a much more limited role. Empirical findings are particularly robust because they are based on a multi-wave longitudinal survey with a large enough sample of Asian and White Americans to consider nativity and generational status. This concluding chapter briefly summarizes each empirical chapter's findings and their implications, discusses the project's theoretical contribution as well as its practice implications. It finally ends with an acknowledgement of the study's limitations and a suggestion for future research.

The first empirical chapter shows differences between Asian American and white men and women by each domain of socioeconomic status under consideration. Descriptively, Asian American are generally performing better than white Americans on most outcomes. Yet, these differences disappear and, in some cases, reverse when human capital is considered. As expected, 1.5 generation and second generation Asian American men and women show distinct outcomes, supporting a segmented assimilation story arguing that all immigrants as well as have various assimilation trajectories in terms of SES as Asian Americans live in the United States over generations. Asian American men and women show higher educational attainment than white Americans but the findings on job-related outcomes are not consistent across gender, immigration status, or job-related outcome. In many ways, 1.5 generation Asian Americans have

reached parity with white Americans and 1.5 generation women even show higher earnings than white American women. However, second generation Asian American men have lower earnings and lower SSS than white American men, again suggesting segmented assimilation may be at work. The changes in coefficients across the multivariate models suggest that much of the advantage of AAs in descriptive analyses can be explained by childhood resources, educational background, and participating labor market characteristics.

In the two subsequent empirical chapters, the contribution of two types of social capital – mentoring and friendship relationships – are considered as explanations for the observed socioeconomic status differences. The second empirical chapter examined access to and impact of mentoring relationships and the third empirical chapter examined the nature of friendship networks.

The second empirical chapter shows that Asian Americans have less access to mentoring relationships than their white counterparts, regardless of immigration generation and gender. The gap in access to mentoring relationships is smaller among second generation AAs than 1.5 generation AAs perhaps suggesting the second generation AAs are more integrated into social fabric of the United States. Having less access to mentors may be consequential for socioeconomic status if mentors in fact facilitate job and financial success. Yet, just having access to a mentor does not guarantee that the mentor will be helpful if used. In fact, the chapter also shows that the impacts of the mentoring relationships were different for AAs and WAs. While there were strong positive impacts of having a mentoring relationship among white Americans, mentoring relationships do not have a positive impact on Asian Americans other than relative mentors. As a strong tie, according to Granovetter's distinction, relative mentors may be more involved in the lives of Asian Americans and help them more actively. Also, they may

have given race and immigration status tailored advice and guidance that other mentors could not provide.

The third chapter demonstrates that Asian Americans not only have access to fewer mentors, but they also have fewer friends. The limited number of friend relationships has a negative impact on earnings for Asian American men and women. However, at the same time, the impact of having a smaller number of friends than White Americans does not fully explain the earning disparities among second generation Asian Americans. Also, after considering friendship ties, some Asian American subgroups still show higher socioeconomic status than their white American counterparts. That is, they are doing better economically than their white counterparts despite the fact that their friends are less helpful for their economic success. Contrary to the study hypothesis regarding racial homophily, Asian Americans have more racially diverse friendship networks than white Americans. Moreover, in group specific models, higher number of friends and homogeneity (rather than heterogeneity as some social network literature would suggest) is related to higher socioeconomic status among white Americans. However, among Asian Americans, the relationship between the number of friends during young adulthood and earnings is significant among AA men and the number of friends do not have any impact among women, regardless of generation. Among female AAs, homogeneity of nominating friends during adolescence is related to supervisory position positively among 1.5 generation and negatively among second generation.

Overall, the study findings confirm that Asian Americans have different mentoring and friendship networks than white Americans and the social capital contribution of these relationships is weaker than for white Americans. Asian American socioeconomic success comes

despite the more limited social capital embedded in mentoring relationships and friendships. Human capital factors explain much of the socioeconomic status attainment of Asian Americans.

Differences in Asian Americans' Social Capital

The chapters addressing the social capital of AA show that AAs have lower access to social capital through mentoring relationships and friendship networks. In addition, AAs' existing social capital does not promote socioeconomic outcomes as it does for white Americans. The results partly endorse some of Lin's inequality of social capital theory that racial minorities and people with immigrant backgrounds have lower access to some forms of social capital and their social capital is not as impactful in promoting socioeconomic status (Lin, 2000).

Even though AA mentors appear less beneficial than WA in terms of their ability to support upward mobility via socioeconomic status attainment, these mentors may still support AAs in a myriad of other ways. For example, they may provide emotional comfort in times of need, offer housing support, financial assistance, guidance to accessing needed community resources, and so on. These coping resources are also critical forms of social capital that are not studied in this dissertation.

Based on the current findings, however, the results suggest that AA adolescents and young adults need more useful educational and informational interventions to support their socioeconomic attainment. On the one hand, it may be important to provide education to AA about the ways that mentors and friends can help with getting a job, getting promoted and raising their earnings. This is particularly important because many Asians are not aware that it is a common American practice to find jobs through social connections and jobs found through social connection are of better paying. Within some AA cultures, it is believed that relying on social connection too much is humiliating and one has to be self-reliant when looking for a job

(Chin, 2020). On the other hand, not all ties are as helpful as all others. AA may need support to build social relationships with mentors and friends that are able to support them and to influence others about their labor market promise. Thus, there may be a role for interventions both to educate AAs about how social capital can serve socioeconomic goals and to actively facilitate connections with mentors and friends who are equipped to actually help them build and mobilize their social capital for socioeconomic success.

Differences in SES between WH and AA are Not Explained by Nature of Friendship

Both positive and negative socioeconomic gaps that AA subgroups have in comparison to WAs are not explained by differences in natures of social capital imbedded in mentoring relationships and friendships. Inability to explain the gap are not in accordance with Lin's theory of social capital inequality (Lin, 2000) and hyper-selectivity theory (Zhou & Lee, 2017). When social capital variables are added in the model, the gap between each group of AAs and counterpart WAs widens regardless of the directions of the gap. Thus, the findings suggest that (1) while mentoring and friendship capital may be generally supportive to academic outcomes, Asian American subgroups academically perform well even without having the same degree of access to these types of social capital as compared to WA, (2) Asian American women are doing economically better than white American women even though they have lower level of mentoring and friendship social capital, and (3) lower levels of mentoring and friendship capital does not explain the lower earnings among second generation Asian Americans.

According to Lin's theory of inequality in social capital (Lin, 2000), lower level of social capital should lead to lower level of socioeconomic status as a capital deficit framework argues. However, considering the number of friends during adolescence and young adulthood widens or does not change the negative gap between AAs and WAs, smaller number of friends does not

lead AA men and women earn less or prohibit from getting promoted to higher supervisory positions. Furthermore, 1.5 generation Asian Americans are less likely to attain a higher supervisory position than white Americans even when their social capital in the form of friendships and mentors is considered. This finding implies that Lin's theory does not explain the differences in socioeconomic status between Asian Americans and white Americans. The earning gap persists among second generation AAs and its cause still remains unknown even after considering both human capital and social capital.

Furthermore, the homogeneity in mentoring and friendship ties of AAs do not explain the AAs' exceptional achievement in education and AA women's higher job outcomes. According to hyper-selectivity theory, the ethnic social capital such as norms valuing education boosts educational achievement among Asian American adolescents. Ethnic social capital that promotes socioeconomic attainment is more available when AAs have higher proportion of other Asian American in their friendship networks. If a Asian American have higher proportion of other Asians in their friendship networks, the Asian Americans are more likely to internalize the Asian value within ethnic communities that endorses educational attainment and other SES attainment. However, the finding shows that homogeneous adolescent friendship or young adulthood friendship are not related to higher educational attainment and other job-related outcomes. These findings go against the hyper-selectivity argument that ethnic social capital is effective in promoting socioeconomic status among Asian Americans.

Social Work Relevance

This study will contribute to social work scholarship and practice by expanding the current binary terrain of understanding of racial injustice and provide social workers with knowledge about 1.5 and second generation AAs. This research on the social capital of second and

1.5 generation Asian immigrants contributes to the social work scholarship and practice by 1) expanding the diversity of research on race and immigration by moving beyond a Black, Brown, and White racial discourse, 2) bringing new theoretical backgrounds to understand inequality into social work scholarship, and 3) providing a new social work intervention possibility for 1.5 generation and second generation AA adolescents and young adults.

This study stretched current race literature within social work scholarship to include less commonly studied racial minorities. Currently, race literature within social work scholarship focuses mainly on the binary distinction between African Americans and white Americans and the marginalization of African Americans. As the number of Asian and Latinx Americans increases, the needs for those populations have increased. The marginalization that AAs experience is equally detrimental to victims, but the forms of everyday example of marginalization is very different from that of African Americans. Unlike other racial minorities, Asian Americans are stereotyped as a model minority and perpetual foreigners, and children of immigrants are the main victims of those stereotyping. This research went beyond the first generation Asian immigrants and focused on the children of immigrants and their experiences.

In examining individuals' developmental outcomes, reflecting on the environment and structural factors is one of the key interests of social work scholarship and practice. This dissertation study has adopted a relatively recent theory and theoretical frameworks that explain the environmental factor that explain racial minorities' developmental outcomes as well as Asian American adolescents and young adults. It is a contribution to the scholarship of social work by expanding and adding to the current understanding of inequality and structural mechanisms.

Finally, as understanding on 1.5 and second generation AA adolescents and young adults grows, this dissertation provides social workers that serve 1.5 and second generation Asian Americans with a hidden need of the population. Because it is believed that Asian Americans have strong social networks and social capital, it has not been concerns among social workers and social work scholars about Asian

Americans who were born and raised in the United States. However, unlike their immigrant parents, this dissertation shows that Asian American adolescents and young adults may need intervention related to building and mobilizing social capital, including mentoring relationships and friendships.

Currently, mentoring programs targeting Asian Americans are increasing in number, but they mostly focus on psycho-behavior goals. This dissertation may shed light on the importance of mentoring relationships in promoting socioeconomic status. Multiple aspects and strengths of mentoring relationships should be addressed and help Asian American adolescents and young adults benefit from such valuable resources. In addition, social workers can inform Asian American parents that friends are a great reservoir of social capital that their children can rely on in their young adulthood. Instead of demonizing friendship during adolescence, parents and social workers can guide Asian American adolescents to build healthy friendships that promote well-being in life.

Despite several limitations, this study contributes to social work scholarship and practices by enhancing understanding on 1.5 and second generation Asian Americans, especially from the often neglected perspectives. By implying the findings of this dissertation, social workers can provide more informed social services to their Asian American clients.

Limitation of This Study

This study has several limitations that should be addressed in future research to help advance scholarship in AAs' social capital and socioeconomic status.

Because this study used available secondary data, how social capital is measured does not unpack all aspects of social capital; it only focuses on mentors and friendship ties. Asian American adolescents may benefit from social capital beyond that provided from mentoring relationships and friendships such as family, public school system, and community organizations. Second, it is unclear whether mentors and friends have the same meaning for

Asian American adolescents and white American adolescents. Although the individuals included in this study have experienced secondary education in the United States, it is possible that they have different concepts of mentoring relationships and friendships because of how they were raised in the family. Thus, the items themselves may not lead both groups to respond in the same way. For example, when they were asked about an adult who “made an important positive difference”, because of Asian culture that value K-12 education, Asian American adolescents are more likely to nominate their school teachers as their “important” positive differences while white American adolescents did not pay attention to the realm of school. Third, because this study examines racial differences in mentoring relationships, having information about the mentor’s race would have added another interesting dimension to the analyses, including racial homophily of mentoring relationship. However, there is no information about the race of the mentor available in the survey data. In future studies, information on mentor’s race should be considered to understand the mentoring relationship of Asian Americans and of other racial minorities. With race information of mentor, much more research questions could have been answered. For example, racial homophily of mentoring relationship could have been examined. In addition, the reason why mentoring relationship of AA is not as impactful can be examined more specifically according to Lin’s theory. For example, whether white mentor would be more impactful for both WAs and AAs or whether homogeneous mentor would be more impactful. Fourth, the nature of friends is not consistently measured across the waves. While friendship nominations were available as a way of measuring friendship networks in wave 1 and 2 when all respondents were in high school, it is not possible to measure entire networks in wave 4. Therefore, in Wave 4 respondents were simply asked how many friends they think they have and what proportion of the friends are of their own race. The number of nominating friends and the

racial composition of the nominating and perceived friends were lacking in this fourth wave. In the future, if primary data collection is available, more comprehensive social capital conceptualization, cross-cultural reliability of social capital measurement, and racial identity of social connections should be considered.

The sample characteristics also imposed some limitations on this study. In wave 4, the respondents were in their young adulthood aging from 24 to 32. For both the earnings and supervisory position outcomes we would expect to see much greater variation later in adulthood. Some respondents do not hold a supervisory position only because she or he worked for the position for short period of time. Secondly, due to the small number of Asian Americans in the sample, some analyses could not be carried out due to power concerns. For example, third- and plus-generation Asian Americans were not included in the multivariate analyses. Another aspect that could not be measured due to a small sample size was the interaction effect of Asian population density and the occupation of respondents. In the future study, a sample of wider age ranges and a larger sample of Asian Americans is necessary to carry out a more robust analysis.

This dissertation study leads to even more questions regarding the importance of social capital for Asian Americans—questions not investigated due to limitations in the data and the study design. In the future, more studies are necessary regarding the type of support Asian Americans receive from their mentors and friends and whether the type of support varies depending on the race of their social ties. Furthermore, while it was not very impactful for socioeconomic status, whether the social capital of Asian Americans has any significant impact on other outcomes, like health and mental health can be future research question. As mentioned before, social capital has largely two main functions: coping and mobility. This dissertation only focused on the mobility function of social capital and coping function such as providing comfort

in times of need, offering housing support, etc. Therefore, this dissertation cannot make any inferences regarding the impact of mentoring relationship and friendship networks beyond the mobility outcomes examined in this study. It is well-known that social capital plays a great role in helping Asian immigrants cope as they adapt to the host society. More research is also necessary to examine the role of mentoring relationship, friendship networks, and other social capital as 1.5 and second generation AAs face psychological, economic, and social crisis in American society.

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