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Have Asians Really Achieved Labor Market Equity with Whites?

A dissertation submitted in partial satisfaction of the requirements
for the degree Doctor of Philosophy

in

Sociology

By

Hyunsu Oh

Committee in charge:

Professor Charlie Eaton, Chair

Professor Tanya Golash-Boza

Professor Sharla Alegria

2022

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2022

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Oh, Hyunsu. 2020. “The Impact of Racial Discrimination on Health Disparities among Asian Americans.” Pp 3-14 in *Research in the Sociology of Health Care (Vol 38 - Race, Ethnicity, Gender and Other Social Characteristics as Factors in Health and Health Care Disparities)*, edited by Kronenfeld, Jennie. Emerald Publishing Ltd. <https://doi.org/10.1108/S0275-495920200000038005>

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Oh, Hyunsu, Eun-Chul Park, Yeongji Son and Tae-Gue Yu. 2012. “Woongjin-Coway: of the society, by the society, for the society.” Pp. 263-89 in *How Korean Brands Soar All over the World: Lessons from Korea’s Top 10 Winning Cases*, edited by Kim, Chung K., Greg Pratt, Mina Jun, Miyea Kim, and Jeong-Su Han. Korea Institute of Marketing for Future.

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 “Gentrification, White Encroachment, and the Policing of Black Residents in Washington, DC.” The California Sociological Association’s 2020 Annual meeting, online via Zoom (2020)
 “Unequal Occupational Returns” The Sociology of Education Association 2020 Annual Conference. Pacific Grove, CA (2020)
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ABSTRACT

Sociological research on Asian Americans generally portrays Asian Americans as a high achieving group in the U.S. educational system and as a “model minority.” But how have Asians fared in the U.S. labor market? What is the labor market standing of Asians compared to whites and other racial groups? Have Asians really achieved labor market equity with whites? I argue that because of racial stigma and exclusion, Asians sometimes achieve labor market parity with whites, but Asians do not experience equity in labor markets relative to whites. Asians are still a minority in the labor market who suffer from processes and disadvantages of racialization that impede their advancement at work. By investigating nationwide datasets using statistical methods, this dissertation research seeks to show that Asians do not attain managerial authority, high status occupations, or pay levels commensurate with their levels of education and human capital acquisition.

Investigating data from the General Social Survey, Chapter 2 discusses Asian underrepresentation in occupational positions of authority. Using binomial and ordinal logistic regression models, this reveals that Asians have lower odds of being positioned in top management occupations than whites and even other non-whites after controlling for educational attainment and social capital indicators. Whereas other non-white workers occupied the bottom layer of the hierarchy at higher rates, Asians were most likely to occupy intermediate professional occupations, all other conditions being equal.

Using data from the National Longitudinal Survey of Youth, Chapter 3 reveals that Asians are more likely than whites to receive nonmanagerial internal promotions, controlling for demographic and work characteristics. But non-managerial promotions and human capital acquisition for Asians did not lead to comparable rates of subsequent managerial promotion. Instead, controlling for past promotions, whites were considerably more likely than Asians to receive managerial promotions.

Exploring data from the American Community Survey, 2019, Chapter 4 revisits Asian income advantages in STEM and finance occupations. In STEM occupations that are dominated by men but accessible to Asians, Asians are the racial group with the highest income, net of sociodemographic and work characteristics. But incomes for Asian women have only matched those of white men. In finance occupations that are highly segregated by race and gender, Asians lacked access to occupations with the highest status and incomes such as investment banking and private equity managing director positions. Although all women were excluded from high paying finance occupations, Asian women in back-office finance jobs were less penalized than white women and non-white, non-Asian women of color.

Despite some limitations, this dissertation research provides significant implications for race and organizational scholarship. It documents a continuing significance of race at work that fundamentally influences labor the market standing of Asians.

CHAPTER 1. INTRODUCTION: HAVE ASIANS REALLY ACHIEVED LABOR
MARKET EQUITY WITH WHITES?

Background

In the twenty first century, Asian is the fastest growing racial identity in the U.S. society. The U.S. Census Bureau reported that there were about 10 million Asians in 2000, as one single race category, which accounted for 3.6 percent of total population of the United States (Grieco and Cassidy 2001). The Asian population reached 18 million by or 5.6 percent of total population in 2015.¹ By 2060, Asians will account for 9.3 percent of total population (Colby and Ortman 2015).

Sociological research on Asian Americans generally portrays Asian Americans as a high achieving group in the U.S. educational system making them a “model minority”. Asian American achievements in the U.S. educational systems are broadly acknowledged in the literature. As compared to other racial groups, including whites, Asians have some of the best academic outcomes measures for cognitive skills, grades, test scores, degree persistence, and completion (Suzuki 1977; Peng and Wright 1994; Kao 1995; Goyette and Xie 1999; Sue and Okazaki 2009; Ochoa 2013; Hsin and Xie 2014; Lee and Zhou 2015). Others have suggested that Asians have also approached labor market parity with whites. But this dissertation asks, have Asians really achieved labor market *equity* with whites that is commensurate with their academic success?

I argue that because of racial stigma and exclusion, Asians sometimes achieve labor market parity with whites, but Asians do not experience equity in labor markets relative to whites. Asians are still a minority in the labor market suffering from processes and disadvantages of racialization that impede their advancement at work. Labor market bias against Asians is obscured by some occupational successes among Asian Americans. Research suggests that Asian Americans’ outcomes in the U.S. labor market surpass those of other racial groups in various areas, including income and earnings (Barringer et al. 1990; Sakamoto et al. 2009; Kim and Sakamoto 2010; Shin and Liang 2014), occupational prestige (Barringer et al. 1990; Xu and Leffler 1992), labor market participation (Wong and Hirschman 1983; Woo 1985; Cheng 1997), and ethnic entrepreneurship (Bates and Dunham 1993; Zhou and Cho 2010; Valdez 2012). Therefore, some scholars have suggested that Asian Americans have achieved labor market parity with whites (Kim and Sakamoto 2010; Kim and Zhao 2014). But this apparent parity does not account for potential unevenness in Asian labor market success across gender groups and different industrial sectors.

The model minority thesis similarly fails to account for systematic racism encountered by Asians in labor markets. Critics note the model minority myth is misleading in its exaggeration of Asian American achievements and underestimation of unfavorable experiences of racialization among Asian Americans (Goto et al. 2002; Chou and Feagin 2015; Sakamoto et al. 2009; Gupta et al. 2011; Chou and Feagin 2015). Rather than model minorities or honorary whites, Asian Americans are implicitly

¹ Source: The United States Census Bureau. American Fact Finder. Annual Estimates of the Resident Population.

regarded as yellow perils or forever foreigners (Saito 1997; Tuan 1998; Lee 2008). In educational settings, scholars have found this racialization has negative impacts on Asian youths' peer relationships, academic performance, psychical and mental health outcomes, and processes of identity formation (Zhou 2004; Li 2005; Wing 2007; Li and Wang 2008; Hwang and Goto 2008; Nadal et al. 2010; Gupta et al. 2011; Chae et al. 2012; Koo, Peguero, and Shekarkhar 2012; Chou and Feagin 2015). I argue that Asian racialization has similar adverse consequences in labor markets.

In what follows, I review sociological explanations of the racialization of “Asians” in the United States. These theories of Asian racialization help to develop my argument regarding the association between Asian racialization of society and the labor market standing of Asians.

The Origin of Asian Racial Status Position

Omi and Winant (2014:55) suggest that racial formation is “the sociohistorical process by which racial categories are created, inhabited, transformed, and destroyed.” According to their racial formation theory, racial formation is linked with the evolution of hegemony, in terms of how a society is organized and ruled involving race, the nature of racism, and the relationship of race to other forms of differences and inequalities. Like Omi and Winant, social construction of racial identity and categorization is broadly acknowledged in the literature of race and ethnicity. A racial group's racial identity and positioning in the racial hierarchy are formed by sociohistorical contexts, reflecting racial relations of the society (Frankenburg 1993; Bonilla-Silva 1999; Golash-Boza 2016). To explain how Asian racialization shapes labor market outcome, it is thus important to begin with the socio-historical formation and transformation of the Asian racial category in the US.

Due to historical and ongoing processes of racialization by public policies and social prejudices, “Asian” is racialized as an intermediate racial identity, neither white nor non-white (Kim 1999; Bonilla-Silva 2002; 2006). Kim (1999) indicated that the racial position of Asian has been triangulated beyond the majority (white) and minority (black) dichotomy by relative valorization and civic ostracism. Between the mid-nineteenth century and the mid-twentieth century, to dominate both Asians and blacks, white policymakers valorized Asians as a racial wild card since they perceived Asians as being superior to blacks culturally and racially. In labor markets, white employers thus deemed Asians to be “docile, hardworking, and intelligent, but less demanding (Kim 1999:109-110).” However, at the same time, the dominant group (white) ostracized Asian immigrants and their descendent because of racial stigmas that Asianness is “unfit for and uninterested in the American way of life (Kim 1999:112-113).” As a result, Asians were regarded as ineligible to be a citizen, thus suffering from immigration controls and social exclusion. Under this racial immigration and status regime, Asians become forever foreigners (Saito 1997; Tuan 1998; Lee 2008).

In the emergent “colorblind” U.S. society, such racial triangulation still shapes the racial status position of Asians. Bonilla-Silva (2002; 2006) proposed that the racial

hierarchy of the U.S. society is threefold, consisting of “whites” at the top, an intermediary group of “honorary whites,” and a “collective Black” at the bottom. His tri-racial stratification system indicates that some Asian ethnic groups, such as Japanese, Korean, Chinese American, and Asian Indian, fall into the intermediary category based on their high levels of socioeconomic success. Other Asians such as Vietnamese, Cambodians, Laotians, and Filipinos are in the bottom of the hierarchy as collective blacks with lower levels of social success (Bonilla-Silva 2002:5). In a tri-racial system, Asians are racialized by whites, but they are also differentiated by other racial groups.

The labor market is unequally structured racial and ethnic lines to exclude racial minorities from achieving positive labor market outcomes (Bonacich 1972; Reich et al. 1973; Piore 1979; 1983; Kalleberg and Sørensen 1979). Since Asian populations are racialized in an intermediate position between whites and non-white racial minorities in the U.S. racial hierarchy (Kim 1999; Bonilla-Silva 2002; 2006), I argue that they still face systemic and institutionalized inequalities at work, even when attaining some occupational success as a “model minority”.

Have Asians Really Achieved Labor Market Equity with Whites?

As discussed, the Asian racial status is racialized as an intermediate position. I suggest that a “middle level” racial status position shapes labor market outcomes of Asians. As a so-called model minority, Asians outperform other non-whites occupationally. However, due to Asian racialization of society connecting to stigmas and stereotypes against Asians – professional and obedient, but with limited English language skills and lacking interpersonal and organizational skills, Asians are funneled into mid-level occupations, and are excluded from workplace authority and leadership. Asians, especially Asian women, are also excluded from some high-status occupations by racialized and gendered social closure. As a result, Asians sometimes achieve labor market parity with whites, but Asians do not experience equity in labor markets relative to whites.

By investigating nationwide datasets using statistical methods, the aim of this dissertation research is to assess labor market standings of Asians using various indicators. In doing so, this study refutes the model minority thesis in the labor market contexts and identifies the inequality regime of the U.S. labor market along with race.

This dissertation is comprised of three empirical papers. Chapter 2 assesses Asians’ position in the U.S. occupational hierarchy. Investigating data from the General Social Survey, it discusses Asian underrepresentation in occupational positions of authority. Using binomial and ordinal logistic regression models, this reveals that Asians have lower odds of being positioned in top management occupations than whites and even other non-whites, after controlling for educational attainment and social capital indicators. Whereas other non-white workers occupied the bottom layer of the hierarchy at higher rates, Asians were most likely to occupy intermediate professional occupations, all other conditions being equal.

Chapter 3 examines how acquisition of training influences promotion rates and moderates the association between race and promotions, focusing on the white-Asian gap in promotions. Using data from the National Longitudinal Survey of Youth 1979, this chapter shows that Asians got nonmanagerial promotions earlier than whites and other racial minorities. But whites got managerial promotions at equivalent rates to Asian employees. Despite its positive influence on promotions, training did not substantially increase incidents of a managerial promotion for Asian workers. After controlling for previous promotions, Asians are significantly less likely than whites to receive a managerial promotion.

Chapter 4 calls into question on Asian advantages in career access and income. Focusing on 1) science, technology, engineering, and math (STEM) and 2) finance occupations, this chapter explores how the “general” Asian advantages in the US labor market vary across occupational careers driven by racial and gender diversity. Using data from the American Community Survey, 2019, this reveals that Asian men were attaining STEM occupations and high income in STEM than any others. The Asian advantage compensated for a female disadvantage for Asian women in STEM. However, in finance that white masculine, Asians were no more enjoying the universal Asian advantages. For both occupational groups, attaining managerial status is less important for income advantages.

I conclude the dissertation in Chapter 5 by discussing why those chapters altogether show that despite their human capital acquisitions, Asians still do not have workplace authority attainment, promotion, and income in lucrative occupations at comparable with whites. These indicate that the model minority myth overestimates Asian achievements at work and masks systemic inequalities against Asians. I suggest that race fundamentally shapes labor market outcomes in the United States.

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CHAPTER 2. DOES A BAMBOO CEILING EXIST? ASIANS IN THE U.S.
OCCUPATIONAL HIERARCHY

DOES A BAMBOO CEILING EXIST? ASIANS IN THE U.S. OCCUPATIONAL
HIERARCHY

Abstract

Using data from the General Social Survey, I explore how race shapes Asians' position in the U.S. occupational hierarchy. Consistent with prior research on Asian racialization, I find that Asians attain positions of high occupational authority at lower rates than whites. This disparity does not substantially change even after controlling for measures of human capital, social capital, and racialized workplace setting. The overall findings support that the racial status hierarchy limits Asian attainment of workplace authority in the U.S.

Keywords: Asian, occupational hierarchy, racial stratification at work, the bamboo ceiling, logistic regression

Introduction

In recent decades, Asians have made up a growing share of the U.S. workforce. Asians have achieved substantial labor market gains in earnings (Barringer et al. 1990; Kim and Sakamoto 2010; Shin and Liang 2014), occupational prestige (Barringer et al. 1990; Xu and Leffler 1992), labor market participation (Wong and Hirschman 1983; Woo 1985; Cheng 1997), and ethnic entrepreneurship (Bates and Dunham 1993; Zhou and Cho 2010). However, these occupational successes mask systemic disadvantages for Asians (Goto et al. 2002; Chou and Feagin 2015). A *model minority myth* thus exaggerates Asian labor market outcomes and understates racial discrimination towards Asians (Woo 2000; Sakamoto et al. 2009; Gupta et al. 2011; Chou and Feagin 2015).

The lack of Asian representation in positions of workplace authority is one indicator of potential labor market penalties for Asians. People in occupational positions of authority can promote and sanction other workers within the firm (Jaffee 1989; Reskin and Ross 1992; Wright et al. 1995; Smith 2002). Via this power, they also accrue higher social status and economic rewards (Jaffe 1959; Halaby and Weakleim 1993; Elliott and Smith 2004; Schieman et al. 2013). Despite the growing racial diversity of the U.S. workforce, positions of workplace authority remain overwhelmingly dominated by whites (Smith 2001; 2002; Petrie and Roman 2004). Asians in the United States also attain occupations with workplace authority at lower rates than whites (Leong and Hayes 1990; Oyserman and Sakamoto 1997; Takei and Sakamoto 2008; Woo 2000; Shih 2006; Akutagawa 2013; Lai and Babcock 2013; Chin 2020). However, these studies do not explain why Asians remain underrepresented in positions of authority.

How can we understand Asian underrepresentation in occupational positions of authority? Human capital and social capital perspectives provide two theoretical frameworks for researchers to investigate disparities within occupational hierarchies. Alternatively, scholars of race and organizations posit that stratification at work is shaped by racial relations. They argue that white occupational dominance is nested in the racial status hierarchy—racialized work settings and practices reinforce race-based inequalities (Reskin et al. 1999; Wingfield and Alston 2014; Ray 2019; Wingfield and Chavez 2020). I situate Asian status in this racially defined occupational hierarchy. Mirroring America's racial status hierarchy, this occupational hierarchy is tri-rationally stratified with Asians falling within a mid-level honorary white status (Bonilla-Silva (2002, 2006).

I test this workplace hierarchy thesis with data from the General Social Survey (GSS) data. Using binomial and ordinal logistic regression models, I find that race fundamentally shapes Asians' occupational position. Asians have lower odds of being positioned in top management occupations than whites and even other non-white non-Asian racial minorities, after controlling for educational attainment and social capital indicators. Whereas other non-white workers occupied the bottom layer of the hierarchy at higher rates, Asians were most likely to occupy intermediate professional occupations, all other conditions being equal.

By clarifying the racialized mid-level position of Asians in hierarchical workplace structures, I provide a fuller explanation of the bamboo ceiling that prevents Asian

workers from attaining professional positions of authority and leadership (Oguntoyinbo 2014; Chong 2016; Chin 2016; 2020). In doing so, I add to the growing “bridgework” (Rodríguez-Muñiz 2016) that integrates structures of race and ethnicity into studies of organizations.

Theories of Occupational Hierarchy

Dominant theories of the occupational hierarchy fail to account for how racial status categories structure social interactions. Human capital theory (Schultz 1961; Becker 1962) posits that an individual’s occupational position results from the accumulation of human capital in the form of credentials, knowledge, skills, and health. Employees are expected to accumulate greater amounts of this human capital as they complete more years of schooling or as they spend more years in the workforce (Mueller 1989; Wilson 1997). As employees gain education and work experience, they are rewarded by employers with getting promotion to supervisory positions and workplace authority (Mintz and Krymkowski 2010; Smith 2001: 458). Together, these theories suggest that racial inequalities in workplace authority will diminish after accounting for inequalities in education and work experience.

Social capital scholarship typically takes more account of race, but also underestimates the particular role of racial status hierarchies. Scholars argue that an individual’s family background functions as his or her social and cultural capital, in lieu of human capital. Social capital signifies trust, norms, obligations, and expectations in one’s interpersonal relationships while cultural capital refers to one’s general background, knowledge, and disposition related to social class. These forms of capital are transferrable across social connections, particularly from parents to their offspring. Hence, parents’ social networks and class origins influence their children’s educational and occupational achievements (Bourdieu 1973, 1986; Coleman 1988; Lin 1999, 2002). This framework stresses how racial inequalities in social connections and elite cultural knowledge can be transmitted generationally with consequences for labor market outcomes (Elman and O’Rand 2004; Conley and Glauber 2007; Björklund and Jäntti 2012; Mood 2017; Thomas 2018; Friedman and Laurison 2020). But this scholarship tells us less about how racial status position might limit occupational authority even as a person gains social capital.

In sum, human capital and social capital theories primarily treat race as an exogenous or a control variable that is not of primary concern of their investigation. Or, as a criterion of comparison, race is used only to show group differences in outcome variables. As a result, these frameworks have little to offer for explaining Asian underrepresentation in top managerial and leadership occupations despite high levels of Asian educational attainment. Instead, sociologists of race and some economic sociologists argue that racial categories, racial cultural meanings, and racial social organization themselves bear on occupational outcomes (Rodríguez-Muñiz 2016; Hirschman and Garbes 2019; Ray 2019).

Race and the Occupational Hierarchy

In the U.S. labor market, racial disparity in attaining managerial positions is broadly acknowledged. Compared with people of color, whites have higher odds of occupying high status positions at work (Kluegel 1978; Mueller et al. 1989; McGuire and Reskin 1993; Wilson 1997; Smith 1997, 2001, 2002; Stainback and Tomaskovic-Devey 2009). Scholars maintain that certain organizational and institutional arrangements facilitate these race-based inequalities, as well as gender- and class-based inequalities (Reskin et al. 1999; Wingfield and Alston 2014; Ray 2019; Wingfield and Chavez 2020). I will delineate between two areas of theory involving race. First, I draw on theories of racialized organizations because they indicate that racial stratification at work is produced to serve for white dominance through racialized work settings. Then I further discuss theories of American society as structured by a tri-racial status hierarchy because they provide socio-historical explanations for how racialization may place Asians in an intermediate position in the occupational hierarchy.

Reskin and colleagues (1999) have shown that social closure around white racial identity is one mechanism by which race perpetuates workplace inequalities. They argue that dominant groups (i.e., whites and men) do not want to lose their hegemony within workplaces and thus regard increasing heterogeneity as a threat to their power and authority. This leads to discriminatory hiring practices, which in turn create disparities in the workplace. They indeed find that women and racial minorities experience lower earnings, lower promotion rates, and fewer opportunities for advancement than their white, male counterparts.

Ray (2019) further proposes that organizational mechanisms can reproduce racial inequality and reinforce relations between racial structures and agencies. He theorizes *racialized organizations* as “meso-level social structures that limit the personal agency and collective efficacy of subordinate racial groups while magnifying the agency of the dominant racial group” (Ray 2019: 36). Organizations can be racialized if they accommodate policies that promote white dominance. For example, they may legitimize unequal distribution of resources such that employees in upper-management positions have easier access to company resources. Racialized organizations also monitor lower-level employees more closely than other employees, either through time management or review processes. In this way, whiteness becomes a credential that facilitates access to organizational resources and benefits.

Racialized workplace settings accelerate disproportionate distribution of power in the occupational hierarchy by racial identity. According to Wingfield and Alston (2014), organizations culturally ascribe different roles in the workplace hierarchy as appropriate to different racial groups. Their *racial tasks theory* indicates that predominantly white workplaces often have a three-level hierarchy, wherein the highest level comprises the elite workers (e.g., executives and upper-level administrators and managers), followed by the mid-level workers (e.g., managers and supervisors), and finally the low-level workers. Highest-level workers, most of whom are whites and from middle-class backgrounds, create the organizational norms and culture. Mid-level workers conform to and enforce those norms. Low-level workers, who generally are blacks and from lower-class

backgrounds, perform the physical tasks (Wingfield and Alston 2014: 275–77). These types of organizational settings perpetuate race- and class-based hierarchies by disproportionately placing some employees (i.e., white men) in positions of power.

Taken together, the literature shows that organizations can and do facilitate white dominance through their cultures, social organization, and practices. Racialized work settings shape race-based hierarchies within workplaces. Nevertheless, these studies still do not explicitly address the exact mechanisms and determinants of Asian employees in the occupational hierarchy. To better understand how and why Asian employees are excluded from these top positions, I discuss how Asian racial identity is socially constructed and how it translates to occupational segregation of Asian employees in the U.S. labor market.

Asian Racialization in the U.S. Labor Market

As an important societal institution, the labor market fundamentally reflects the racial relations in a society (Bonacich 1972; Reich et al. 1973; Kalleberg and Sørensen 1979; Piore 1979, 1983). Thus, to discuss Asian status in the labor market, it is important to understand how the Asian racial identity has been socio-historically constructed in the United States. Omi and Winant (2014: 55) define racialization as “the sociohistorical process by which racial categories are created, inhabited, transformed, and destroyed.” These categories sort people into a racial status hierarchy (Frankenburg 1993; Bonilla-Silva 1999; Golash-Boza 2016). Tracing Asian racialization historically, thus, will show how Asians came to occupy a certain position in the racial status hierarchy.

From the nineteenth century, racialized immigration laws and policies had historically shaped Asian racialization in the United States, as a non-white “yellow peril” (Hsu 2015). The 1881 Chinese Exclusion Act was the first “gatekeeping” (Lee 2002:37) law which restricted immigration based on race. Regarding Asian as a distant racial group which is dissimilative to society, the Exclusion Act legitimated restriction, exclusion, and deportation of the Asian population (Hing 1993; Kim 1999; Lee 2002; Hsu 2015). The race-based immigration quota system of the 1924 Johnson-Reed Act, which allowed a high quota allocation for Europe and a much lower quota for Asia, led to de-racialization of European immigrants in the United States and continuing marginalization of the Asian population (Takaki 1998; Ngai 2005). European immigrants became racially eligible to be citizens while Asian immigrants were not (Takaki 1998; Ngai 2005; Park and Park 2005).

During recent decades, an image of an Asian model minority has been painted by policies that contributed to greater immigration by Asians with higher levels of education. The 1965 Hart-Cellar Act renounced the racially biased quota system. Instead, Hart-Cellar initiated an immigration quota for every country with no race-based restriction. The shift facilitated a massive migration from Asia to the United States and reduced race-based discriminatory policies against the Asian population while also codified restrictions for Latin American immigrants (Wong 1986; Hing 1993; Park and Park 2005). Compared to the traditional Asian immigrants and the total U.S. population, the post-1965 Asian immigrants were a highly educated population, so that they tended to

outperform other racial and immigrant groups occupationally (Wong and Hirschman 1983; Woo 1985; Wong 1986). In addition, amongst all racial groups, Asians showed exceptional education achievement in schools and colleges (Lee and Zhou 2015; Hsu 2015). The term model minority is derived from the socioeconomic and educational attainments of the Asian population which does not align with the majority-minority paradigm in racial and ethnic relations (Sakamoto et al. 2009).

Through this sociohistorical process, the racial category of “Asian” came to indicate an intermediary social position above other racial minorities (Kim 1999; Bonilla-Silva 2002, 2006). Kim (1999) posits that Asians in the United States are not regarded as a majority or minority; rather, Asian is “a racial wild card” (109). She argues that the dominant white culture in America has in many ways embraced Asian Americans more so than they have black Americans (“relative valorization”). However, American culture still alienates Asians as aliens who cannot assimilate into white society and are therefore not eligible to be citizens (“civic ostracism”). As a consequence, Asians are racially triangulated within cultural processes of inclusion (e.g., *the model minority myth* and affirmative action) and by systemic estrangement (e.g., racial discrimination and oppressive immigration policies and controls). This racial triangulation is the basis for racial positioning of Asian Americans (Kim 1999:107-8).

Bonilla-Silva (2002, 2006) also proposes a threefold racial stratification in the U.S., where white people are at the top, an intermediary group of honorary whites are in the middle, and the collective Black population is at the bottom. He asserts that gaps in objective standings, such as poverty rates, income levels, educational and occupational outcomes, and differences in subjective ethnic identity formation among racial minorities, reinforce these distinctions. Given the great diversity among Asians, Bonilla-Silva suggests that some Asians, including Japanese, Korean, Chinese, and Asian Indian people, as well as light-skinned Latinos, fall into the intermediary category.

The racialization of Asian workers in the U.S. labor market emphasizes “Asian-ness” in several ways. First, most Americans have biases regarding what occupations are a good fit for different racial groups, including Asians. For example, Asian employees are overrepresented in the science, technology, engineering, and math fields (Hira 2010; Landivar 2013; Min and Jang 2015; Alegria 2020). Research also shows that most Americans think of a “typical” Asian as a computer programmer or engineer, not a farmer or salesperson (Leong and Hayes 1990; Sy et al. 2010). This “race-occupation fit” (Sy et al. 2010: 904) of Asian workers aligns with their professional accomplishments as non-whites. These occupations also are generally associated with more income and prestige in the labor market.

Second, within a given job level, most Americans hold sociocultural stereotypes and prejudices about Asian-ness in the work setting. These stereotypes include viewing Asian employees as family- and business-oriented, competent, hard-working, and obedient (Oyserman and Sakamoto 1997; Xin 2004; Berdahl and Min 2012; Akutagawa 2013; Kawahara et al. 2013; Chavez 2020). Yet, despite a bias that categorizes Asians as ideal workers due to advantages in credentials, skills, task competence, and employee loyalty, Asians are not perceived as managers or leaders (Woo 2000; Lai 2013; Lai and

Babcock 2013). Consequently, Asians are significantly underrepresented in leadership positions at work (Woo 2000; Shih 2006; Thatchenkery and Sugiyama 2011; Akutagawa 2013).

In summary, the sociological literature on organizations documents that human capital and family background affect occupational status. Human capital theory highlights that investment in human capital significantly enhances labor market achievements and predicts better outcomes (Mueller et al. 1989; Wilson 1997; Smith 2001; Mintz and Krymkowski 2010). Other studies focus on how family background contributes to social and cultural capital and how privileged backgrounds are linked with ones' occupational status (Blau and Duncan 1967; Sewell et al. 1970; Haller and Portes 1973; Wegener 1991). However, these perspectives do not address how race impacts the occupational hierarchy. Studies in this area argue that white dominance in workplace cultures and practices alienate non-white workers from positions of authority and leadership. Thus, to reaffirm the white versus non-white racial gap in occupational hierarchies, I tested the following hypothesis:

Hypothesis 1: Non-white workers, including both Asian workers and non-Asian non-white workers, are less likely than white workers to hold managerial occupations, after controlling for human capital and family background.

Scholars of organization-level racial inequality further indicate that racialized work arrangements facilitate race-based inequalities at workplaces. In the racialized organization, allocation of power and authority favors white dominance (Wingfield and Alston 2014; Ray 2019; Wingfield and Chavez 2020). This suggests the second hypothesis on the underrepresentation of Asian workers in high-status occupations at white-dominated workplaces:

Hypothesis 2: If a workplace is white dominated, non-white workers, including both Asian and non-Asian non-white workers, will hold managerial positions at even lower rates.

As detailed above, Asian identities in the United States are racialized as an intermediary racial group between whites and other minorities in the tri-racial hierarchy of society (Kim 1999; Bonilla-Silva 2002, 2006). I argue that Asian racialization is similarly represented to positions of Asians in mid-level occupations. This is the basis for the third hypothesis of the occupational status of Asian workers:

Hypothesis 3: Asian workers are less likely than both white and other non-white workers to hold both low status and managerial positions (conditional on not holding either managerial or low status positions), even after controlling for human capital and family background.

This racial funnelling of Asians out of both managerial and lower status positions concentrates Asian job holding in mid-level professional positions. In other words, the third hypothesis proposes that Asian workers are designated to the intermediary positions at the tri-racial occupational hierarchy.

Methods

Data

To test the hypotheses, I use data from the GSS, a nationwide survey of social and attitudinal trends in American society that has gathered data on demographic information, political and social behaviors, and psychological attitudes since 1972. Data from the GSS are used extensively in social science research about occupational characteristics and trends in the U.S. labor market (Cushing-Daniels and Yeung 2009; Fujishiro et al. 2010; Brochu and Morin 2012; Schnabel 2016; Chai and Maroto 2020). In addition, the GSS is only available data that provides inclusive information on variables assessing suggested hypotheses. I use the latest ten GSS years of pooled data from 2000 to 2018. This aggregation allowed for a comprehensive investigation of the current status quo in terms of racial disparity in the occupational hierarchy of U.S. workplaces. It also provided enough observations of each racial category for rigorous statistical comparison. As this investigation assessed workplace positioning, I drew a subsample of adults from the pooled data that included those who were fully or partially employed but excluded those who were self-employed, yielding a total of 5,861 workers.

Variables

Position in the occupational hierarchy. To account for individual workplace positions, I created two measures of formal hierarchy based on respondents' occupations. The first was a binary measure signifying whether a respondent attained a managerial position (1 = managerial occupation, 0 = other occupation). *Managerial or top-level occupation* signified a hierarchical position of authority with "control over organizational resources and control over human resources" (Smith 2002: 511). This position mainly comprises executives and upper-level administrators and managers (Elliott and Smith 2001; Smith 2002; Wingfield and Alston 2004). Only 9.6% (n = 561) of respondents attained these managerial occupations.

To unpack the other occupations, the second measure included three distinct levels of occupational hierarchy: 1) elite managerial (top level), 2) professional (middle level), and 3) other (low level) occupations. The top level comprised top management team members, such as CEOs and CFOs. The middle level included mid-level managers, low-level administrators, and other positions requiring knowledge and skills. These employees have more resources, autonomy, power, and prestige than those in low-level positions (Connors and Romberg 1991; Wingfield and Alston 2004; Kuratko et al. 2005). In the sample, 29.4% (n = 1,725) of respondents belonged to the middle level, and 61.0% (n = 3,575) to the low level. Table 2.1 reports the detailed classifications of the occupational hierarchy and the 2002 Census occupation codes.

[TABLE 2.1 ABOUT HERE]

Race. The primary independent variable of interest was respondents' race. To assess racial disparity within occupational hierarchies and to differentiate Asian workers from other racial minorities, race was coded as white, Asian, or other races. In the sample, 78.8% of respondents (n = 4,616) identified as white, versus 2.7% (n = 156) as Asian and 18.6% (n = 1,089) as other.

Human capital and family background. As discussed, human capital theorists argue that individuals' occupational achievements, including their positions in occupational hierarchies, are shaped by their investment in their own human capital. Thus, respondents' years of schooling is used as an indicator of human capital.² The sample mean is 14.1 (SD = 2.9) years of schooling. And to investigate its nonlinear effect, I included a square term for years of schooling.

Likewise, prior studies suggest that family backgrounds contribute to social and human capital and thus affect positioning in the occupational hierarchy. To measure social capital, I used Duncan's socioeconomic index (SEI), which is based on the father's occupation. In the sample, the mean of this index was 46.7, with a standard deviation of 20.8. Herein, a quadratic term for father's socioeconomic index was also included.

Racialized workplace setting. Studies on race and organization suggest that in predominantly white work settings, workers of color are racialized and alienated, and their access to organizational resources is limited (Reskin et al. 1999; Wingfield and Alston 2004; Kelly 2007; Ray 2019). In this way, racial makeup can shape the allocation of resources and power within a workplace. To control for white dominance in the workplace setting, I additionally created a variable for racial makeup of a workplace: workplaces that were reported as "all white" or "mostly white" were coded as 1 (white-dominant), and all others were coded as 0. Relatedly, as another indicator showing characteristics of workplaces, dummy variables for workplace size (less than 10, 10-100, 100 or more) were additionally included.

Other controls. A series of demographics were included as control variables in the analyses, including gender (1 = female), place of birth (1 = US born), age (in years), marital status (never married; married; or divorced, separated, or widowed), parenthood status (1 = having kids), and region of residence (Northeast, South, Midwest, or West). As one indicator of labor market participation, worked per week (in hours) was also included. I also controlled for the year in which the observation occurred to account for potential shifts in labor market structures in recent decades. Table 2 reports the descriptive statistics for these variables.

Analytic Strategy

I assessed racial disparity in the occupational hierarchy of U.S. workplaces by examining the bivariate relationships between variables. Table 2.2 presents the observed racial gaps and other bivariate relationships between race and other variables.

I then conducted a multivariate analysis by performing sets of binary logistic regressions using managerial occupation as the dependent variable. Controlling for covariates of demographics and workplace characteristics, Model 1 included a race dummy to show the baseline effect of race on attaining positions of workplace authority and leadership. Models 2 then added variables for human capital and family background.

² In addition to years of education, the GSS has some other indicators, such as years at current job and work-related training, that potentially capture respondents' investment in human capital. And yet, those variables are not asked across all survey years. Therefore, including those human capital indicators significantly affect model estimations by reducing the number of observations for all models. Instead, I added a variable for age as an indirect indicator of workforce experience.

Finally, Model 3 controlled for workplace racial makeup and its interaction term with racial categories. This successive modelling strategy is broadly used in the literature investigating inequalities in labor market outcomes, along with race and gender and their determinants (Jaffee 1989; Mueller et al. 1989; Huffman 1995; Huffman and Cohen 2004; Mintz and Krymkowski 2010). Table 3 demonstrates the results of the logistic regression models predicting log odds of having a managerial occupation, as compared to another occupation.

I then regressed the independent variables on the three occupational hierarchy levels (highest-level elite managerial, mid-level professional, and lowest level) using multinomial logistic regression analysis. Using maximum likelihood estimation, multinomial logistic regression is one technique of regression estimating the probability of being in a particular category when the outcome variable has more than two nominal categories. In comparisons with an omitted reference category, this enables us to see how predictors influence the odds that a certain category of the dependent variable will be chosen (Menard 2002; Hilbe 2009; Treiman 2014). For social science research, a multinomial logistic regression is broadly used to identify determinants and mechanisms for one's placement in different occupational strata (Brown et al. 1980; Hendrickx and Ganzeboom 1998; Akresh 2008; Tremblay et al. 2010). Likewise, this modelling strategy is suitable for this investigation to test Hypothesis 3 since it anticipates the distinction of Asian placement in the occupational hierarchy compared with both white and non-white non-Asian workers. From the baseline model of race (Model 1), I ran multinomial logistic regression models, by successively adding variables for human capital and family background (Model 2), and workplace racial makeup (Model 3). Table 4 reports the results from the multinomial logistic regression models showing how race influences one's position in this hierarchy. In the multivariate analyses, I dealt with missing values using listwise deletion.

Findings

Bivariate Findings

Table 2.2 shows the structure of occupational hierarchies at U.S. workplaces. From 2000 to 2018, 8.9% of GSS respondents reported having a managerial occupation, versus 27.5% who reported having a mid-level professional job and 63.6% who reported having a lower-level position. This finding indicates a pyramid structure, wherein only a small portion of employees have authority over the vast majority of paid workers. Among subordinate workers, some attained mid-level professional occupations with adequate resources and privileges, based on their skills and credentials.

[TABLE 2.2 ABOUT HERE]

Consistent with Hypothesis 1, Table 2.2 shows a racial gap in the distribution of high-status occupations. Although the odds of becoming a manager were low across all racial groups, whites (9.9%) were still more likely than their non-white counterparts (8.3% for Asian versus 5.5% for other racial minorities) to obtain managerial occupations. The racial gap in attaining middle-level positions also was noticeable. Among mid-level managers, Asians (43.8%) were most represented, followed by whites

(28.9%) and other racial minorities (21.1%). Among Asian workers in the sample, about half (47.9%) held low-level positions. Other racial minorities were most likely to fill lower-level positions (73.4%). These racial gaps were statistically significant ($\chi^2 = 80.092, p < .001$).

Racial differences in human capital and family background were noteworthy. Regarding human capital investment, Asians reported more years of schooling (14.975 years), compared with whites (14.058 years) and other racial minorities (13.212 years). Likewise, in terms of family background, father's SEI was highest among Asians (55.513) versus whites (48.148) and other races (39.682). These racial differences again were statistically significant (for years of education, $F = 33.44$ and $p < .001$; for father's SEI, $F = 80.96$ and $p < .01$).

With respect to racial makeup of U.S. workplaces, the bivariate findings showed racial segregation, as almost 74% of whites reported that their workplace was dominated by the same racial group, and 62.5% of Asians reported working in places with predominately white employees. Less than half (40.8%) of other underrepresented racial minorities reported working in a predominately white workplace.

Multivariate Findings

Table 2.3 presents results from the four logistic regression models predicting the attainment of managerial occupations but omitting controls for survey year, gender, age, place of birth, marital status, parenthood, region, and hours worked per week. All estimates are robust when including all observations. Including the covariates reduced the sample sizes but did not alter the results. Model 1 shed light on the baseline effect of race on having a position of authority and leadership. It reveals that non-white non-Asian workers of color are significantly less likely than white workers to attain managerial occupations ($b = -.499, p < .001$). And yet, it does not provide evidence of white-Asian achievement gap in attaining top tier occupational positions.

[TABLE 2.3 ABOUT HERE]

Model 2 incorporates years of schooling as an indicator of human capital and father's socioeconomic index as a variable for family background, as well as their quadratic terms. It shows that investment in human capital yielded higher odds of attaining managerial occupations ($b = .484, p < .001$). Further, father's SEI ($b = .044, p < .01$) is positively associated with an increase in the odds of attaining a managerial occupation, indicating that greater social capital leads to higher occupational status.

Controlling for human capital and family background reveals how racial identity influences the attainment of top-level positions, adding those variables makes the white versus non-white comparison significant. Specifically, non-white non-Asian racial minority workers are less likely than white workers to have managerial occupations ($b = -.368, p < .001$). That is, there is a definite racial disparity in attaining managerial occupations, net of human capital and family background; white workers were most likely to be employed in positions of workplace authority and leadership. However, still, although Asian workers are less likely than their white counterparts to attain managerial occupation, such white-Asian achievement gap is not statistically significant ($b = -.380, p$

> .05). This finding partially supports the first hypothesis, indicating the white versus non-white gap in the odds of having high status occupations.

Model 3 tests Hypothesis 2 by including a variable for white-dominant workplace as an indicator of racialized workplace settings. The literature on organizational-level racial inequality argues that white supremacy in a work organization can alienate non-white workers and prevent them from attaining high-status positions, thereby perpetuating their unequal status among workers. Contrary to Hypothesis 2, however, controlling for white workplace dominance does not weaken the effect of racial identity on managerial status attainment. White versus non-white racial disparity was still significant, as white workers were still more likely than workers of color to be in managerial positions. Although in interaction estimates, odds of having managerial occupations among non-Asian workers of color would lead a little change, they did not substantially show that predominately white workplaces yielded wider gaps between racial groups or lower odds of having managerial occupations. Also, workplace size also did not yield a difference on it.

[TABLE 2.4 ABOUT HERE]

To test Hypothesis 3, I then ran a series of multinomial logistic regression models using the three occupational strata as the dependent variable. Beyond the binary outcome of holding managerial occupations, this modelling seeks to ascertain the distinctive status of Asian members in the occupational hierarchy. Table 2.4 shows the results for predicting managerial occupations versus low-level occupations (the reference category is middle-level occupations). All models included survey year, gender, age, place of birth, marital status, parenthood, region, hours worked per week, and employer size, but they are not included in the table.

As predicted in Hypothesis 3, these models indicate that Asian workers are more likely to hold middle level professional occupations compared with their white and non-white non-Asian minority workers. Like their low odds of attaining managerial occupations, they are also less likely to be low-status workers, after controlling for human capital and family background.

In Model 1, compared with whites, Asians were 50% ($exp^{-.694}$) less likely to be managers. A white-Asian racial gap also was observed in having low-level positions. Compared with white workers, Asian workers were less likely to be in low-level occupations and more likely to be in mid-level occupations ($b = -.964, p < .001$). As compared to whites, non-Asian racial minorities were more likely to have low tier occupations. These findings suggest wide racial gaps in the occupation hierarchies of U.S. workplaces. In particular, a tri-racial structure was observed, wherein white employees occupied the highest levels of management, Asians occupied the middle levels of their professions, and other racial minorities occupied the lowest levels.

Model 2 adds variables for years of schooling and father's SEI to examine how human capital and family background shape occupational status and moderates the impact of race. After controlling for them, I found that Asian workers are about 48% ($exp^{-.687}$) less likely to obtain the managerial occupations than white workers. At the same time, as compared to their white counterparts, they are about 50% ($exp^{-.626}$) less

like to have the low status occupations. The moderating effect of human capital and family background was weaker for higher-level positions. Even after controlling for years of schooling and father's socioeconomic index, there was no substantial change in the race effect between managerial positions and professional positions. Still, in the comparison between white workers and non-white, non-Asian racial minority workers, I found that non-white, non-Asian racial minority workers attain managerial positions at significantly lower rates than white workers ($b = -.324, p < .01$). But the racial gap between those two groups in having low status is not significant.

These findings support the third hypothesis, indicating that Asians workers also are less likely than both white and other non-white workers to occupy low status positions, conditional on not holding either managerial or low status positions. Controlling for human capital and family background, I found that Asians workers are more likely to attain the middle-level positions and less likely to occupy hold both low status and managerial positions, as compared to both white workers and non-white non-Asian workers of color.

Finally, to account for the impact of racialized workplace settings, Model 3 includes a variable for a white-dominant workplace and its interaction terms with racial identities. It shows that working at white dominant workplaces increases odds of having professional occupations among non-Asian racial minorities, rather than lower-level occupations ($b = -.495, p < .01$). However, still, Asian workers are mostly likely to have professional occupations after controlling for this factor.

Additionally, it is noteworthy that working in larger workplaces is relatively akin to have professional occupations. This might suggest the division of labor and stratification of work at large businesses.

The multinomial logistic regression models showed that occupational hierarchy aligned with racial stratification, wherein managerial occupations were primarily filled by white employees, professional occupations by Asian employees, and lower-level occupations by other racial minorities. Factors known to be relevant in shaping one's labor market status (e.g., human capital and family background) did not shape individuals' odds of having managerial positions. These findings confirm a robust, persistent, and race-oriented occupational hierarchy of white dominance in U.S. workplaces. The results therefore indicate the triangulated position of Asian workers in the U.S. labor market.

Discussion

The findings support the hypotheses on the racially stratified occupational hierarchy. Based on prior studies on organization-level racial disparity in occupational hierarchies (Reskin et al. 1999; Wingfield and Alston 2014; Ray 2019; Wingfield and Chavez 2020), the first hypothesis suggested that whites are more likely than non-whites to attain occupations of authority and leadership. Controlling for human capital and family background, the binary logistic regression models revealed that all things equal, white dominance affected the attainment of managerial positions. Following the literature on Asian racialization in U.S. society (Kim 1999; Bonilla-Silva 2002, 2006), the third hypothesis predicted that those Asians workers also are less likely than both white and other non-white workers to occupy low status positions, net of human capital and family

background. As hypothesized, findings from the multinomial logistic regression models identified a three-tiered, race-based stratification system in occupational hierarchies (net of controls for human capital, family background, and other covariates), wherein white workers attained managerial occupations the most, Asian workers mostly attained professional occupations, and other racial minorities mostly attained lower-level occupations.

These findings affirm that the position of Asian employees in the occupational hierarchy of U.S. workplaces mirrors their position in the racial status hierarchy of society. A tri-racial stratification system of U.S. society emerges (Kim 1999; Bonilla-Silva 2002, 2006), which also applies to the occupational hierarchy of U.S. workplaces. And racially defined workplace hierarchies produce a bamboo ceiling that limits Asian workers attainment of high-level positions of authority in the U.S. job market. Asians are less likely to break through this invisible ceiling of occupational authority even when they possess equivalent human and social capital as their white counterparts (Takei and Sakamoto 2008; Oguntoyinbo 2014; Chin 2016; Chong 2016). Given the prevalence of Asian racialization in the labor market (Leong and Hayes 1990; Sy et al. 2010), the bamboo ceiling consequently prevents Asians from achieving the highest professional roles as leaders at their workplaces, regardless of their competencies, skills, and credentials.

Nonetheless, I did not find any support for the second hypothesis regarding the impacts of white-dominant workplace setting. Scholars argue that workers of color in a predominantly white workplace are marginalized by cultures, social organization, and practices. Tasks at workplaces are also racialized to strengthen white dominance. I thus predicted that Asian racialization is more pervasive in white dominated workplaces through assigning Asian workers to middle-level occupations. And yet, findings from the GSS using both binary and multinomial regression models do not support that the racialized workplace setting shapes race-based stratification at work.

The null finding may stem from a methodological limitation of available firm-level data on race and occupational status. The variable for white dominated workplace for this investigation is measured as respondents' self-report on workplace racial makeup. This measure does not capture the extent to which corporations with large non-white workforces may still be dominated by white managers in their C-suites. This shortcoming underscores the necessity of further research developing individual-level indicators and/or organization-level data for discerning racial patterns in managerial status attainment and their impact.

Other than the null finding regarding the role of white workplace dominance in Asian attainment of occupational authority, there remain some further limitations in this investigation. The limited size and distribution across employers of Asian survey respondents in the GSS may be prohibitive for assessing potential variations in occupational authority, along with gender, ethnic origins and geography, among Asian workers. These constraints highlight the need for major social surveys in the United States to gather adequate subsamples of Asian respondents. Future studies also could benefit from using panel data to account for nuances in the links between race and occupation, along with temporal contexts of the labor market.

Further, the GSS lacks some measures that could help account for the possible role of immigration- and acculturation differences in Asian occupational attainment (e.g., ethnic origin, immigration generation length of stay in the United States, and English proficiency) are important for understanding labor market assimilation among Asian Americans (Zeng and Xie 2004; Sakamoto et al. 2009; Kim and Sakamoto 2010; Lee and Kye 2016).

Nevertheless, the findings presented here demonstrate that there is a tri-racial hierarchy at work mirroring racial relations at society. Based on sociohistorical contexts of Asian racialization, these findings provide an explanation for Asian underrepresentation at positions of workplace authority and leadership.

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*Tables***Table 2.1.** Classification of the occupational hierarchy, GSS 2000-2018 (n=5,861).

2002 Census Occupation Code (4 digit)	
<i>Managerial (n=561)</i>	<i>10-430 Management occupations</i>
<i>Professional (n=1,725)</i>	<i>500-950 Business and financial operations occupations</i> <i>1000-3540 Professional and related occupations</i> 100-1240 Computer and mathematical occupations 1300-1560 Architecture and engineering occupations 1600-1960 Life, physical, and social science occupations 2000-2060 Community and social services occupations 2100-2150 Legal occupations 2200-2550 Education, training, and library occupations 2600-2960 Arts, design, entertainment, sports, and media occupations 3000-3540 Healthcare practitioner and technical occupations
<i>Low-level (n=3,575)</i>	<i>3600-4650 Service occupations</i> 3600-3650 Healthcare support occupations 3700-3950 Protective service occupations 4000-4160 Food preparation and serving related occupations 4200-4250 Building and grounds cleaning and maintenance occupations 4300-4650 Personal care and service occupations <i>4700-5930 Sales and office occupations</i> 4700-4960 Sales and related occupations 5000-5930 Office and administrative support occupations <i>6000-7620 Natural resources, construction, and maintenance occupations</i> 6000-6130 Farming, fishing, and forestry occupations 6200-6940 Construction and extraction occupations 7000-7620 Installation, maintenance, and repair occupations <i>7700-9750 Production, transportation, and material moving occupations</i> 7700-8960 Production occupations 9000-9750 Transportation and material moving occupations <i>9800-9840 Armed force</i>

Table 2.2. Descriptive statistics, by race.

	Total	White	Asian	Other
<i>Occupational hierarchy</i> ^a				
Managerial occupations	.089 (.285)	.099 (.299)	.083 (.276)	.055 (.229)
Professional occupations	.275 (.447)	.289 (.453)	.438 (.497)	.211 (.408)
Low-level occupations	.636 (.481)	.611 (.487)	.479 (.500)	.734 (.442)
<i>Human capital</i>				
Years of schooling ^a	13.890 (2.888)	14.058 (2.842)	14.975 (3.219)	13.212 (2.880)
<i>Family background</i>				
Father's SEI ^a	46.737 (2.761)	48.148 (2.644)	55.513 (23.532)	39.682 (19.094)
<i>Work characteristics</i>				
White-dominant workplace ^a	.663 (.473)	.741 (.438)	.625 (.485)	.408 (.491)
<i>Controls</i>				
Survey year				
2000	.136 (.343)	.142 (.349)	.147 (.356)	.110 (.313)
2002	.069 (.254)	.073 (.260)	.058 (.234)	.056 (.230)
2004	.064 (.244)	.063 (.243)	.103 (.304)	.062 (.240)
2006	.136 (.343)	.136 (.343)	.147 (.356)	.133 (.340)
2008	.089 (.285)	.089 (.284)	.077 (.267)	.094 (.291)
2010	.082 (.275)	.086 (.280)	.058 (.234)	.072 (.258)
2012	.087 (.281)	.085 (.279)	.090 (.287)	.091 (.288)
2014	.111 (.315)	.107 (.309)	.096 (.296)	.133 (.340)
2016	.122 (.327)	.120 (.326)	.122 (.328)	.129 (.335)
2018	.103 (.305)	.099 (.299)	.103 (.304)	.121 (.327)
Female ^a	.520 (.500)	.507 (.500)	.524 (.500)	.561 (.496)
Age ^a	41.464 (13.069)	42.254 (13.268)	39.783 (12.712)	39.063 (12.107)
US born	.867	.916	.321	.734

	(.340)	(.277)	(.468)	(.442)
Marital status ^a				
Never married	.299	.263	.315	.415
	(.458)	(.440)	(.465)	(.493)
Married	.473	.512	.532	.342
	(.499)	(.500)	(.500)	(.475)
Divorced, separated, or widowed	.228	.226	.153	.243
	(.419)	(.418)	(.301)	(.429)
Having kids ^a	.675	.661	.601	.730
	(.468)	(.473)	(.490)	(.444)
Region ^a				
Northeast	.173	.178	.177	.158
	(.379)	(.383)	(.382)	(.364)
South	.207	.182	.127	.298
	(.405)	(.386)	(.334)	(.457)
Mid-West	.406	.425	.208	.366
	(.491)	(.494)	(.406)	(.482)
West	.213	.215	.488	.179
	(.410)	(.411)	(.501)	(.383)
Hours worked ^a	41.728	41.908	4.332	41.299
	(13.424)	(13.537)	(13.637)	(13.007)
Employer size ^a				
Less than 10	.188	.123	.157	.181
	(.391)	(.330)	(.364)	(.385)
10 – 100	.389	.370	.345	.380
	(.487)	(.484)	(.476)	(.485)
100 or more	.423	.506	.497	.439
	(.494)	(.502)	(.500)	(.496)
<i>N</i>	5,861	4616	156	1,089

Note: Standard errors in parentheses. ^a Significant racial difference in $p < .05$.

Table 2.3. Results from binary logistic regression models predicting the managerial positions.

	Model 1	Model 2	Model 3
<i>Race</i>			
Asian	-.161 (.336)	-.380 (.343)	-.228 (.503)
Other races	-.499*** (.147)	-.368** (.150)	-.685*** (.238)
<i>Human capital</i>			
Years of schooling		.484*** (.176)	.487*** (.176)
<i>Family background</i>			
Father's SEI		.044*** (.013)	.043*** (.013)
<i>Racialized workplace</i>			
White-dominant workplace			-.025 (.119)
Asian × White workplace			-.255 (.657)
Other × White workplace			.595** (.299)
<i>Workplace size</i>			
Middle-sized business			.075 (.140)
Large-sized business			-.069 (.139)
(Constant)	-48.536*** (15.663)	-44.575*** (15.964)	-45.208*** (16.027)
<i>Pseudo R²</i>	.058	.092	.094
<i>LR χ^2</i>	214.5	34.9	347.2
<i>N</i>	5,822	5,822	5,771

Note: All models include covariates for survey year, gender (*female*), age, US born, marital status (*married* and *divorce, separated, or widowed*), having kids, region (*South, Midwest, and West*), and hours of work.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2.4. Results from multinomial logistic regression models predicting the three-levels of occupational hierarchy.

	Model 1		Model 2		Model 3	
	(Manager)	(Low)	(Manager)	(Low)	(Manager)	(Low)
<i>Race</i>						
Asian	-.694** (.347)	-.964*** (.185)	-.664* (.353)	-.681*** (.220)	-.562 (.523)	-.706** (.348)
Other races	-.325** (.158)	.251*** (.084)	-.324** (.162)	.059 (.100)	-.462* (.257)	.323** (.149)
<i>Human capital</i>						
Years of schooling			-.349** (.175)	-.140 (.160)	-.300* (.173)	-.088 (.157)
<i>Family background</i>						
Father's SEI			.034** (.014)	-.011 (.009)	.034** (.014)	-.011 (.009)
<i>Racialized workplace</i>						
White-dominant work					-.098 (.131)	-.142 (.096)
Asian × White work					-.180 (.677)	.058 (.432)
Other × White work					.278 (.322)	-.495** (.197)
<i>Workplace size</i>						
Middle-sized business					-.141 (.157)	-.343*** (.110)
Large-sized business					-.461*** (.154)	-.680*** (.108)
<i>Pseudo R²</i>	.047		.217		.223	
<i>LR χ²</i>	483.3		2,241.9		2,288.3	
<i>N</i>	5,822		5,822		5,771	

Note: All models include covariates for survey year, gender (*female*), age, US born, marital status (*married* and *divorce, separated, or widowed*), having kids, region (*South, Midwest, and West*), hours of work, and employer size (*10-100, 100-500, and 500 or more*).

* $p < .05$. ** $p < .01$. *** $p < .001$.

CHAPTER 3. THE ORGANIZATIONAL BAMBOO CEILING WITHIN US
BUSINESS: RACE, JOB TRAINING, AND PROMOTION AMONG ASIAN
EMPLOYEES

THE ORGANIZATIONAL BAMBOO CEILING WITHIN US BUSINESS: RACE,
JOB TRAINING, AND PROMOTION AMONG ASIAN EMPLOYEES

Abstract

Using data from the National Longitudinal Survey of Youth, I assess how Asian racial identity influences managerial job promotion within U.S. workplaces. Controlling for demographic and workplace characteristics, Asians get nonmanagerial promotions earlier than whites. Although Asians and whites get managerial promotions at equivalent rates, when using prior non-managerial promotions as a separate indicator of human capital acquisition, I find that Asians receive managerial promotions at much lower rates than whites who have received the same number of past non-managerial promotions. These findings suggest that a bamboo ceiling from Asians' racial status position prevents them from attaining managerial authority at rates commensurate with their human capital acquisition.

Keywords: Asian, workplace promotions, training, the bamboo ceiling, Cox proportional hazard models

Introduction

The U.S. labor market is racially stratified. Contrary to the model minority mythology, Asian workers disproportionately attain professional occupations, and other non-white non-Asian workers of color disproportionately occupy nonprofessional occupations. Neither Asians nor other people of color attain managerial positions at rates comparable to whites after controlling for education. In other words, the U.S. labor market sorts of people into occupational strata by race, not just human capital investment or class background (Reskin et al. 1999; Wingfield and Alston 2014; Ray 2019; Wingfield and Chavez 2020). Asians are sorted into a middle professional stratum that reflects their racialization as honorary whites who are nonetheless stigmatized as unsuited for holding positions of managerial authority and leadership (Oguntoyinbo 2014; Chong 2016; Chin 2016; 2020).⁰

Less is known regarding the extent to which the sorting of Asians occurs within businesses as opposed to across a market wide structure in which Asians might apply for jobs across a range of employers. This paper assesses patterns within workplace promotions for Asians in comparison to whites and other racial groups. Promotion shapes how individual advance in their careers within a workplace (Spilerman and Lunde 1991; Rosenfeld 1992; Pergamit and Veum 1999). Promotion leads to other labor market advantages such as wage increases (Pergamit and Veum 1999; Addison et al. 2014), improved work performance (Rinny et al. 2020; Haryono et el. 2020), and higher job satisfaction (Pergamit and Veum 1999; Naveed et al. 2011). Moreover, in the hierarchical structure of work organizations, promotion is the path to senior management positions that provide power, prestige, and responsibility at work (Spilerman and Lunde 1991; Pergamit and Veum 1999).

To explain workplace promotion, organizational studies highlight the role of job training as an investment in human capital. Work organizations provide promotion opportunities for those who have appropriate skills and productivity (Sørensen 1977; Jovanovic 1979; Mobley 1982; Stevens 1999). Having specific training and more training thus increases an employee's promotability at work (Baron et al. 1986; Grimshaw et al. 2002; Melero 2010). Meanwhile, scholars further argue that there is a significant racial gap in promotions unexplained by acquisition of human capital (Spilerman and Lunde 1991; Pergamit and Veum 1999; Landau 1995; Lehmann 2011; Abelson et al. 2018). They indicate that workplace culture and practices are racialized in ways that make promotion racially unequal with disproportionate advantages white employees (James 2000; Wingfield and Alston 2014; Chin 2020).

I assess how acquisition of training influences promotion rates and moderates the association between race and promotions, focusing on the white-Asian gap. Using data from the National Longitudinal Survey of Youth 1979, I find that Asians get nonmanagerial promotions earlier than whites and other racial minorities. But whites get managerial promotions at equivalent rates to Asian employees. Although training generally leads to all types of promotion, it does not substantially increase incidents of a managerial promotion for Asian workers. In addition, the receipt of prior non-managerial promotions significantly increases the probability of a managerial promotion. But after

controlling for previous non-managerial promotions, Asians are significantly less likely than whites to receive a managerial promotion. This suggests that Asians acquire human capital through training and non-managerial promotion, but do not receive managerial promotions that are commensurate with this human capital acquisition at the same rate as Whites

By discussing the mechanism of promotions in relations to race and training, this investigation seeks to develop a better understanding of how an individual's career is developed in racialized work organizations. In doing so, I show that a principal mechanism of the bamboo ceiling occurs through racial status constraints on employers' internal promotions.

Job Training and Workplace Promotion

At work organizations, one's opportunity structure in the job ladder is thought to be systemically institutionalized, depending on an employee's skill levels and task competence (Jovanovic 1979; Mobley 1982; Sørensen 1977). In these institutionalist accounts, the fundamental consequences of race that shape one's opportunity structure at work are often overlooked. In following sections, I will discuss two perspectives involving promotion. First, I address institutional perspectives because they highlight the importance of job training for achieving promotion as human capital investment. Then I further suggest that race still is a significant factor that influences promotion opportunities at work. In doing so, I explain how an organizational "bamboo ceiling" limits Asian attainment of high-status positions, despite a commensurate rate of human capital acquisition.

Institutional theorists suggest that labor markets are systemically segmented to separate submarkets with different characteristics, norms, and rules (Reich et al. 1973; Osterman 1975). The primary sectors are characterized by high levels of wages, job safety, unionization, and autonomy of employees while the secondary sectors are characterized by less attractive and poor working conditions (Doeringer and Piore 1970).

Within a workplace, career paths are also segmented institutionally (Sobel 1982). Some employees are assigned to a primary career path providing more promotion opportunities and better working conditions while others remain in a supplementary path. Sorting employees in different career tracks is determined by performance appraisals by senior managers on whether an employee is skilled and trainable for the designated position (Sørensen 1977; Jovanovic 1979; Mobley 1982; Sobel 1982). In other words, by their levels of skills and task competence, workers are situated in different career paths which produce variations in opportunities and outcomes (DiPrete and Soule 1988; Winter-Ebmer and Zweimüller 1997; Pekkarinen and Vartiainen 2006); if workers are perceived as skilled and trainable, they are institutionally assigned to a primary career path providing more promotion opportunities (Sobel 1982). Therefore, acquisition and accumulation of job training improve workers' potentials for achieving high status positions (Mincer 1974; Stevens 1999).

Empirical studies lend supports to the role of training in promotions, indicating that the more receipts in training, the more opportunities in the job ladder and for career development (Baron et al. 1986; Melero 2010; Pergamit and Veum 1999; Dekker et al. 2002). For instance, investigating 1,883 jobs in 100 single-site California workplaces between 1965 and 1979, Baron and colleagues (1986) find that one's career development is highly correlated with training investment that knowledge and skills acquired by training programs increased his or her promotability at the promotion ladder. The promotion ladders in workplace further provided more opportunities of selected on-the-job training. Using data from the British Household Panel Survey (BHPS, 1991-2002), Melero (2010) shows that job-related training significantly shapes the promotion probability and wages for British women. Using the National Longitudinal Survey of Youth, Pergamit and Veum (1999) also find that the acquisition of job training and skill advancement lead to promotions. Moreover, for workers those who do not have human capital at a rate comparable with their counterparts, having more training could increase their promotability (Pergamit and Veum 1999).

For workers those who are in the secondary sectors, investment in training also facilitates their promotability to higher job levels (Dekker et al. 2002). Investigating data from the Labour Supply Survey of 1992 of the Dutch Organization for Strategic Labour Market Research, Dekker and colleagues (2002) assess the role of training in career mobility. They find that the positive effect of training in promotion is the highest in the supplementary market characterized by low level jobs with no vocational qualification requirement. They thus predict that continuing investments in human capital for low level workers would enhance their chances for entry into the primary labor market.

The Continuing Significance of Race in Promotion

Despite the positive role of job training in workplace promotion, the returns of training are not equal for all workers. Using data from black and white managers in a Fortune 500 financial services firm, James (2000) argues that the payoffs of training differ across racial groups. She finds that participation in work-related training programs is generally associated with an increase in reported promotion rates. However, race moderates the role of training on promotion, indicating that training provides a larger promotion boost for whites, as compared to blacks. So, even when they receive equivalent levels of training with their white counterparts, black managers face workplace discrimination which slows their rate of promotion. This implies that race has a significant role for promotion, beyond training.

Organizational literature often overlooks fundamental consequences of race that shape inequalities at work (Tomaskovic-Devey 1993). Even for institutional perspectives which account for intentional discrimination between workers in job security and opportunities in internal labor markets, race-based inequalities in workplaces are sometimes regarded as incidental by-products of labor market operations (Doeringer and Piore 1970:220). As a result, they do not substantially explore the racial dimensions of labor market segmentation within places of employment (Omi and Winant 2014:32).

Instead, race scholars indicate that work practices and workplaces are racialized in the United States (Wingfield and Alston 2014; Ray 2019; Wingfield and Chavez 2020). In work organizations, being white increases one's chances for promotability, because whiteness becomes a credential (Ray 2019). In doing so, white workers are in a career path that accelerates their promotion possibilities and enhances their chances of attaining high status managerial/executive positions. Empirical research provides evidence that white workers received more promotions than their non-white counterparts (Spilerman and Lunde 1991; Pergamit and Veum 1999; Landau 1995; Lehmann 2011; Abelson et al. 2018). Race becomes a key determinant for understanding the opportunity structure at racialized workplaces (Wingfield and Alston 2014). Hence, promotions mirror and magnify the unequal structure of society by putting workers down in different career path with respect to race.

Asians accumulate human capital from education and vocational/skill training at comparable rates with, or sometimes, greater than whites (Sue and Okazaki 1990; Hsin and Xie 2014; Lee and Zhou 2015). Notwithstanding, Asians' human capital acquisition does not lead to commensurate levels of promotion. Research shows that Asians have lower chances of job promotions in terms of attaining high status positions than their white counterparts in various sectors, including private (Fernandez 1998; Takei et al. 2014; Gee and Peck 2018; Chin 2020), public (Sakamoto et al. 2006), and academia (Palepu et al. 1998; Perna 2001).

Given this paradox, the White-Asian promotion gap can be only explained by the unequal structure of opportunity at workplace by race. In other words, regardless of job training and other forms of human capital, Asian workers' career development is limited by a "bamboo ceiling" that reduces their access to high-status managerial positions (Chin 2020). This strongly suggests acquiring additional human capital in the form of vocational/skill training will not increase the likelihood of promotion at the same rate as their White counterparts.

In summary, since the opportunity structure at workplaces is racialized, despite human capital acquisition, I expect that Asians may attain managerial promotions at lower rates than whites. To test this assumption, I put forward a series of hypotheses. First, I propose that there is no substantial difference between Asians and whites in receiving workplace trainings that provide a ladder to promotion. While Asians seek human capital investment via higher education at higher rates than all other racial groups, their racial status position will inhibit employers from offering them workplace trainings which provide human capital and paths to managerial promotion. Following prior research on Asian labor market achievement (Sue and Okazaki 1990; Hsin and Xie 2014; Lee and Zhou 2015), I expect that there is no substantial difference between whites and Asians in the training.

Hypothesis 1: Relative to whites, Asians are no more likely to receive workplace training.

Hypothesis 1 lays the groundwork for further hypotheses on disparities in promotions between whites and Asians. First, I expect that Asians will receive

managerial promotions at lower rates than whites. Managerial promotions will mirror Asian's racial status position beneath the bamboo ceiling (Gee and Peck 2018; Chin 2016; 2020). This inequality will persist even after controlling for workplace trainings that provide a ladder into managerial promotions.

Hypothesis 2: Compared to whites, the probability of managerial promotion will be lower for Asians.

Within lower levels of the workplace hierarchy, Asians will be unconstrained by the bamboo ceiling. This adds a dimension to known mechanisms by which labor market inequality operates differently in lower occupational levels than in higher occupational tiers (Cotter et al. 2001). For Asians, there will be no race-based disadvantage in non-managerial promotions. In fact, Asians will have an advantage over whites and other racial groups in mid-level promotions due to both their midlevel racial status position and their high levels of human capital acquisition (Sue and Okazaki 1990; Hsin and Xie 2014; Lee and Zhou 2015).

Hypothesis 3: Compared to whites, the probability of non-managerial promotion will be higher for Asians.

I will carry out additional tests of how on-the-job human capital acquisition shapes racial gaps in promotions. Informal on-the-job skills acquisition is even less likely to help Asian managerial promotion than formal training. The informality of non-training skills acquisition makes it less visible and more susceptible to filtering through a biased racial lens (Wingfield and Alston 2014; Ray 2019; Wingfield and Chavez 2020). In the hierarchical workplace setting, attaining a top position also involves ascending well-defined promotion steps (Pergamit and Veum 1999). Therefore, it is expected that the receipt of a managerial promotion is highly correlated with past promotions. But some employees “move upward at a much faster rate than others” (Pergamit and Veum 1999:587). Asians might climb to the top of the non-managerial job ladder at higher rates than whites and other racial groups. Because of their midlevel racial status position, however, Asians will be less likely than whites to be promoted the rest of the way into management once they have climbed the non-managerial job ladder (Spilerman and Lunde 1991; Pergamit and Veum 1999; Landau 1995; Lehmann 2011; Abelson et al. 2018).

Hypothesis 4: Relative to whites who received comparable prior promotions up the job ladder, Asians are less likely to receive managerial promotions.

Methods

Data and Sample

I use data from the National Longitudinal Survey of Youth (NLSY79), a nationally representative cohort of people living in the United States born between 1957 and 1964 (n=12,686). The survey asks about respondents' backgrounds, educations, employment histories, incomes, health, attitudes towards social issues, and much more. Interviews were conducted annually from 1980 to 1992 and biannually thereafter. The data are extensively used in social science research on occupational career decisions and

trajectories (Cobb-Clark and Dunlop 1999; Yamaguchi 2010; Kosteas 2011; Addison, Ozturk, and Wang 2014).

For this analysis, I only include respondents who were adults and those who have at least one record of employment across all 28 waves of the survey. The final sample minus non-codable cases thus comprises 12,250 respondents and 147,139 observations with data for at least one dependent variable and all covariates.

Variables

The NLSY79 asks about respondents' experiences of position changes at current employer and/or workplace, including promotion and demotion. Although detailed question items have changed across survey years, this data can provide information on whether respondents received a promotion at workplace in each survey year. In addition, using the 1970 and 2000 Census 3-digit Occupation Code, I specify that each promotion experience was related to obtaining senior management positions or non-management positions. Using them, on one hand, I create variables for 1) *managerial promotion*, which is a binary variable that takes the value 1 at a respondent's attainment of senior management positions through a promotion in each survey year. In other words, if a respondent was promoted to a manager, an executive, or an administrative role in a specific year, I only treat this specific year/person as a managerial promotion equal to 1. Otherwise, it is equal to 0. On the other hand, if there is a record of promotion with an involvement of nonmanagerial positions, I treat such year/person as 2) *nonmanagerial promotion*. That is, if a respondent was promoted in a year, but the promotion was not associated with obtaining a manager, an executive, or an administrative role, I treat this specific year/person having a nonmanagerial promotion. I then calculate the total number of prior promotions by adding together both managerial and nonmanagerial promotions in past years.

The main independent variables for explaining promotion are training and race. For training, I use questions asking about whether respondents have been enrolled in vocational/technical training for one month or more. If a respondent took part in any vocational/technical training programs in a survey year, responses were coded as 1. Using this data, I calculate the *total number of vocational/technical training*, which is accumulated across surveys. *Race* is included as a series of dummy variables for Asian and other races. The omitted reference category for race is White. Descriptive statistics for main variables of interest are reported in Appendix 3A.

Other than training and race, I account for various demographic and work characteristics that might have an influence on promotion. For demographic characteristics, I include a dummy variable for *gender* (reference category is male); *years of schooling* as an indicator of human capital; sets of dummy variables for *marital status* (never married; married; separated, divorced, or widowed); and a dummy variable for *parenthood* (having kids or not). For work characteristics, to allow for linear and curvilinear effects of job tenure in promotion rates, weeks of *tenure* at current workplace and its squared term are included. A variable for *years of work experiences* is also included.

Analytic Strategy

For my multivariate analyses, I use two different modelling strategies. First, a mixed-effects linear regression for the time-series panel data is used. Compared to OLS regression, this technique accounts for random subject effects in the regression models to explain the effect of subjects on repeated observations (Hedeker and Gibbons 2006; Rabe-Hesketh and Skrondal 2008; Thomas et al. 1998). These random-subject effects indicate each individual's trend across time and account for correlations in the longitudinal data (Hedeker and Gibbons 2006). This method enables me to account for the influences of time-invariant variables on the outcome variable, which allows me to ascertain the racial gaps in vocational/technical training receipts. The reasoning of this analysis is to test that there is no difference in the receipts of training between white and Asian workers.

Then, I use cox proportional hazard models to assess the associations between race, training, and the receipts of promotions. Using the duration (or the survival time) prior to an event, it estimates the hazard ratios (or relative risks), which denote the ratios of occurrence of the events (hazards) corresponding to explanatory variables. In addition, assuming no particular parameterization mechanism of the shape of the hazard across times, it provides the general hazards for all subjects (Rabe-Hesketh and Skronda 2008; Cleves et al. 2016). This modelling strategy is broadly used in studies on the promotion process and decision making (Pergamit and Veum 1999; Sheridan, Slocum, and Buda 1997; Lyness and Judiesch 2001; Grenier and Xue 2011). Using Cox proportional hazard models, I estimate the hazards of managerial or nonmanagerial promotion and their relationship to race and training. For those models, missing values are dealt with using listwise deletion.

Findings

I find support for Hypothesis 1 that receipt of training will have no association with Asian racial identity in comparison to white reports of training. Using the number of trainings as the outcome variables, Table 3.1 presents the results from the mixed-effect regression models estimating the racial gaps in training receipts with odd ratios. In the table, the omitted reference category for race is White. All models include covariates for demographic and work characteristics, but their coefficients are not included in the table.

[TABLE 3.1 ABOUT HERE]

The first model shows the racial disparity in vocational/technical training receipts among my full sample of 12,250 respondents. It reveals that Asian workers have received training more than their White counterparts by 9.8%, net of controls. Consistent with hypothesis 1, however, this racial gap is not statistically significant.

Subsequent models will restrict the sample to those who ultimately receive promotions as Cox panel models require a respondent level change in the dependent variable. To confirm that the racial distribution of training is similar among those who ultimately receive promotions, I then restrict the sample to those who received at least one promotion during the panel years. For those who got promotions, there is no significant racial gaps in training receipts. More specifically, by decomposing

promotions, Model 2 encompasses 1,114 respondents who had obtained a high-status position through promotions and Model 3 includes 2,845 respondents who had promotions to nonmanagerial positions, respectively. After controlling for demographic and workplace characteristics in both models, there still was no evidence that race shapes the receipts of training; for those who had promotions to a managerial position, Asians, as compared to their white counterparts, are 8.9% more likely to receive vocational training, but the white-Asian gap is not statistically significant. And among workers who have had a nonmanagerial promotion, Asians are about 17% less likely to have training experiences than whites, but the gap is not significant.

[TABLE 3.2 ABOUT HERE]

Table 3.2 reports the results of tests for this hypothesis using Cox proportional hazard models predicting the ratios of occurrence (hazards) of nonmanagerial and managerial promotions. I find mixed support for Hypothesis 2 that Asians are less likely to receive managerial promotions than whites and Hypothesis 3 that Asians are more likely to receive non-managerial promotions than whites, net of training.

In detail, the first three models reveal the racial gaps in attaining managerial promotions, as well as the role of training. Model 1 shows there is no statistically significant difference between white and Asian workers in hazards of attaining a managerial position via promotions (hazards ratio = 1.255). The promotion gap between white and other minority workers is more remarkable, showing that other workers of color are about 20% less likely than White workers to be promoted to a senior position, all else equal (hazards ratio = .809, $p < .05$). Model 2 assess how training relates to managerial promotions. I find that all else equal, an additional vocational/technical training is associated with an 8.6% increase in the hazards of a managerial promotion (hazards ratio = 1.086, $p < .001$). Model 3 is an additive model including variables for race and training, as well as other control variables. It reveals that training still increases managerial promotion by 8.3% (hazards ratio = 1.083, $p < .001$). But there is little attenuation in the white-Asian gap in a managerial promotion, and the gap is still not significant. In other words, access to training does not appear to influence Asians' comparable rates of managerial promotion relative to whites. These findings do not support Hypothesis 2 that Asians are less likely to receive managerial promotions than whites, but these results are not necessarily inconsistent with the contention that Asians do not receive managerial promotions at rates commensurate with their human capital acquisition. Tests for my further hypotheses assess this possibility.

The remaining three models in Table 1 show racial gaps in nonmanagerial promotions to test Hypothesis 3 that the probability of non-managerial promotion will be higher for Asians, compared to whites. Model 4 indicates that net of controls, the rates of achieving nonmanagerial promotions for Asians, as compared to whites, increase by 68.5% (hazards ratio = 1.685, $p < .05$). In contrast, there's no difference in the hazards of a nonmanagerial promotion between whites and non-white non-Asian minority workers (hazards ratio = .997). In Model 5, I also find that an additional vocational/technical training is weakly associated with an 2.5% increase in the hazards of a nonmanagerial promotion (hazards ratio = 1.025, $p < .05$). Model 6 predicts the hazards of a

nonmanagerial promotion by race and training. An additional training still is associated with an increase in the hazards of a nonmanagerial promotion by 2.5% (hazards ratio = 1.025, $p < .05$). Asians are about 70% more likely than whites to achieve a nonmanagerial promotion (hazards ratio = .699, $p < .05$). Compared to the race model (Model 1), adding a variable for number of trainings even widens the white-Asian gap by 1.4%. These findings support Hypothesis 3, indicating that Asians are more likely to receive non-managerial promotions than whites. Moreover, for lower levels of the business, training increases Asians' promotability. Nonetheless, on-the-job human capital acquisition is fully sufficient for promotability assessment in attaining high status positions in the internal hierarchy.

[TABLE 3.3 ABOUT HERE]

Table 3.3 presents results from the four logistic regression models predicting the attainment of managerial occupations but omitting controls for survey year, gender, age, place of birth, marital status, parenthood, region, and hours worked per week. All estimates are robust when including all observations. Including the covariates reduced the sample sizes but did not alter the results. Model 1 shed light on the baseline effect of race on having a position of authority and leadership. It reveals that non-white non-Asian workers of color are significantly less likely than white workers to attain managerial occupations ($b = -.499$, $p < .001$). And yet, it does not provide evidence of white-Asian achievement gap in attaining top tier occupational positions.

[TABLE 3.3 ABOUT HERE]

Even though I did not find support for Hypothesis 2 of a white-Asian gap in managerial promotions, I find that considering past promotion experiences validates a white-Asian gap in receiving managerial promotions, as I predicted in Hypothesis 4 that Relative to whites who received comparable prior promotions up the job ladder, Asians are less likely to receive managerial promotions. Table 3.3 present a Cox proportional hazard model assessing how past promotion experiences shape the receipts of managerial promotions. Note that the first model here is identical to Model 3 of Table 3.2, but I include it again here for comparison.

Model 2 estimates the role of past promotion experiences in managerial promotions. I find that past promotion experiences decisively increase the receipt of managerial promotions. An additional experience of past promotion is associated with a 75.5% increase in the hazards of managerial promotions (hazards ratio = 1.755, $p < .001$). The variable for training is only marginally significant when including a variable for the number of past promotions (hazards ratio = 1.034, $p < .10$).

Importantly, adding a variable for past promotion experiences, the coefficient for the white-Asian gap in managerial promotions flips over and becomes significant. Asians, as compared to whites, are about 57% less likely to be promoted to a high-status position (hazards ratio = .422, $p < .10$). Still, non-white non-Asian minorities are about 16% less likely than whites to have a managerial promotion (hazards ratio = .838, p

< .05). In other words, after accounting for prior promotions, whites are most likely to attain managerial promotions, followed by non-white non-Asian minorities and Asians.

These findings suggest that a job promotion, more specifically, a managerial promotion in an internal hierarchy is systemically structured by stages. Workers are considered for the managerial promotion if they have had enough experiences in the business. Furthermore, as well as structured, the receipt of managerial promotions is also racialized. The opportunity ladder of workplace is disproportionally offered for whites; Asians only have restricted opportunities of managerial promotions even they have comparable rates of past promotion experiences and vocational/skill training with whites. These findings support Hypothesis 4 that Asians are less likely to receive managerial promotions, relative to whites who received comparable prior promotions up the job ladder.

Discussion and Conclusion

Using data from the NLSY, I investigated the association between race, training, and the promotion receipts at work. Mixed-effects regression models revealed that there is no significant racial gap in the training receipt, for both all respondents and those who received any type of promotions. Relating to my first hypothesis, this indicates that there is no difference between whites and Asians in human capital investment at workplaces. Cox proportional hazards models showed that there are complexities in the association between race and promotion receipts. Although I expected a white advantage in managerial promotions (Hypothesis 2) based on the bamboo ceiling thesis (Chin 2020; Gee and Peck 2018; Sakamoto, Woo, and Yap 2006), there is no white-Asian gap in terms of managerial promotions if we do not account for prior promotions. Otherwise, I found that Asians are more likely than whites to receive nonmanagerial promotions, controlling for demographic and work characteristics. Also, acquisition of job training slightly increases nonmanagerial promotion rates for Asians, as compared to whites. These results imply that attainment of human capital for Asians from on-the-job knowledge learning at work serves for promotions at lower levels. These support my third hypothesis.

More importantly, my findings suggest that past promotion experience is vital for predicting managerial promotions. I found that more experiences of promotions in the past lead to more chances of receiving managerial promotions. That is, in the well-defined internal hierarchy, certain employees are appraised as “promotable” and are institutionally located in career paths relating to workplace leadership and authority (Pergamit and Veum 1999:587). Also, the opportunity structure for internal promotions at work are racialized, as well as institutionalized. Considering the past promotion experience, the racial gap became more remarkable, because the chances of managerial promotions for Asians are considerably decreased. In other words, controlling for past promotions, the white-Asian gap become significant, and whites are mostly likely to receive managerial promotions, followed by other races and Asians. Therefore, as I expected in Hypothesis 4, Asians are less likely than whites who had comparable prior promotions to receive managerial promotions. These findings indicate that Asians face an organizational barrier that does not allow them to move up the pipeline within businesses.

Although they are highly educated and skilled, Asians represent the high- status positions at lower rates than whites due to such bamboo ceiling.

The funnelling of Asians into mid-level and technocratic occupations seems likely to reinforce the racial status position that has relegated Asians to this occupational tier in the first place. Research indicates that English language acquisition challenges (Kossoudji 1988; Yu 2020) and cultural differences in interpersonal styles and networks at work (Cianni and Romberger 1995; Chin 2016) can reduce the perception of Asians as professional and promotable. These perceptions are likely to be filtered through a racial lens of Asians as forever foreign and anti-social. The subordination of Asians in midlevel positions provides spurious support for the racist argument that they are unsuited for leadership. The exclusion of Asians from leadership likewise maintains white hegemony over the meanings and content of leadership, sociality, and management culture. This perpetuates the othering of Asian cultural traditions as “forever foreign” and anti-social. This vicious cycle is consistent with my findings and has been supported by substantial empirical research using qualitative methods (Woo 2000; Lai and Babcock 2013; Chin 2020).

My findings also show the limits to which both Asians and other racial groups can achieve social mobility through individual education achievement if cultural and organizational structures of white dominance remain entrenched. My findings show that Asians have failed to achieve income and occupational status equity with whites even when they surpass whites in educational attainment and human capital. Asian racialization in occupational hierarchies suggests that even oppressive cultural assimilation to valorized whiteness has limitations as a path to mobility. This entrenchment of racial castes in occupational hierarchies creates obstacles for all non-white persons who surpass most whites in educational success.

If we are to dismantle structures of white supremacy that impede racial equity at work, further research could investigate further the discourses that executives use when they pass over Asians for promotion. This might expand our understanding of the cultural stigmas behind Asian’s racial status position and the narratives that justify this inequality in a supposedly colorblind society. Human capital theories imply that equivalent promotion for Asian and white workers should reflect equivalent levels of human capital acquisition and a credentialing of English language fluency and interpersonal skill. Yet Asian workers with equivalent past promotions as white workers are promoted into management at substantially lower rates. By critically documenting the racial discourses that in fact inhibit Asian occupational mobility, we might then construct new narratives and policy structures of racial justice and equity for removing the bamboo ceiling.

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*Tables***Table 3.1.** Results from Mixed-Effects Regression Models Predicting Racial Gaps in Training Receipts.

	Model 1 (All)	Model 2 (Managerial)	Model 3 (Nonmanagerial)
<i>Race</i>			
Asian	1.098 (.116)	1.089 (.374)	.729 (.229)
Other races	1.007 (.022)	.887 (.074)	1.017 (.049)
Log likelihood	-208,306.1	-26,657.1	-58,56.8
Wald χ^2	62,696.85	10,283.28	19,763.63
<i>N</i> (Subjects)	12,250	1,114	2,845
<i>N</i> (Observations)	147,139	17,352	40,429

Note: Model 2 includes 1,114 individuals who got at least one promotion to a managerial position while Model 3 2,845 individuals who had been promoted to a nonmanagerial position at least once. All models include covariates for demographic and work characteristics. Standard error clustered in subjects in parentheses.

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3.2. Results from Cox Hazards Models Predicting Promotion Receipts.

	<i>Managerial</i>			<i>Nonmanagerial</i>		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>Race</i>						
Asian	1.255 (.409)		1.249 (.410)	1.685* (.430)		1.699* (.433)
Other races	.809** (.065)		.822* (.067)	.997 (.045)		.998 (.045)
<i>Training</i>						
Numbers of training		1.086*** (.021)	1.083*** (.021)		1.025* (.012)	1.025* (.012)
Log likelihood	-8,847.5	-8,839.7	-8,834.3	-33,569.2	-33,569.0	-33,565.9
Wald χ^2	953.95	938.06	946.48	791.84	783.85	789.54
<i>N</i> (Subjects)	1,114	1,114	1,114	2,845	2,845	2,845
<i>N</i> (Observations)	17,352	17,352	17,352	40,429	40,429	40,429

Note: To test Hypothesis 2, Models 1, 2, and 3 include 2,845 individuals who got at least one promotion to a managerial position while Models 4, 5, and 6 accounts for 1,114 individuals had been promoted to a nonmanagerial position at least once for testing Hypothesis 3. All models include covariates for demographic and work characteristics. Standard error clustered in subjects in parentheses.

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Table 3.3. Results from Cox Hazards Models Predicting Managerial Promotion Receipts.

	Model 1 (Training)	Model 2 (Past promotions)
<i>Race</i>		
Asian	1.249 (.410)	.422† (.255)
Other races	.822* (.067)	.838* (.072)
<i>Training</i>		
Numbers of training	1.083*** (.021)	1.034† (.020)
Past promotion experiences		1.755*** (.057)
Log likelihood	-8,834.3	-8,574.6
Wald χ^2	946.48	1,014.90
<i>N</i> (Subjects)	1,114	1,114
<i>N</i> (Observations)	17,352	17,352

Note: All models include covariates for demographic and work characteristics. Standard error clustered in subjects in parentheses.

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.

Appendix 3A. Descriptive Statistics for Variables for Promotion and Training Receipts, by Race.

	(All)	White	<i>by race</i> Asian	Other races
Promotion				
<i>Promotion hazards</i>				
Nonmanagerial	.010	.010	.015	.009
Managerial	.005	.006	.008	.005
<i>Promotion periods</i>				
Nonmanagerial	8.9	8.7	7.5	9.1
Managerial	10.8	10.1	9.1	11.8
Training				
<i>Numbers of training</i>				
	1.2	1.2	1.4	1.2
	(1.7)	(1.7)	(1.7)	(1.7)
<i>N (Respondents)</i>	12,250	6,474	129	5,647

Note: Standard error in parentheses.

CHAPTER 4. EXPLORING VARIATIONS IN ASIAN (DIS)ADVANTAGES IN
CAREER ACCESS AND INCOME BETWEEN STEM AND FINANCE
OCCUPATIONS

EXPLORING VARIATIONS IN ASIAN (DIS)ADVANTAGES IN CAREER ACCESS
AND INCOME BETWEEN STEM AND FINANCE OCCUPATIONS

Abstract

Using data from the 2019 American Community Survey, I explore variations in Asian (dis)advantages in STEM and finance fields, focusing on career access and income. In STEM occupations that are masculine, but open to Asian, Asian men were attaining STEM occupations and high compensation than any others. After controlling for sociodemographic and work characteristics, the Asian income advantage compensated for a female disadvantage for Asian women. However, in finance professions that are segregated by race and gender, Asians were no more enjoying advantages in career access and income. For both occupational groups, attaining managerial status is less important for income attainment. The overall findings support implementing the intersectional approach on organizational studies.

Keywords: Asian, career access, income, occupational social closure, intersectionality, STEM, finance, OLS regression

Introduction

As important measures of labor market and social standing, employment and income are of interest to organizational scholars. It is well documented in the literature that whites and men are more likely to be employed and earn more than racial minorities and women (Budig et al. 2021; Bishu and Alkadry 2017; Pais 2011; Manning and Saidi 2010). For Asians, notwithstanding, the Asian-white employment and income gaps have flipped during recent decades as Asians became the racial group with the highest level of labor force participation and median income in the U.S. economy (Barringer et al. 1990; Icel 1999; Goyette and Xie 1999; Sakamoto et al. 2009; Zeng and Xie 2004). Nevertheless, this national advantage in median incomes and employment may obscure persistent racial and gendered penalties for Asians in particular organizational contexts.

Racialized organizations and intersectionality are promising but thus far underutilized theoretical frameworks for explaining employment and income patterns among Asians relative to other groups. These theoretical approaches stress that white and masculine identities provide socioeconomic advantages, which produce systemic organizational workplace inequalities between whites and non-whites and between men and women (Browne and Misra 2003; Glenn 2009). Career access and income attainment of racial minorities and women are limited by inequality regimes at work that perpetuate racial and gender inequalities (Acker 2006; 2011).

However, there still is a little research on examining Asian advantages using the intersectional perspective. Racial and gender segregation and income inequality are intensified in white- and male-dominant work sites (Acker 1990; Ray 2019; Tomaskovic-Devey and Skaggs 2002). But we still lack a full picture of how the “general” Asian advantages in employment and income of the U.S. labor market may vary across occupational careers driven racial and gender diversity.

Have Asian men and women obtained access to highly compensated occupational groupings that whites and men have dominated historically? Do Asian women earn more than white women in occupations dominated by men? Do Asian income advantages persist in white dominated occupations? To answer these questions, this research explores dispersions of Asian employment and income advantages in two occupational groupings: 1) science, technology, engineering, and math (STEM) and 2) finance occupations. These groupings include high-prestige and high-paying occupations in the U.S. labor market with varying degrees of accessibility to racial minorities and women (Alegria 2020; Neely 2018). Income differentials for both occupational groupings are also highly racialized and gendered (Michelmore and Sassler 2016; Stéphanie et al. 2017). It is thus expected that Asian advantages in career access and income may be differentiated across these occupational groupings, based on their racial and gender social closure that penalizes “outsiders” along the race and gender line.

I anticipate that model minority racialization of Asians as studious and intelligent but obedient provides relatively few obstacles to Asian men in attaining STEM occupations and high STEM compensation (McGee et al. 2017; Williams et al. 2019). Intersectionally, however, Asian women are unlikely to attain more career access or pay

than white men as women are stereotyped to have less “natural” ability in science and math (Shapiro and Williams 2012; Castro and Collins 2021). I theorize that all Asians and especially Asian women are more penalized by biases in finance, where occupational status and income is more unequal between “front office” jobs like banks tellers and clerks and “back office” positions such as investment bankers and managing directors. Social closure among white men in back office hiring racialization of Asians as anti-social will preclude Asians from attaining back-office jobs or equal pay in those positions. Intersectionally, the penalty for Asian men relative to white men will be greater than the penalty for Asian women relative to white women. This is because back-office finance jobs are some of the most persistently gender exclusive high-status professions (Neely 2020; Rivera 2016).

Using data from the American Community Survey, 2019 (1-year, Public Use Microdata Sample), administrated by the U.S. Census Bureau, I provide some preliminary validation for my argument. I also show that attaining managerial status is relatively unimportant for attaining income advantages for Asians in STEM and finance. This is because income rewards are divorced in these sectors from the management of direct reports.

By investigating Asian advantages in career access and income between those occupational groupings that show different racial and gender social closure, this explorative research suggests a necessity of using an intersectional approach in organizational studies. Further, I provide new insights for future study of how racial and gender segregation between occupations shapes other labor market outcomes of Asians.

Intersectional Race and Gender Social Closure in Asian Access to High Status Occupations

Based on the Weberian perspective, a concept of social closure describes the sociocultural process by which members of social collectives maximize rewards and privileges from their status by restricting outsiders (Macdonald 1985). In sociological studies, it is used to discuss institutionalized exclusion that translates into various forms of inequality in gatekeeping and decision-making processes (Macdonald 1985; Weeden 2002; Roscigno et al. 2007). Social closure is a mechanism that could block Asian access to high status occupations despite high levels of human capital acquisition. Occupational scholarship has rarely explored how social closure may be patterned around intersectional race and gender positions. In what follows, I delineate occupational social closure literature involving race and gender and how intersectionality provides implications for Asian occupational closure in STEM and finance occupations.

To monopolize inner-group advantages, occupational social closure engages in institutionalize patterns of exclusion in work organizations (Weeden 2002; Albiston and Green, 2018). Combining with racial inequality of society, it creates occupational racial segregation. Racialized social closure does not allow racial minorities’ attempts to privileged white occupations in well-established markets by valuing whiteness (Roscigno et al. 2007; Albiston and Green, 2018). Moreover, work organizations reproduce white

dominance at work through various labor processes, including wage, work conditions, and promotion (Ray 2019). Racial minorities of an occupational, thus, do not benefit equally from closure with their white counterparts (Roscigno et al. 2009; Weeden 2002).

Women are also excluded from accessing to “good” occupations or receiving “equal” rewards within the occupations (Weeden 2002). Gendered social closure produces gender-stereotyped images towards women those who attempt to lucrative masculine occupations (Roscigno et al. 2007; Ibáñez and García-Mingo 2021). As a result, despite their high educational credentials, women are sorted into low prestige and low compensation jobs. Along the underlying gender relation, social closure reinforces the gender hierarchy at work by devaluing women’s labor and by rewarding men’s task disproportionately (Acker 1990).

Focusing on “the relationships among multiple dimensions and modalities of social relations and subject formations (McCall 2005:1771),” intersectionality provides a framework for understanding multiple dimensions of inequalities incorporating race and gender, as well as other social identities (Crenshaw 1991; McCall 2005; Acker 2006; Collins 2015). In the labor market, the intersection of race and gender is focal for institutionalized occupational closure (Browne and Misra 2003). Women and racial minorities are segregated and marginalized at work due to systems of exclusion and occupation social closure. Moreover, involving with intersecting pattern of sexism and racism, women of color are the subordinate work groups those who achieved restricted accesses to resources and opportunities by white men and/or same ethnic group men, with an array of disadvantages and discriminations (Crenshaw 1991; Weeden 2002; Browne and Misra 2003). In addition, white femininity often penalizes women of color by forming the racialized hierarchy between women at work (Alegria 2019; Neely 2020).

Prior work has shown Asian access to high status managerial positions is racially constrained (Shih 2006; Tang 1993; Gee et al. 2016; Gee and Peck 2017). Asians with substantial human capital might also face social closure constraints to commensurate access to high-status occupations that do not involve managerial authority over large numbers of subordinate employees. For example, STEM professions such as software engineering and computer system management are high status and highly compensated without substantial managerial authority. Some financial professions such as investment banking and private equity management similarly are lucrative and high status while managerially less intensive.

An intersectional approach to social closure might best describe patterns of access and exclusion from STEM and finance professions, more specifically for Asian women. These patterns may also reflect how gendered Asian racialization maps on to the particular traits that are valorized in STEM and finance.

Asians and the Intersection of Race and Gender in STEM Occupations

STEM occupations are lucrative and prestigious careers with high skills and educational credentials. Racialized and gendered social closure in STEM provides how

Asians' access and income attainment in the fields may vary. I suggest that Asian men are more accessible to STEM occupations with high income, but intersectionally, there are more obstacles to Asian women.

Racialized images of Asians as a model minority are closely related to their achievements in STEM fields. Asians are not only characterized as studious and intelligent, but also perceived as good-fit for math- and science-related fields of study and occupations (Xie and Goyette 2003; Sy et al. 2010; Cooc and Kim 2021). This provides that Asian, more specifically, Asian men, attain professional STEM occupations with considerable compensations (Xie and Goyette 2003; Min and Jang 2015; Alegria 2020).

However, Intersectionally, such advantages of Asians in career access and income may not work for Asian women, due to gendered social closure in STEM. Gender segregation and discrimination is highly visible in STEM. Women are stereotyped as less suitable for occupations with high levels of mathematical and scientific skills (Min and Jang 2015; Piatek-Jimenez et al. 2018). Activating on these stereotypes, STEM educational programs and employers exclude women and discourage them with hostile environments and low compensation (Sassler et al. 2017; Piatek-Jimenez et al. 2018; Alegria and Branch 2015; Nimmesgern 2016; Oh and Lewis 2011; Michelmores and Sassler 2016; Osikominu and Pfeifer 2018; Sterling et al. 2020; Broyles and Fenner 2010). As a result, Asian women are situated in a “paradoxical (Castro and Collins 2021:34)” identity with both Asian overrepresentation and female underrepresentation, lagging behind Asian men and white men (Wu and Jing 2011; Castro and Collins 2021). Even a gender pay gap in STEM has narrowed (Broyles 2009), it is expected that there still remains a female disadvantage for Asian women that they receive pay at comparable rates with white men.

Albeit the gender difference, Asians as a whole, do not have comparable chances with their white counterparts for internal promotions and managerial authority attainment (Shih 2006; Tang 1993; Gee et al. 2016; Gee and Peck 2017). Moreover, Alegria (2019) found a gendered “glass escalator” in STEM careers that white women are more likely to get promotions to managerial positions than Asian women. That is, regardless of gender, Asians' advancement in STEM job ladders are systemically limited, despite the numerical overrepresentation of the fields. Instead, whites in STEM have disproportionate opportunities of attaining supervisory positions at work. Since having managerial positions generally relates to more rewards at work, including wage (Pergamit and Veum 1999; Addison et al. 2014), the lack of managerial status renders Asians another barrier for income attainment at high ranks of the occupational hierarchy.

Asians and the Intersection of Race and Gender in Finance Occupations

Based on high levels of educational credentials, skills and professionalism, workers in finance receive “a finance sector premium” of the economy, including, income, incentives, and occupational prestige (Lounsbury 2002; Tomaskovic-Devey and Lin 2011; Arestis et al. 2013; Lindley and McIntosh 2017; Vaahtoniemi 2021). Nevertheless, the finance occupations are highly segmented by race and gender, favoring

white masculinity (Rivera 2016; Lin and Neely 2017; Neely 2018). So, I anticipate that Asians are excluded from obtaining good jobs and high pay by white social closure. Moreover, due to gendered social closure that does not allow women's successes at finance, Asian women are expected to be more penalized than both Asian men and white women.

Scholars for finance sectors document that finance careers are dualized along the race and gender line. On one hand, some "back office" jobs, such as investment managers, investment analysts, and management consultants which provide more pay, safety, and authority are dominated by white men (Rivera 2016; Lin and Neely 2017; Neely 2018; Eaton 2022). On the other hand, some "front office" jobs, such as bank teller, financial clerk, and insurance sales agent that are labor-intensive and low-status occupations, are for women and racial minorities (Prather 1971; Leidner 1991; Stéphanie et al. 2017; Arestis et al. 2013).

White social closure alienates Asians in finance. Studies indicate that Asians are institutionally excluded from having their own C-suites by workplace culture and practices, despite their human capital acquisitions. Intersectionally, relating to gendered social closure produces stereotypes that women are more likely to be risk averse and less likely to have mathematical knowledges and skills than men (Beckmann and Menkhoff 2008; Roszkowski and Grable 2005). Asian women receive more penalty by their racial and gender identity, so that they remain in low status "front office" positions with marginal finance premium (Hegewisch and Mefferd 2021; Penner 2008; Fisher 2012; Adams and Kirchmaier 2016).

The finance premium is less relative of managerial and supervisory status attainment. Instead, who you know and what you share within the networks are focal for better occupational outcomes in finance field. For instance, Neely (2018; 2022) argued that interpersonal networks in finance careers, produce trust and maintain advantages in hiring, grooming, and seeding practices within and among financial firms. In doing so, certain people – white men – are raised as financial elites to hold prestige in financial rewards. Eaton (2022) also indicated that financial elites are mutually connected to social ties that create economic and symbolic rewards to them. McGuire (2000) indicated that women and people of color in finance only have network members of with low prestige and managerial authority, because they have limited access to powerful employees.

In sum, although both STEM and finance occupations are professions that provide high income and occupational prestige, there are differences in racial and gender social closure. STEM occupations are generally accessible to Asians, but not favorable to women. Finance occupations are dually segmented; "good" jobs for whites and men versus "bad" jobs for racial minorities and women. I shall propose that those differences influence variabilities in Asian advantages in career access and income in both occupational areas. Using a two-by-two matrix, the intersectional racial and gender structure for each occupation grouping is presented in Table 4.1.

[TABLE 4.1 ABOUT HERE]

Data and Methods

To explore variabilities in Asian (dis)advantages in STEM and finance occupations, I use data from the 2019 American Community Survey (ACS) 1-year Public Use Microdata Sample (PUMS). The ACS is a legitimate nationwide survey that annually garners an array of social, economic, housing, and demographic information of the U.S. population as implementing the Decennial Census for public funding planning and distribution, administered by the U.S. Census Bureau. The Bureau annually publicizes a subset of the responses – approximately one percent of the U.S. population – as the Public Use Microdata Sample (PUMS). This data is broadly used for studies that explore income disparities between individuals and communities in various contexts (Reardon et al. 2015; Fuller-Thomson and Gadalla 2008; Kim and Carter 2016). For this research, I drew a subsample from the 2019 ACS 1-year PUMS that included adults who were not self-employed, yielding a total of 2,521,433 adults.

The variables of interest for this research are race, gender, income, and occupational groups. Race is measured trifold, white, Asian, or other races. In the sample, 74.3% of respondents ($n = 1,873,773$) identified as white, versus 5.4% ($n = 134,826$) as Asian and 20.3% ($n = 512,834$) as other. And I used a dummy variable for female as a reference category of gender. In the sample, 52.6% of respondents were female ($n = 1,262,064$) while 47.4% of respondents were male ($n = 1,139,218$). For income, I used adjusted annual income from wage and salary in 2019 constant dollar. The mean of income is \$54,553 with the standard deviation of \$66,036. Using the Standard Occupational Classification (SOC) Code, the ACS provides information for respondents' occupation. Based on this, I create a variable for an occupational grouping that includes STEM, finance, and other occupations. The definition of each group follows definitions for career clusters defined by O*NET OnLine which is sponsored by the U.S. Department of Labor.

Other than those principal variables, other sociodemographic characteristics were included as control variables for multivariate analyses, such as age (in year), education (in years), marital status (never married; married; divorced, separated, or widowed), and parenthood (1=having kids). For work characteristics, I also controlled for industry (agriculture, forestry, fishing, and hunting; mining, quarrying, and oil and gas extraction; construction; manufacturing; wholesale and retail trade; transportation and utilities; information; financial activities; professional and business services; education and health services; leisure and hospitality; other services; and public administration, including military) and worked per week (in hours). Descriptive statistics for those variables are reported in Appendix 4A.

With those variables, I first ran a series of bivariate analyses to examine the distribution of each occupation group by race and gender and to assess income dispersion between occupational groupings. Table 4.2 and Table 4.3 present those bivariate findings. I then conducted a multivariate analysis by performing Ordinary Least Squares (OLS) regressions to estimate Asian income advantages in STEM and finance occupations, controlling for other characteristics. In addition, those OLS models predicted the role of managerial status attainment for income differentials in each occupational group. The multivariate results from the OLS regression analyses are reported in Table 4.4.

Findings

Bivariate Findings

Table 4.2 shows the percentage distribution of occupational groupings – STEM, finance, and other occupations – by race and gender. In the sample, it reveals that 5.9% of Asians had STEM occupations, versus 2.7% for whites and 1.4% for other races. Across all three racial groups, men were more likely than women to hold STEM occupations. These findings support the numerical overrepresentation of Asian populations and the male dominance of STEM careers.

[TABLE 4.2 ABOUT HERE]

For finance occupations, as compared to STEM occupations, the proportions of whites and other racial minorities with finance occupations were increased (for whites, 2.7% to 3.9%; for other races, 1.4% to 2.6%). Asians, however, were less likely to have finance occupations than STEM occupations. Table 2 also indicates that women were more likely than men to be in finance fields, regardless of race. Yet these findings show some racial and gender differences in occupying finance occupations, they don't tease out the racialized and gendered segmentation of finance occupations. To do so, I thus assessed variability in income across occupational groups. The result is reported in Table 4.3.

[TABLE 4.3 ABOUT HERE]

Table 4.3 shows the income dispersion between occupational groups. For both occupations, income distributions were positively skewed, but respondents with STEM occupations (\$95,895) received more average income than those who had finance occupations (\$89,207). Interestingly, despite the relative low income, the standard deviation of income in finance occupations (\$103,602) was much larger than that in STEM occupations (\$74,822). That is, there is more income dispersion in finance occupations as compared to STEM occupations. Since finance occupations are highly segmented, these suggest that women and workers of color in finance would earn considerably less than men and whites. And yet, for STEM occupations, it is expected that income disadvantages might not be cruel for women and racial minorities, in comparison with finance occupations.

[FIGURE 4.1 ABOUT HERE]

Such racial and gender income differentials are graphically visualized in Figure 4.1. It demonstrates that in STEM occupations, Asian men earned the most (\$114,030), followed by white men (\$100,564), Asian women (\$94,186), other men ((\$81,779), white women (\$81,671), and other women (\$71,055). That is, intersectionally, a female income

disadvantage in STEM penalizes Asian women. Otherwise, in finance occupations, white men earned the most (\$128,032), followed by Asian men (\$117,746), Asian women (\$82,248), other men (\$79,488), white women (\$65,458), and other women (\$55,194). This indicates that income differentials in finance are both gendered and racialized. There was a definite male income advantage in finance. Among women, Asian women were less penalized.

Multivariate Findings

To further examine the Asian income advantages, I then ran OLS regressions for each occupational grouping. Table 4 shows the results from OLS regression models for predicting racial and gender income differentials in STEM, finance, and other occupations. Herein, the dependent variables are the natural logarithm of income. For race, the omitted reference category is white. And for gender, male is All models include covariates for sociodemographic (age, marital status, parenthood, place of birth, and years of education) and work characteristics (industry and hours of work), but they are not presented in Table 4.4.

[TABLE 4.4 ABOUT HERE]

The first two models estimate income differentials in STEM occupations. Model 1 examines an intersectional effect of race and gender on income differentials. It suggests an Asian income advantages in STEM that Asians earn significantly more than whites by 8.5% ($exp^{0.082} = 1.085$, $p < .001$). Non-white non-Asian racial minorities received 4.5% lower income than whites ($exp^{-0.046} = .955$, $p < .01$). There also is a female income disadvantage in STEM that compared to their male counterparts, women received income at considerably lower rates than men ($b = -.094$, $p < .001$). Adding interaction terms between race and gender, Model 1 also shows intersectional income differentials. As visualized in Figure 4.2, after controlling for sociodemographic and work characteristics, it is expected that Asian men receive the highest level of income in STEM, followed by white men and Asian women. Asian women, however, are expected to receive income at comparable rates with white men, net of controls. Thus, in STEM occupations, there is an Asian income advantage. A female disadvantage does not diminish an Asian income advantage for Asian women.

[FIGURE 4.2 ABOUT HERE]

Model 2 adds a variable for managerial status attainment. Along with prior studies that highlight the importance of obtaining supervisory positions in income attainment (Pergamit and Veum 1999; Addison et al. 2014), it reveals that attaining a managerial position in STEM is associated with an increase in income by 39.4% ($exp^{0.332} = 1.394$, $p < .001$). However, when adding it, the coefficients for racial and gender gaps in income were slightly attenuated. Given the Asian underrepresentation in managerial positions, this indicates that attaining managerial status does not influence income (dis)advantages for Asians in STEM.

The next two models ascertain racial and gender income differentials in finance occupations. Model 3 shows that after controlling for socioeconomic and work characteristics, Asians earned less than whites ($b = -.018$), but such racial gap was not statistically significant. Instead, non-white non-Asian racial minorities earned significantly less than whites by 17% ($exp^{-.187} = .829$, $p < .001$). That is, in finance careers, there is no more universal Asian income advantage. But except for Asian, the white versus non-white racial gap in income is more magnified. For gender, there is a clear gender gap that women substantially earned less than men by 21% ($exp^{-.251} = .778$, $p < .001$). Intersectionally, despite the female disadvantage, Asian women got some premium in income. But white women did not enjoy a white income advantage due to their female identity. Non-white non-Asian women received a doubled penalty due to their intersectional disadvantages from non-white racial identity and female identity. These intersectional income differentials are demonstrated in Figure 4.3.

[FIGURE 4.3 ABOUT HERE]

Including a variable for managerial status attainment, Model 4 assesses how managerial status differentiates income differentials in finance occupations across race and gender groups. Although having managerial status leads to an income increase by 22% ($exp^{.199} = 1.220$, $p < .001$), adding it does not substantially differentiate existing racial and gender income gaps in finance occupations. That is, like STEM, obtaining managerial status is relatively less important in finance occupations.

For comparison, the remaining two models explore racial and gender income differentials in other occupations. They support a universal Asian income advantage (Model 5, $b = .090$, $p < .001$), as well as a female income disadvantage (Model 5, $b = -.162$, $p < .001$) of labor markets. Also, they show that becoming a manager increases an Asian income advantage.

Discussion and Conclusion

Using data from the 2019 ACS 1-year PUMS, I explored racial and gender differentials in career access and income in STEM and finance occupations, focusing on Asians. Following prior studies in STEM careers (Alegría 2020; Piatek-Jimenez et al. 2018; Castro and Collins 2021; Broyles and Fenner 2010; Michelmore and Sassler 2016), I expected that Asian men obtain STEM occupations and high STEM compensation while Asian women have some penalty due to gendered stereotypes of the fields. As expected, I found that Asians, more specifically, Asian men, were attaining STEM occupations than any other racial groups. In terms of racial income differentials, Asians are the racial group with the highest income, net of control variables. But Asian women were somewhat penalized in income due to the female income disadvantage. However, after controlling for sociodemographic and work characteristics, the penalty for Asian women was diminished. Further, along with prior studies on the segmentation of the fields (Fisher 2012; Rivera 2016; Neely 2018; Eaton 2022), I predicted that Asians are penalized in finance fields for career access and income attainment. Finding showed that

the general Asian income advantage of the economy was disappeared in finance. Controlling for sociodemographic and work characteristics, there's no more advantage in income for Asians, as compared to whites. Although all women were excluded from high paying finance occupations, however, Asian women in finance were less penalized than white women and non-white non-Asian women of color.

These findings indicate the necessity of implementing the intersectional approach for racial and gender social closure at work. Both occupations are highly masculine that women are unlikely to have equal career access and high compensation with men (Alegria and Branch 2015; Piatek-Jimenez et al. 2018; Hegewisch and Mefferd 2021; Fisher 2012). Compared to white women and non-white non-Asian women, in both occupational groups, Asian women have some income premium, probably due to their high levels of human capital acquisition. And yet, still, such premium is not comparable to the male advantage. But the female disadvantage can be differentiated along the race line with respect to racialized social closure in occupations. For STEM occupation that are highly open to Asians, Asian women have an income boost from their racial identity that the Asian advantage compensates for female disadvantages. In other words, in STEM careers, the effect of race is larger than the effect of gender for Asian women. But, in finance that are not accessible to Asians, Asian women do not benefit from the universal Asian advantages. The effect of race in finance thus is smaller than the effect of gender.

Findings also indicated that attaining managerial status is relative less important for income advantages in both occupational groups. Although managerial status attainment generally provides more income (Pergamit and Veum 1999; Addison et al. 2014), even after controlling for managerial status as well as other sociodemographic and work characteristics, the existing racial and gender income differentials were not substantially differentiated. That is, having managerial status does not directly yield income advantages in both STEM and finance occupations. Relatedly, research indicates that elite networks provide more rewards in finance (Neely 2018; 2022; Eaton 2022). Future research could explore details in the casual mechanism of income rewards in STEM, specifically in high status positions.

Exploring Asian (dis)advantages in STEM and finance occupations, this preliminary research provides that using an intersectional approach is validated in organizational studies. This perspective can be applied to various sites showing different racial and gender social closure which produces various forms of workplace inequalities along race and gender lines. Moreover, it raises further research on how racial and gender segregation of occupations shapes other career outcomes of Asians.

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*Tables***Table 4.1.** Racial and Gender Diversity in STEM and Finance Careers.

		Race (Asian)	
		<i>low</i>	<i>high</i>
Gender (women)	<i>high</i>		Finance (low status)
	<i>low</i>	Finance (high status)	STEM

Table 4.2. The Percentage Distribution of Occupational Groupings by Race and Gender.

<i>by occupation</i>	Total	<u>White</u>		Total	<u>Asian</u>		Total	<u>Other races</u>	
		(Male)	(Female)		(Male)	(Female)		(Male)	(Female)
STEM	2.7	4.1	1.4	5.9	7.9	3.9	1.4	2.0	0.9
Finance	3.9	3.2	4.5	5.4	4.1	6.5	2.6	1.7	3.4
Others	93.4	92.8	94.1	88.8	87.9	90.0	96.0	96.3	95.7

Table 4.3. Income Dispersion between Occupational Groupings.

<i>by occupation</i>	Median	M	SD
STEM	80,812	95,895	74,822
Finance	60,609	89,207	103,602
Others	36,365	51,891	62,885

Note: All numbers rounded off to the nearest whole number in \$.

Table 4.4. Racial and Gender Income Differentials, by Occupational Groupings.

	<u>STEM</u>		<u>Finance</u>		<u>Other</u>	
	(Model 1)	(Model 2)	(Model 3)	(Model 4)	(Model 5)	(Model 6)
Asian	.082*** (.015)	.069*** (.015)	-.018 (.020)	-.018 (.020)	.090*** (.005)	.097*** (.005)
Other races	-.046** (.015)	-.041** (.015)	-.187*** (.018)	-.187*** (.018)	-.112*** (.003)	-.103*** (.003)
Female	-.094*** (.009)	-.102*** (.009)	-.251*** (.008)	-.253*** (.008)	-.162*** (.002)	-.162*** (.002)
Asian × Female	.003 (.022)	.026 (.022)	.093*** (.024)	.103*** (.024)	.003 (.007)	.001 (.007)
Other × Female	.019 (.027)	.015 (.026)	.141*** (.022)	.149*** (.022)	.081*** (.004)	.074*** (.004)
Managerial position		.332*** (.009)		.199*** (.008)		.351*** (.003)
R^2	.318	.342	.385	.392	.454	.462
F -ratio	799	852	1,473	1,456	46,208	45,650
N	41,069	41,069	56,558	56,558	1,334,581	1,330,465

Note: All models include covariates for sociodemographic (age, marital status, parenthood, place of birth, and years of education) and work characteristics (industry and hours of work).

* $p < .05$, ** $p < .01$, *** $p < .001$.

Figures

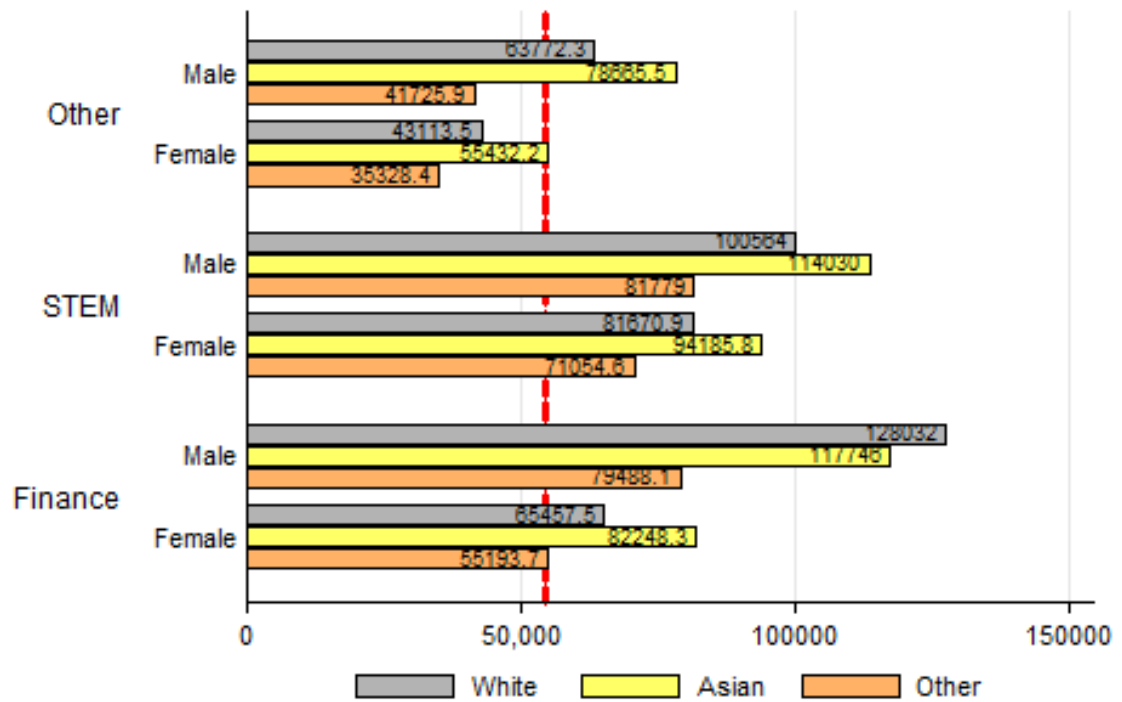


Figure 4.2. Income Dispersion between Occupational Groupings, by Race and Gender.

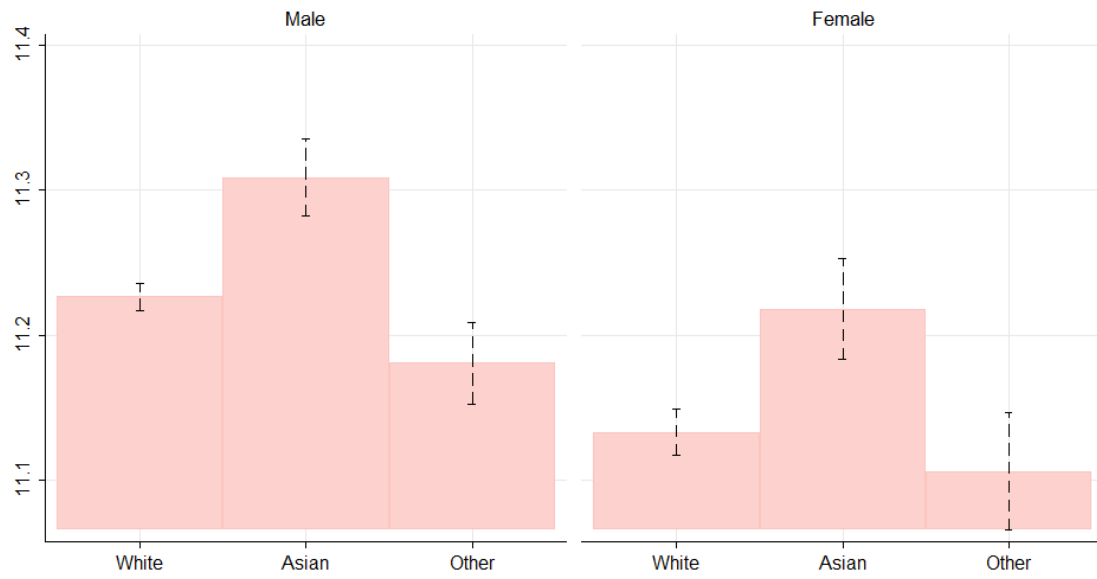


Figure 4.3. Expected Logged Income in STEM Occupations, by Race and Gender.

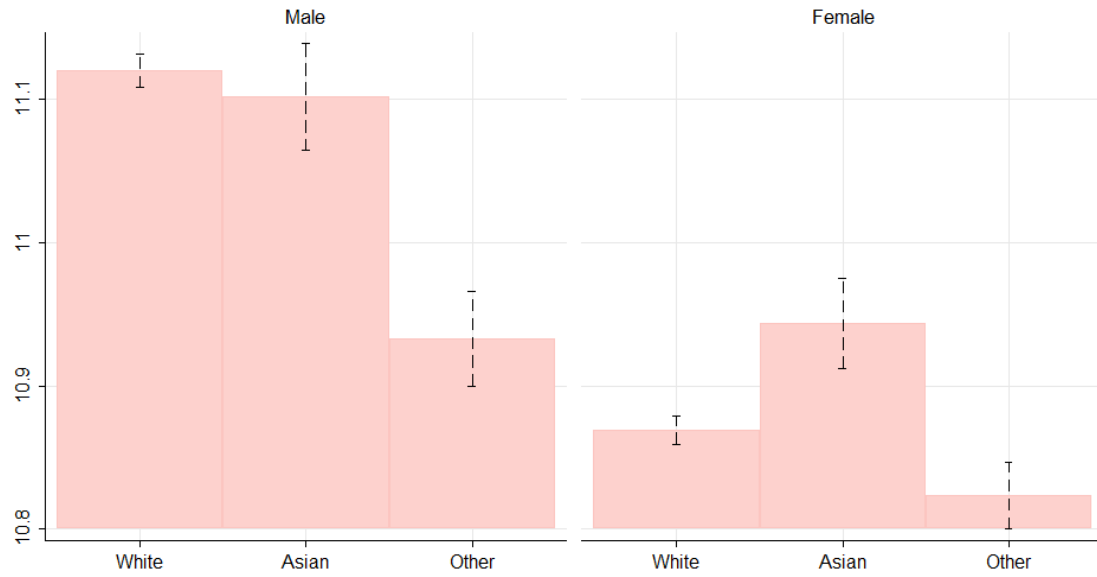


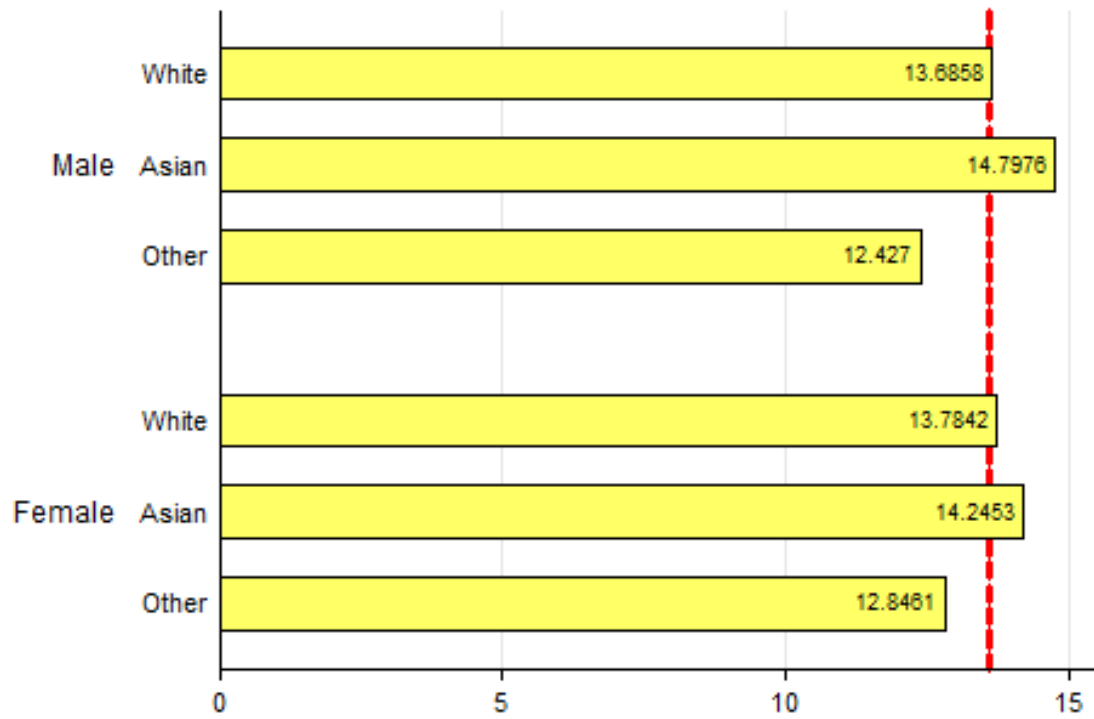
Figure 4.4. Expected Logged Income in Finance Occupations, by Race and Gender.

Appendix 4A. Descriptive Statistics.

	<i>Sample</i>	<i>by race</i>		
		<u>White</u>	<u>Asian</u>	<u>Other</u>
Income (\$)	54,553 (66,037)	56,407 (67,787)	70,956 (82,435)	39,738 (44,914)
Occupation (%)				
STEM	2.7 (16.2)	2.7 (16.3)	5.9 (23.5)	1.4 (11.8)
Finance	3.7 (18.9)	3.9 (19.2)	5.3 (22.5)	2.6 (15.8)
Gender (%)				
Male	47.4 (49.9)	47.5 (49.9)	45.3 (49.8)	47.8 (50.0)
Female	52.6 (49.9)	52.5 (49.9)	54.7 (49.8)	52.2 (50.0)
Age	50.3 (19.2)	51.5 (19.3)	46.1 (18.1)	45.7 (18.4)
Years of schooling	13.6 (3.3)	13.7 (3.1)	14.5 (4.4)	12.6 (3.4)
Marital status (%)				
Never married	27.3 (44.5)	24.0 (42.7)	28.2 (45.0)	42.6 (49.5)
Married	52.7 (49.9)	55.5 (49.7)	60.8 (48.8)	36.5 (48.1)
Divorced, separated, or widowed	20.0 (40.0)	20.5 (40.4)	11.0 (31.3)	20.9 (40.7)
Having kids (%)	25.4 (43.5)	24.2 (42.8)	34.6 (47.6)	28.2 (45.0)
Foreign-born (%)	13.5 (34.2)	7.9 (26.9)	75.4 (43.1)	19.2 (39.4)
Industry (%)				
Sector 1	1.0 (10.1)	1.1 (10.3)	0.3 (5.0)	1.1 (10.5)
Sector 2	0.5 (7.3)	0.6 (7.8)	2.0 (4.4)	0.3 (5.7)
Sector 3	5.6 (22.9)	5.9 (23.6)	1.7 (12.8)	5.3 (22.4)
Sector 4	10.6 (30.8)	10.9 (31.1)	11.7 (32.1)	9.1 (28.8)
Sector 5	13.5 (34.2)	13.7 (34.4)	11.6 (32.0)	13.2 (33.8)
Sector 6	5.4 (22.6)	5.2 (22.1)	4.1 (19.9)	7.0 (25.5)
Sector 7	1.9	2.0	2.6	1.6

	(13.8)	(13.8)	(15.9)	(12.4)
Sector 8	6.1	6.3	7.3	4.8
	(23.9)	(24.3)	(26.0)	(21.3)
Sector 9	10.6	10.4	15.6	9.9
	(30.8)	(30.5)	(36.3)	(29.9)
Sector 10	25.3	25.3	26.3	24.9
	(43.5)	(43.5)	(44.0)	(43.2)
Sector 11	9.1	8.4	10.0	11.8
	(28.7)	(27.8)	(30.0)	(32.2)
Sector 12	4.1	4.1	4.3	3.8
	(19.8)	(19.9)	(20.3)	(19.2)
Sector 13	6.2	6.1	4.4	7.2
	(24.1)	(23.9)	(20.6)	(25.9)
Hours of work	38.5	38.6	38.0	37.8
	(12.5)	(12.6)	(12.5)	(12.2)
<i>N</i>	2,521,433	1,873,773	134,826	512,834

Note: Industrial sectors include: (1) Agriculture, forestry, fishing, and hunting; (2) Mining, quarrying, and oil and gas extraction; (3) Construction; (4) Manufacturing; (5) Wholesale and retail trade; (6) Transportation and utilities; (7) Information; (8) Financial Activities; (9) Professional and business services; (10) Education and health services; (11) Leisure and hospitality; (12) Other services; and (13) Public administration, including military. Standard deviation in parentheses.

Appendix 4B. Years of Schooling, by Race and Gender.

CHAPTER 5. CONCLUSION: FINDINGS, LIMITATIONS, AND IMPLICATIONS
FOR FURTHER RESEARCH

Findings

The findings from the preceding chapters refute the myth of the model minority in labor market contexts. Asians do not succeed in labor markets *because* they are a model minority. Some Asians succeed in despite their racial status position (Sakamoto et al. 2009; Kim and Sakamoto 2010; Kim and Zhao 2014). This labor market success is not universal for all Asians. US immigration policy has facilitated immigration by multiple generations of Asians, and especially Asian men, with greater educational attainment than is typical in their country of origin. Not all Asian Americans, however, enjoy these educational advantages. I show throughout this dissertation that Asians do not attain managerial authority, high status occupations, or pay levels commensurate with their levels of education and human capital acquisition. Instead, top jobs and incomes are most commonly attained by whites. Asian workers disproportionately attain professional occupations. Other non-white and non-Asian racial minorities disproportionately attain lower-status occupations. This funnelling of Asians into a middle tier in the occupational hierarchy is shown in Chapter 2.

Using data from the National Longitudinal Survey of Youth, Chapter 3 reveals that based on high levels of human capital acquisition, Asians were more likely than whites to receive nonmanagerial internal promotions, controlling for demographic and work characteristics. But non-managerial promotions and human capital acquisition for Asians did not lead to comparable rates of subsequent managerial promotion. Instead, controlling for past promotions, whites were considerably more likely than Asians to receive managerial promotions.

Exploring data from the American Community Survey, 2019, Chapter 4 revisits Asian income advantages in STEM and finance occupations. In STEM occupations that are dominated by men but accessible to Asians, Asians are the racial group with the highest income, net of sociodemographic and work characteristics. Incomes for Asian women have only matched those of white men. In finance occupations that are highly segregated by race and gender, Asians, as a whole lacked access to occupations with the highest status and incomes such as investment banking and private equity managing director positions. Although all women were excluded from high paying finance occupations, however, Asian women in finance were less penalized than white women and non-white non-Asian women of color.

Limitations

Although these empirical findings contribute new knowledge to our understanding of Asian racialization and occupational hierarchies, they are not without limitations. I will discuss methodological and theoretical issues involving this dissertation research in turn.

First, as this dissertation seeks to use nationally representative datasets, there are methodological limitations with available data such as the General Social Survey, the National Longitudinal Survey of Youth, and the American Community Survey. For

instance, the General Social Survey is limited for including adequate sub-sample sizes for some groups, including Asians. The National Longitudinal Survey of Youth also has sub-sample size limitations. Moreover, although the NLSY has achieved relatively high response rates, it still is suffering from the abundance of missing components for some work-related questions, including hours of work, industrial sectors, and so on (Schoeni et al. 2013; Hitt et al. 2016). The American Community Survey is one of the most comprehensive data providing general demographic and financial information of the U.S. population, including Asians. Nevertheless, it does not gather enough information for secondary and postsecondary educations for respondents, such as high school track placement (Moller and Stearns 2012; Scott and Bernhardt 1999) and college major (Gill and Leigh 2000; Xia 2016) that influence individuals' career and income attainment.

Secondly, this dissertation research was not able to account for diversity and variability within the Asian racial category. The racial category of "Asian" includes more than 20 subethnic groups. With respect to national origin and ethnicity, each group has distinct sociocultural backgrounds and histories of immigration to the United States. These diverse backgrounds among Asians yield varied racial positionalities and attainment of socioeconomic status (Sakamoto et al. 2009; Sakamoto and Woo 2007; Oh 2021). However, current datasets lack sufficient ethnic background data and subsample sizes to explore variations of labor market outcomes within Asian populations.

Moreover, existing person-level national datasets also have limitations for analyzing the dynamics of employers as racialized organizations. Racial inequalities at work are an outcome of sociocultural, historical, and political processes of marginalization (Omi and Winant 2014). And yet, they also are influenced by subtle and informal interactions and practices within an organization (Acker 2006; Ray 2019). For instance, white supervisors devalue non-white workers' productivity and promotability than that of white workers (Baldi and McBrier 1997; Elliott and Smith 2001). As a result, non-white workers are less likely than nonwhite workers to be in career paths that provide high income and prestige in internal labor markets (Reskin et al. 1999; Acker 2006; Shih 2006; Lai 2013). But it is difficult to assess how such mechanisms may impact Asians without more employee level data nested within large corporate employers and different types of employing organizations.

Implications for Further Research

Despite these limitations, the empirical findings provide significant implications for race and organizational scholarship. Findings suggest that Asians are less likely to attain executive positions in large industrial corporations. Instead, Asians attain professional occupations with having opportunities for managerial promotion at lower rates than whites. Using in-depth interviews and/or filed research, future research further validates how organization-level culture and practices produce a bamboo ceiling institutionally and how it serves for white dominance at work by limiting advancement of Asians at work.

Findings also suggest that Asians will continue to be excluded from high level investment banking and private equity positions. Lower average pay for Asians than whites in finance is consistent with this thesis. But further analyses using occupational data are needed to test this contention. If validated, this argument contends that whites continue to exclude Asians from the highest circles of economic life even if Asians have been granted "honorary white" racial status.

Overall, this dissertation shows that along with racial relations of society, Asians are racialized in the US labor market. On one hand, as a model minority, Asians outperform non-white non-Asian racial minorities with higher occupational status, workplace promotion, career access and income attainment in prestigious professions. Nevertheless, on the other hand, their success is institutionally limited, lagging behind whites. Regardless of human capital accumulation, Asians experience systemic disadvantages in their placement within the occupational hierarchy, in managerial promotion, and in access and income attainment in lucrative and prestigious professions. Hence, Asians are stuck at work due to a bamboo ceiling.

Asian racialization in the labor market reproduces the inequality regime of society along the race line. One's occupational status relates to his or her social status. The racialized identity of Asian at work as an intermediate position limits possibilities of upward mobility among Asians. A bamboo ceiling becomes a social mechanism that alienates Asian populations and labels them as a yellow peril and/or a forever foreigner. Therefore, as Omi and Winant (2014) proposed, the current labor market processes, as shown in this dissertation, inhibit, transform, and reproduce the Asian racial category in the United States.

To close, I return to the title of this dissertation, "have Asians really achieved labor market equity with whites?" The simple answer is no. As a model minority, Asians outperform other racial minorities, but a bamboo ceiling which is an outcome of Asian racialization of society and economy impedes them to achieve labor market parity with whites. This dissertation documents a continuing significance of race at work that fundamentally influences the labor market standing of Asians.

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