

Examining Inter-Ethnic Life Expectancy Differentials among Asians in the United States

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Introduction

Asians now comprise the fastest growing racial group in the United States, experiencing a population growth rate of 43% between 2000 and 2010 (Hoeffel et al. 2012). However, investigations of their health remain scarce. Historical aggregation and the pervasive notion of Asians as model minorities facing few problems has led to a very limited understanding of the the varying experiences of diverse Asian ethnic groups in the United States. While often presented as a homogenous group, the health experiences of Asian communities are situated along ethnic, socioeconomic, and geographic inequalities. Moreover, research on Asians in the United States has been limited to traditional and gateway immigrant destinations in the American West and Hawaii (Ibrahim 1991). Consequently, a gap exists in our understanding of the variations in key health indicators among Asian ethnic groups. This study addresses part of that gap by examining the patterns in life expectancy among the six largest Asian ethnic groups in the country (Chinese, Filipinos, Asian Indians, Vietnamese, Koreans, and Japanese) at the national and regional levels.

To my knowledge, this is the first study to investigate the life expectancies of disaggregated Asian groups at a sub-national level. Its theoretical contribution lies in its emphasis on the intersection of ethnicity (in addition to race), socioeconomic status (SES), geography, and nativity to explicate patterns of health inequality within the larger ‘Asian’ category. Furthermore, it contributes to the migration literature by testing the applicability of current migration theories to disaggregated Asian populations. Considering that an overwhelming majority of Asians/Asian-Americans in the United States are foreign-born, examining the effects of social factors associated with immigration is key to understanding the health patterns of the group. Thus this study draws from the migration literature in order to

identify research gaps; and it applies current knowledge on other immigrant groups in the United States in order to develop predictions regarding the distribution of health outcomes among the largest Asian ethnic groups in the country. This study offers a snapshot of the general patterns of health differentials among the largest Asian groups in the country. Therefore, it highlights the heterogeneity of the communities subsumed under the monolithic Asian category.

Background

The Asian Population

As of 2010, 17.3 million people in the United States consider themselves Asian, accounting for approximately 5.6% of the American population (Hoeffel et al. 2012). While often considered a mono-cultural group, the 17 million people who comprise the Asian category can trace their histories to a broad and diverse group of nations in the Asian continent and the Pacific Islands. The Office of Management and Budget (OMB) (1997) categorized all people from the following world regions under the term Asian: Far East, Southeast Asia, and the Indian Subcontinent. Based on this categorization, people who are considered Asian include: Chinese, Japanese, Koreans, Vietnamese, Filipinos, Malaysians, Asian Indians, Thai, Pakistanis, among others. Hereafter, I use the terms “Asian” or “Asian groups” in reference to the broader racial category that includes non-U.S. citizen Asian immigrants and U.S.-born and naturalized Asian Americans.

Furthermore, Asian groups can be found among different regions around the country. In 2010, approximately 75% of all Asians in the United States resided in the following ten states: California, New York, Texas, New Jersey, Hawaii, Illinois, Washington, Florida, Virginia, and

Pennsylvania. Notably, the Asian population experienced its fastest growth in the South (Hoeffel et al. 2012). Given their rapid growth and variegated experiences, Asian communities warrant more close attention from researchers. More importantly, health research on these communities must disaggregate health data and consider the effect of the long and complex history of Asian immigration in explicating variations in health outcomes today.

Asian Immigration

Asians first began settling in the United States in the mid 19th century with the arrival of Chinese, Japanese, and Filipino laborers working in railroads, farms, and plantations in the American West (Takaki 1998; Portes and Rumbaut 2014; Boyd 1971). The earliest wave of Asian immigrants consisted of laborers from South China who arrived to the United States between 1849-1852 (Portes and Rumbaut 2014). These mostly male early Chinese immigrants were a source of cheap labor at railroads, mines, and farms in the West (Boyd 1971; Portes and Rumbaut 2014; Takaki 1989). With growing economic insecurity in the American West in the mid-to-late nineteenth century, the racialized tension against Chinese workers led to the passage of the Chinese Exclusion Act of 1882, barring the entry of Chinese people into the United States for sixty-one years (Lee 2002; Ting 1995). Following the Chinese Exclusion Act, Chinese workers were replaced by Japanese laborers to fill agricultural work in Hawaiian sugarcane plantations and Californian farms (Boyd 1971; Portes and Rumbaut 2014). As the Japanese population grew, they began to face the same anti-Asian discrimination faced by the Chinese immigrants before them. The anti-Japanese sentiment led to the Gentlemen's Agreement of 1908 between the United States and Japan, in which Japan agreed to issue passports to the United States only to non-laborers (Boyd 1971). Unfortunately, the hostility faced by early Japanese

immigrants did not attenuate, and it later contributed to the forced internment of Japanese and Japanese Americans following the attack on Pearl Harbor. Similar to the Chinese and Japanese before them, thousands of Filipinos also immigrated as laborers recruited to work in sugar and pineapple plantations in Hawaii, and eventually to the mainland United States as workers and some as students called “Pensionados” (Boyd 1971; Posadas and Guyotte 1990; Takaki 1989). Due to laws that prohibited the movement of people of Asian origin—except for Filipinos who were still under American rule— into the United States, the Chinese, Japanese, and Filipinos would account for the early Asian immigrant population in the United States until the late 1960’s (Boyd 1974; Ong, Bonacich, and Cheng 1994; Portes and Rumbaut 2014; Ting 1995).

With the signing of the Hart-Cellar Act of 1965, the United States witnessed a renewal of Asian immigration. After 1965, the proportion of immigrants coming from Asia rose sharply as some of the most important sending countries became the Philippines, Korea, and Vietnam (Keely 1971; Massey 1990). Through occupational preference, immigrants from India, Korea, and the Philippines began entering the country in more significant numbers (Boyd 1974). Research also shows that relative to their pre-1965 and native-born counterparts, the new group of Asian immigrants were more skilled and educated, and they were more likely to occupy professional and managerial positions (Hirschman, Wong, and Morrison 1986; Yang 1999). These post-1965 Asian immigrants filled professional positions where there was a shortage of skilled labor, from STEM jobs such as engineering and scientific research, to healthcare-related positions (Ong, Bonacich, and Cheng 1994). These highly skilled and highly educated immigrants would comprise a large portion of the new wave of Asian immigrants in the United States. As will be expanded later, most of the Asian groups in the present study are members of the post-1965 migration wave—which may help explain their health patterns today.

Following the new wave of immigration from Asia, the image of Asians in America also began to evolve. Beginning in the 1960's media portrayals—in the *New York Times* and *U.S. News and World Report*—of Asian success stories became prominent, depicting the racial group as academic overachievers, law abiding citizens, and successful small business owners who overcame adversity to achieve the American Dream (Espiritu 1992; Shim 1998; Kawai 2005; Kao 1995; Kitano and Sue 1973). These success stories touting Asian achievement often emphasized the ability of Asian groups, particularly the Japanese and Chinese, to succeed in the United States on their own hard work and motivation, in contrast to African Americans and Latino Americans. Thus, it was used to maintain a racial hierarchy that pitted minority communities against each other. Subsequently, the stereotypes associated with the model minority myth—which are mostly based on the experiences of Chinese and Japanese immigrants—have been attributed to the broader Asian racial group. This contributed to the pervasive use of a pan-Asian category in research. Unfortunately, the aforementioned trends also overlook non-East Asian ethnic groups, such as Vietnamese, Filipinos, and South Asians, thus leaving them to be forgotten members of the broader Asian racial category. Therefore, although the model minority myth is not directly related to the health outcomes of Asian groups, recognizing its persistence is critical in understanding the justification for the neglect of Asian issues in American society.

Literature Review

Asian Groups' Health

In the United States the leading causes of death include: heart disease, cancer, stroke, chronic obstructive pulmonary disease, diabetes, and other chronic health conditions (US Burden of Disease Collaborators 2013). Among those of Asian origin, causes of death vary by ethnicity but follow similar patterns as those seen among the general United States population (Howard, Peace, & Howard 2014; Barnes, Adams, & Powell-Griner 2008). However, notwithstanding their high rates of chronic diseases, Asians as a group continue to die at later ages relative to their white counterparts, particularly from causes such as cancer and heart disease (Acciai, Noah, and Firebaugh 2015). Additionally, according to existing studies, Asians as an aggregate enjoy the longest life expectancy of any racial group in the United States, and they are said to benefit from a mortality advantage over other racial groups (Accai, Noah, and Firebaugh 2015; Elo and Preston 1997; Singh and Hiatt 2006). Asians as a group outlive their white counterparts by nearly 8 years on average (Acciai, Noah, and Firebaugh 2015). More than a decade ago Singh and Miller (2004) published findings demonstrating longer life expectancies for U.S.-born and foreign born Asian-Americans as an aggregate, compared to their white counterparts to support the notion of an Asian advantage in health. Interestingly, Singh and Miller (2004) also show that the difference in life expectancy for Asian immigrants compared to their United States-born co-ethnics had a range of less than two years for Asians as an aggregate and for the following ethnic groups: Chinese, Japanese, and Filipinos. But they did find a larger gap in life expectancy by gender. However, the same study also failed to incorporate data on one of the largest Asian ethnic groups in the country—Asian Indians. More recently, Acciai, Noah, and Firebaugh (2015)

found that regardless of the cause of death, Asians tend to outlive whites, thus causing the life expectancy gap between the two racial groups. While the overwhelming evidence supports the Asian mortality advantage hypothesis, it offers a limited view of Asian groups' health.

In spite of their mortality advantage, research shows great variation in the cause-specific mortality rates among Asian sub-groups; and their risks for specific conditions such as cancer, heart disease, and stroke vary greatly by ethnic group (Jose et al. 2014; Frisbie, Cho, and Hummer 2001; Hastings et al. 2015). Hastings et al. (2015) found that among Chinese, Korean, and Vietnamese men, cancer was the leading cause of death; while for Filipino, Asian Indian, and Japanese men, it was heart disease. Among women, Hastings et al. (2015) found that cancer was the leading cause of death for Chinese, Korean, Vietnamese, Filipino, and Japanese, but not for Asian Indians. Further, research on other measures of health among Asians find significant ethnic differences in outcomes. John et al. (2012) found that Chinese and Vietnamese are more likely to report fair/poor physical and mental health compared to Filipinos. Additionally, Staimez and colleagues (2013) offer evidence pointing to heterogeneity in cardiometabolic risk factors among different Asian ethnic groups. They found that among Chinese, South Asians/Asian Indians, Filipinos, Koreans, and Vietnamese, Filipinos had the highest mean BMI, and Asian Indians had the highest rate of diabetes. The foregoing ethnic variations in health outcomes suggest that significant differences in life expectancy are also likely to exist. In the following sections, I synthesize key concepts and findings in the medical sociology and migration literatures in order to identify the factors that may determine the patterns of mortality and life expectancy among Asian ethnic groups in the United States.

Potential Explanations: Socioeconomic Inequality, Nativity, and Place of Residence

The vast scientific literature in health and international migration cannot be covered sufficiently here. Therefore, I focus on three key concepts that have been consistently identified in the literature as explanatory factors for health differentials among Asians in the United States. Considering space limitations, the following sections broadly describe three themes that may explicate the patterns of life expectancy inequality that may be encountered in the data. The factors described below tie findings in medical sociology to dominant theories in international migration, and they undergird my expectations for results.

Socioeconomic Status

A sizeable body of research implicates socioeconomic status (SES) as a contributor to inequalities across a range of health outcomes and across diverse communities (Ross, Masters, and Hummer 2012; Maty, Leung, Lau, and Kim 2011; Farmer and Ferraro 2005; Pollitt, Rose, and Kaufman 2005; Preston and Taubman 1998). SES refers to one's position in a social hierarchy, and it is largely determined by occupation, income, education, and wealth (Krieger, Williams, and Moss 1997). The literature suggests that SES influences the accumulation of the material conditions necessary for survival and longevity, as well as an individual's ability to control life conditions (Marmot 2002; Lynch, Smith, Kaplan, and House 2000; Kawachi and Kennedy 1999). SES has also been identified as a fundamental cause of health (Link and Phelan 1995; Luftey and Freese 2005; Phelan, Link, and Tehranifar 2010; Phelan et al. 2004). Fundamental causality suggests that SES produces health inequality due to its association with an individual's access and ability to employ flexible resources—such as money and education—in order to avoid disease, minimize its effects, and ultimately delay death (Link and Phelan 1995;

Phelan, Link, Tehranifar 2010). Individuals with high SES are more likely to have health insurance, have money to purchase medicine, have greater access to transportation in order to seek care, and have more knowledge of healthy behaviors (Phelan et al. 2004). Consequently, gaps in survivorship and longevity are widest among ‘preventable diseases’ for which knowledge and treatment are available to those who can afford them.

The foregoing suggests that individuals with higher SES would have better health outcomes and longer life expectancies. Unfortunately, most of the literature on the relationship between SES and health are not drawn from studies on Asian groups (Zhang and Wu 2017; Gong, Xu, and Takeuchi 2012; de Castro, Gee, and Takeuchi 2010). Nevertheless, these patterns may obtain among Asians. Research shows that Asian American/Pacific Islander’s (AAPI) suffer from large intra-group disparities in income and educational attainment, with many Southeast Asian groups faring worse than those of East Asian heritage (Lopez, Ruiz, and Patten 2017; U.S. Bureau of the Census 1995). Groups with origins in Southeast Asia—including Vietnamese—exhibit lower incomes and lower educational attainment relative to other Asian groups (Sakamoto, Goyette, and Kim 2009; Fong 2008; Takei and Sakamoto 2008; Kao and Thompson 2003). Moreover, analyses conducted by the Pew Research Center (Lopez, Ruiz, and Patten 2017) show that among the six Asian groups in the present study, Asian Indians have the highest median annual household income (\$100,000), followed by Filipinos (\$80,000), Japanese (\$74,000), Chinese (\$70,000), Koreans (\$60,000), and Vietnamese (\$60,000). The development of ethnic niches partly explains the SES disparity among Asian ethnic groups, as described below.

Given the positive selection of post-1965 voluntary migrants, most of the Asian groups in this study are more likely to be highly educated and skilled. Thus, they are also likely to obtain

high-paying and high-status jobs. Evidence of the aforementioned trend can be found in the overrepresentation of particular Asian ethnic groups in certain jobs. For instance, we find that partly due to the sustained efforts of foreign governments to export workers around the world, Filipinos occupy a large proportion of nursing positions in the United States (Brush, Sochalski, and Berger 2004; Choy 2003, 2010), while Asian Indians take on positions in the medical field and engineering (Wang 2010; Adkoli 2006). These examples demonstrate the importance of ethnic niches among Asian groups. Immigrants fill job openings that have been left open by economic changes; and ethnic niches develop as co-ethnic employment opportunities and network hiring close job opportunities to other groups (Light and Bonacich 1988; Waldinger and Lichter 2003). As ethnic niches develop, certain jobs and professions begin to be associated with particular groups. Although ethnic niches occupied by Filipinos and Asian Indians afford them high occupational status income, and access to health care, occupational heterogeneity exists among other groups. As an example, Vietnamese are overrepresented in the lower paying and lower status nail salon industry, as operators and workers (Eckstein and Nguyen 2011). Additionally, the Chinese and Koreans have found success as entrepreneurs working in ethnic enclaves (Light and Bonacich 1988). However, a potential consequence of self-employment is limited access to health services—partly attributable to insurance under-coverage.

Considering the literature that links SES to health outcomes as well as the literature pointing to the income and educational gaps between various Asian ethnic groups, it follows that groups such as Koreans and Vietnamese will have lower life expectancies relative to the other groups of interest. Importantly, the literature also suggests that Asian Indians and Filipinos will have the longest life expectancies in this study as a result of their high SES.

Nativity

The majority of people who identify as Asians in the United States today descended from or are members of the immigration wave following the 1965 Hart-Cellar Act. According to Pew Research Center estimates, approximately 60% of the country's Asian population and nearly 75% of Asian adults in the United States are foreign-born (Lopez, Ruiz, and Patten 2017). Considering that such a large proportion of Asians in the United States are foreign-born, how might nativity influence their health? Although an in-depth investigation of life expectancy differentials by nativity is beyond the scope of the present study, the extensive literature on the subject warrants close attention.

Immigrants arrive to the United States with lower income levels and face barriers to health care access. Thus, they are expected to experience poorer health outcomes than the native-born population. However, research demonstrates that immigrants exhibit better health outcomes than their native-born counterparts—thus resulting in a so-called ‘immigrant health paradox’ (Abraido-Lanza et al. 1999; Abraido-Lanza, Chao, and Florez 2005; Franzini, Ribble, and Keddie 2001; Markides and Eschbach 2005; Urquia, O’Campo, and Heaman 2012). Among various racial groups, foreign-born individuals have been found to exhibit lower risks for mortality relative to the native-born, with Asian immigrant adults exhibiting the lowest risks for death compared to other groups, including native-born whites (Hummer et al. 1999; Singh and Siahpush 2001, 2002; Singh and Hiatt 2006; Cunningham, Ruben, and Narayan 2008). Among Asians, immigrants have lower odds of being obese and/or overweight than the U.S. born (Popkin and Udry 1999; Lauderdale and Rathouz 2000); and immigrants from some Asian countries also exhibit lower risks for particular types of cancers (Cunningham, Ruben, and Narayan 2008).

Immigrant Selectivity. According to the Immigrant Health Advantage (IHA) theory, immigrants arrive to the United States with better health vis-à-vis the native-born U.S. population; but their health deteriorates with duration of residency in the United States. One explanation for the IHA is the effect of immigrant selective migration. Compelling evidence suggests that migrant self-selection may explain the relatively better health exhibited by recent immigrants (Kennedy et al. 2015; Riosmena et al. 2017; Jasso et al. 2004; Rubalcava et al. 2008). For instance, Riosmena et al. (2017) found statistically significant evidence of a self-selection effect among both low-skilled and high-skilled immigrants. Jasso and colleagues. (2004) compared life expectancies between immigrants and non-migrants in their native countries and found that immigrants from some Asian countries experience an approximately 10-year advantage relative to their non-migrant co-nationals. These findings corroborate the claim that immigrants who enter the United States are self-selected for good health. Why might this be the case?

Immigrant selection occurs on multiple levels for various characteristics, such as education, skill, age, gender, and health, among others. However, scholars continue to debate the extent to which present-day immigrants fare better compared to the population in their countries of origin. In addition, contemporary political rhetoric often presents a bleak perspective, suggesting that immigrants arriving to the United States today do not represent the best of the population of origin (Flores and Schachter 2018). However, some scholars contend that immigrant labor force success evinces the high selectivity of the newcomers (Chiswick 1978). Other scholars contend that relative deprivation motivates international migration (Stark and Bloom 1985; Stark and Taylor 1991). As such, immigrants from households who do not fall favorably in the origin society's income distribution and whose income aspirations cannot be

satisfied by domestic opportunities, are more likely to pursue economic opportunities abroad. Arguing that immigrants represent the most motivated and ambitious segment of their countries of origin, Portes and Rumbaut (1996) contend that all immigrants, regardless of legal status, are positively selected on multiple factors. They suggest that only people who are more educated and have been exposed to the possibilities of an American lifestyle are more likely to immigrate.

Therefore, the aforementioned scholars argue that positive selection for multiple factors—including health— occurs among contemporary immigrants. Corroborating evidence have been presented by other scholars as well. Feliciano (2005a) found that immigrants to the United States are positively selected for education. However, she notes that the degree of selectivity varies substantially depending on the country of origin and historical period of migration. In regard to health selectivity, researchers have found significant evidence to support the claim that immigrants generally (Kennedy et al. 2015), and Asian immigrants in particular, benefit from immigrant selectivity (Frisbie, Cho, and Hummer 2001). Thus, positive migration stream selectivity is a key factor that may partly explain the patterns of health differentials that we might observe among various Asian ethnic groups.

In spite of the evidence presented above, other scholars argue that not all immigrants are positively selected. Lee (1966) contends that the context of migration significantly influences the selection of immigrants. Immigrants who are motivated by pull factors in the United States are more positively selected than immigrants who are motivated by push factors in the country of origin. Moreover, the process of international migration carries burdensome costs to the immigrant. Therefore, Lee (1966) also posits that immigrants who face the greatest barriers to migrate are more likely to be positively selected for multiple characteristics. In studying labor

market success, Chiswick (1999) found a direct relationship between migration costs and favorable migrant selection—thus supporting Lee (1996’s) position.

However, it should be noted that the influence of migration stream selectivity applies mostly to voluntary migrants (Chen et al. 2009). Involuntary migrants, such as refugees and asylum seekers, do not face the same obstacles to entry as voluntary migrants, thus reducing the significance of migration stream selectivity on their health outcomes. In this study, the selectivity of the migration streams remains important because the groups under study largely entered the country as voluntary migrants—with the exception of the early wave of Vietnamese migrants who arrived as refugees and asylum seekers following the Vietnam War (Alperin and Batalova 2018). However, unlike in the past, recent Vietnamese immigrants arrive as voluntary migrants, largely through family reunification and some through employment channels (Alperin and Batalova 2018).

Acculturation and Health. Another factor to consider in discussing migration-related health outcomes is the effect of acculturation. Although contemporary understanding of acculturation has drifted from the one-dimensional and unidirectional conceptualization of early theories (Park and Burgess 1924; Park 1914; Gordon 1961, 1964), the term generally refers to the gradual change in an immigrant’s beliefs, values, and behaviors over time as a result of interactions with others in the immigrant destination (Portes and Rumbaut 2014; Alba and Nee 1997; Zhou 1997; Portes and Zhou 1993; Waters and Jimenez 2005). Researchers ascribe the convergence in health outcomes between immigrants and the native-born to acculturation (Abraido-Lanza, Echeverria, and Florez 2016; Abraido-Lanza, Chao, and Florez 2005; Franzini, Ribble, and Keddie 2001). There exists an implicit assumption in the acculturation and health

literature that with greater acculturation, immigrants adopt harmful behaviors from the native-born over time (Abraido-Lanza, Echeverria, and Florez 2016; Savage and Mezuk 2014). These unhealthy behaviors include an increased consumption of high-fat and low-nutrient food and an increasingly sedentary lifestyle. It may also include the adoption of other behaviors such as smoking and risky sexual behaviors. Thus the literature suggests that duration in the United States may reduce the health advantages conferred by migration stream selectivity. Further, if we consider acculturation as an intergenerational process (Alba and Nee 1997), then we might observe a relative health disadvantage among Asian groups with large second and later generation populations—such as Japanese and Chinese—compared to groups with larger first generation members.

Early studies on acculturation and health among Asian groups in the United States found support for the deleterious effect of acculturation on health (Marmot and Syme 1976; Marmot 1983). However, recent work by Lu and colleagues (2016) suggests that among Chinese, Vietnamese, and Hmong adults, those who identify as ‘westernized’ or bicultural are less likely to be diagnosed with hypertension compared to those who identify as ‘very Asian.’ Moreover, Singh and Miller (2004) also found that Asian immigrants as a whole have higher life expectancies than United States-born co-ethnics. However, they note that United States-born Chinese, Filipino, and Japanese live longer than their foreign-born counterparts, contradicting common assumptions about the ‘immigrant health advantage’ (Singh and Miller 2004). The contradiction noted above may reflect differences in the strengths of migrant stream selectivity. As Lee (1966) noted, strong positive selectivity occurs among groups who face the greatest barriers to entry. As such, the Chinese, Filipinos, and Japanese may face fewer barriers and less costs to entering the United States compared to other Asian groups. Therefore, immigrant

selectivity remains an important explanation for Asian groups' characteristics and health trajectories. However, considering that an investigation of the differences in life expectancy between the foreign-born and native-born is beyond the scope of this study, I do not expressly examine the relationship between nativity and life expectancy in this paper. Rather, I incorporate nativity in examining the effect of geographic differences in immigrant composition on life expectancy differentials, as described in the following section.

Place of Residence

Although the Immigration Act of 1965 eased the restrictions on migration into the United States, the movement from one country to another was still associated with heavy migration costs due to opportunity costs of foregone income, monetary costs related to travel, and psychological costs due to the relocation to a foreign setting (Massey 1990). In order to minimize those migration costs, immigrants relocate to areas settled by co-ethnics, which have traditionally been in metropolitan areas. Demonstrating the importance of urban areas as gateways for immigrants is the fact that in 2002 more than 90 percent of immigrants lived in metropolitan areas (Marrow 2005). These popular immigration destinations include California, New York, Texas, Florida, Illinois, and New Jersey—where 67% of all immigrants to the United States lived in 2000 (Harrow 2005). This is of no surprise as the aforementioned states are also home to large metropolitan areas—and the country's largest cities: New York, Los Angeles, and Chicago—where jobs are plentiful and co-ethnics are present. For Asian immigrants, these destinations have traditionally been in the West and the Northeast. However, immigrants are now dispersing beyond the traditional destination cities, and they are increasingly moving to the suburbs (Alba et al. 1999; Marrow 2005). As I mentioned previously, in 2010 the states with the largest Asian

populations were: California, New York, Texas, New Jersey, Hawaii, Illinois, Washington, Florida, Nevada, and Pennsylvania (Hoeffel, Rastogi, Kim, and Shahid 2012). Notably, significant Asian populations now reside in the Midwest and the South.

The health disparities literature consistently demonstrates that place matters for health outcomes. Extant research shows that when comparing states, life expectancies can vary by nearly 7 years for men and women (NRC and IOM 2013). Wilmoth, Boe, and Barbieri (2010) found that when compared to its European peers, the United States suffers from greater geographic inequalities in mortality. Moreover, large regional differences in disease control, medical treatment, and other risks contribute to geographic health inequalities across the United States (Montez et al. 2019; Sheehan et al. 2018; Montez and Berkman 2014). Murray and colleagues (2006) found that while a racial gap exists between Blacks and Whites with regard to life expectancy and mortality rates, intra-racial inequality also exists based on region. Those who live in the South have higher mortality rates and lower life expectancies regardless of race. Further, macro-level studies show that Southern states maintain some of the highest rates of diseases such as obesity and HIV in the United States (Fenelon 2013; Levi, Segal, Rayburn, and Martin 2015; CDC 2016). Therefore, regardless of race living in the South is associated with poor health outcomes.

Research on this topic emphasizes the importance of the social context of the immigrant destination in order to promote well-being (Eschbach et al. 2004). Studies on Mexican immigrants have shown that ethnic enclaves offer a protective effect attributed to the good mental and physical health produced by co-ethnic social support (Markides and Esbach 2005). As such, it follows that immigrants who settle in less established destinations—as is the case

with Asian groups who reside in Southern states¹—forego the protective health benefits of the ethnic enclaves. Nevertheless, it is important to note that the immigrants who settle in ethnic enclaves are also the ones who are more likely to need the social, economic, and health resources available there (Portes and Rumbaut 1990). Consequently, the immigrants who settle in traditional destinations are also more likely to be those with low skills and social capital. On the other hand, those who settle in less established destinations may be more skilled, more educated, and benefit from those factors.

Thus, the geographic disadvantage that is often associated with the South may not be pronounced among the Asian groups in the present study because of the strong protective effect of migration stream selectivity. As such, Asian groups who reside in non-traditional destinations, including the South and Midwest, benefit from positive selection for multiple factors that affect health outcomes. Recently, Fenelon (2017) published findings on Mexican immigrants that demonstrate a health advantage among those who live in non-traditional and new destinations, contradicting long-held assumptions about the advantages of ethnic enclaves. I posit that a similar pattern will hold among the Asian groups in the present study. Asian groups who reside in new destination regions—such as the South and Midwest—will have longer life expectancies than Asians in the traditional destinations of the Western region.

¹ Although the South, relative to the West, is generally a newer destination for most Asian groups, there are certain areas of the region where some Asian groups have settled for multiple generations—particularly some Chinese groups in the Mississippi Delta and Chinese and Japanese groups in parts of Texas (Bashi Treitler 2013; Glasrud 2001).

Summary and Hypotheses

The Asian racial category consists of a diverse group of ethnic groups with origins in various regions of Asia and parts of the Middle East. Although Asian groups have lived in the United States for more than a century—with groups such as the Chinese, Japanese, and Filipinos being the earliest Asian settlers in the country—a large proportion of Asians in the United States today are part of the post-1965 immigration wave. Unlike the pre-1965 immigrants, contemporary Asian groups exhibit greater diversity in regard to socioeconomic status, ethnicity, and geographic settlement patterns. In this paper, I consider that diversity in conjunction with the patterns of health inequality presented in the extant literature. Given the literature described in preceding sections, I expect to find support for the following hypotheses.

Hypothesis 1: Life expectancy among the different ethnic groups follow a gradient determined by socioeconomic status. Ethnic groups with high household incomes and educational attainment (e.g. Asian Indians and Filipinos) will exhibit the longest life expectancies.

Hypothesis 2: I anticipate that there will be geographic differences in life expectancy, such that Asian groups living in new Asian destination regions—the Midwest and the South—will have higher life expectancies than those living in the traditional Asian gateway destination—the West.

Data and Methods

Data

I utilize mortality data from the ‘All Counties’ Multiple Cause of Death File (MCDF) contained in the Compressed Mortality File (CMF) from the National Vital Statistics System for the year 2016. The 2016 ‘All Counties’ MCDF in the CMF is a restricted dataset collected and made available by the National Vital Statistics System, the Centers for Disease Control and Prevention (CDC), and the National Center for Health Statistics (NCHS). Vital statistics were provided to the NCHS by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. The ‘All Counties’ MCDF contains all officially recorded deaths in the United States, including the District of Columbia, Puerto Rico, and all other United States territories. The data contain information based on death certificates completed jointly by a medical examiner and a licensed funeral director. These data include the underlying cause of death, and up to twenty additional causes. The dataset also includes demographic data including, but not limited to, age, gender, country of birth, state of residence, county, race, Hispanic ethnicity, and ethnicity for Asian decedents. Mortality data are coded by individual states and are then submitted to the NCHS through the Vital Statistics Cooperative Program or coded by NCHS based on copies of original death certificates provided by state registration offices². In this study, I only examine the deaths that occur within the 50 states and the District of Columbia. American Samoa, Puerto Rico, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands were excluded from the analysis. Moreover, prior to requesting access to the ‘All Counties’ MCDF,

² For more information on the Multiple Cause of Death File, please see Multiple Cause of Death 1999-2017 on CDC Wonder Online Database, released 2018, and the National Center for Health Statistics website.

the project was approved by the Institutional Review Board (IRB) at Vanderbilt University. Following IRB approval, access to the restricted data was granted for 2 years by the NCHS after a review conducted by the National Association for Public Health Statistics and Information Systems (NAPHSIS).

Additionally, population denominators are obtained from the Public Use Micro Sample (PUMS) data file of the American Community Survey (ACS) 5-year population estimates (2012-2016), which contains data on disaggregated Asian ethnic groups. The PUMS ACS data are publicly available and was accessed through Data Ferret. As part of the United States' Census Bureau's Decennial Census Program, the ACS provides current demographic, social, economic, and housing estimates throughout the period between each census. The survey randomly samples approximately 3.5 million addresses in the United States and Puerto Rico every year. Thus the data are representative of the United State's non-institutionalized population. It asks respondents a range of questions, ranging from demographic information (e.g. age, sex, country of birth, and income) to subjects such as language spoken at home and shelter costs. For the current study, I look only at 5-year population estimates (2012-2016), disaggregated by age, sex, and region. In order to maintain consistency, I use population denominators for all analyses from the the same dataset. Furthermore, population denominators for each ethnic group include only single-race individuals. That is, population estimates for people who reported more than one ethnicity and/or race were excluded in order to avoid over-estimation of population denominators.

Methods

In order to describe the age structure of the respective Asian ethnic groups, I present population pyramids for each ethnic group at the national level, utilizing data from the American

Community Survey. Moreover, I also present population pyramids for Asians as an aggregate in the traditional and recent destination regions. Considering that I contend that Asians who live in new destination regions to be members of the first or second immigrant generation, I expect to find a younger age structure in the destination region compared to the traditional destination. I also expect to find a large proportion of the population in the new destination region to be in the working ages (i.e. between 15-69 years old). On the other hand, I expect to find a larger proportion of older adults (i.e., 70 years and above) in the Asian population in the traditional destination.

Then, I compute life expectancy (e_0) for Asians in the United States as an aggregate and for each of the six Asian groups of interest. The analyses are conducted at the national and regional levels. In regard to regional-level analyses, I compute life expectancies for the four geographic regions used in the United States Census—West, South, Midwest, and Northeast³. The West region includes Alaska and Hawaii. Considering that the vast majority of Asians residing in the Western states reside in California, Hawaii, Washington, and Alaska—all of which are Asian immigrant gateway states (Takaki 1989)—I consider the Western region a traditional immigrant destination. On the other hand, I consider Southern and Midwestern states such as Georgia, North Carolina, and Minnesota, —wherein fewer than 100,000 people of Asian descent lived in 1990 (U.S. Census Bureau 1993)—that have experienced rapid Asian population within the last few decades as recent Asian immigrant destinations. The analyses and discussion of findings at the regional level will largely focus on the differences between traditional and new destination regions. Given the small number of deaths—for individual ethnic groups—that occur at ages below fifteen in the Midwest and South, I combined the two regions into one.

³ For more information, see U.S. Census Bureau Geographic Terms and Concepts.

Furthermore, abridged standard life tables (Preston, Hueveline, and Guillot 2001) were utilized in order to calculate life expectancy at birth (e_0) for the national level analyses of disaggregated Asian ethnic groups as well as the regional level analyses of life expectancy for all Asians as an aggregate. The life table method measures death rates, survivorship, and life expectancies given age-specific death counts and population estimates. Age-specific death (ASD) rates (${}_n m_x$) are calculated by dividing death counts by the number of people in each age-group. Given ${}_n m_x$ values, the probability of dying within each age interval (${}_n q_x$) is calculated and applied to a hypothetical cohort of 100,000 individuals, which then allows me to compute life expectancy values⁴. The abridged standard life table follows the aforementioned techniques, but it utilizes 5-year rather than 1-year age groups.

Furthermore, in order to glean meaningful patterns of health differentials at the sub-national level (i.e. traditional vs. new destination), I compute the average the number of years lived between the ages fifteen and seventy. These were calculated using the following equation:

$$e_{(15,65)} = \frac{T_{15} - T_{65}}{l_{15}}$$

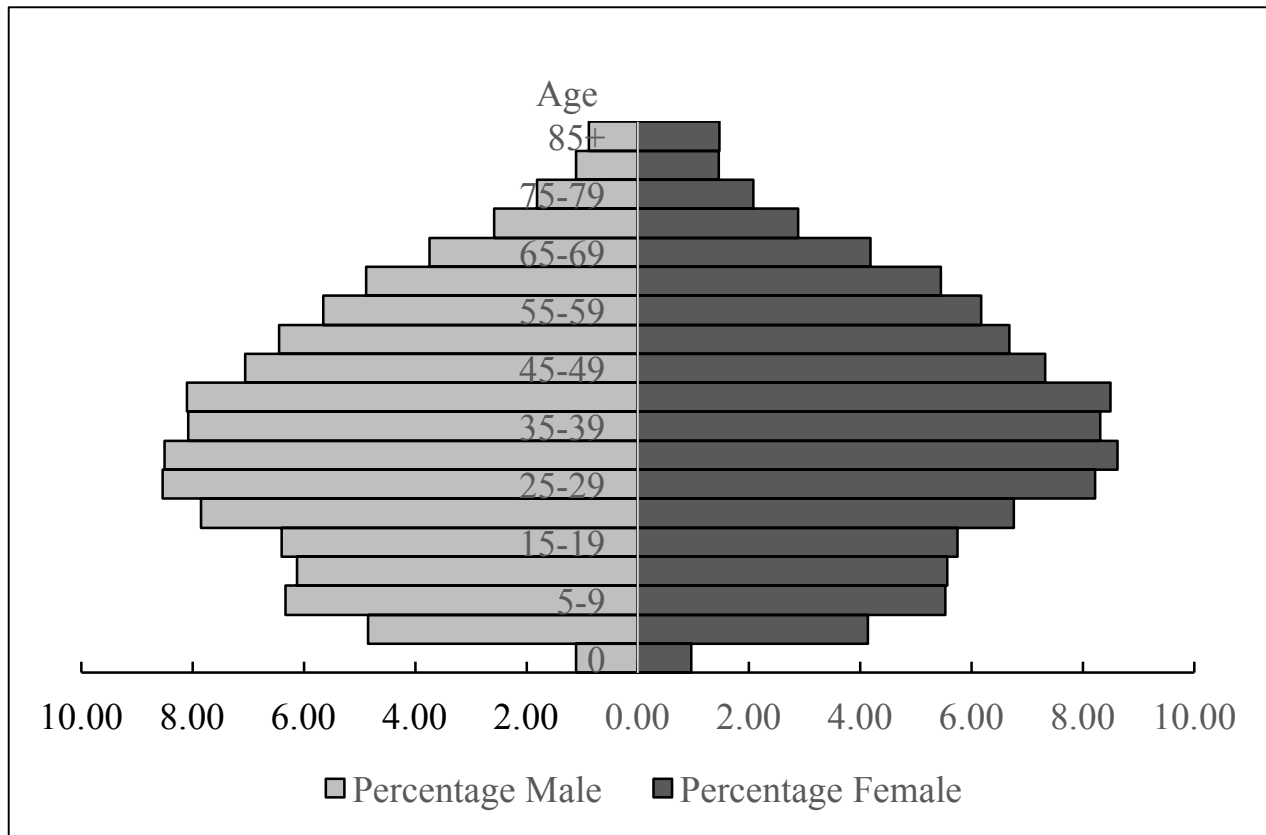
In the above equation, T_x represents the person-years lived above age group (x). For example, T_{15} represents the total number of person-years lived above the five-year age group (15-19). Furthermore, l_x represents the number of persons alive at the beginning of age group (x). Thus, l_{15} represents the number of persons alive at the beginning of age 15. The aforementioned method allows me to calculate the number of years an individual, age 15, can expect to live between the ages 15 and 65, on average. I present findings in the following section.

⁴ See Preston, Hueveline, and Guillot (2001) for more information on the life table method.

Results

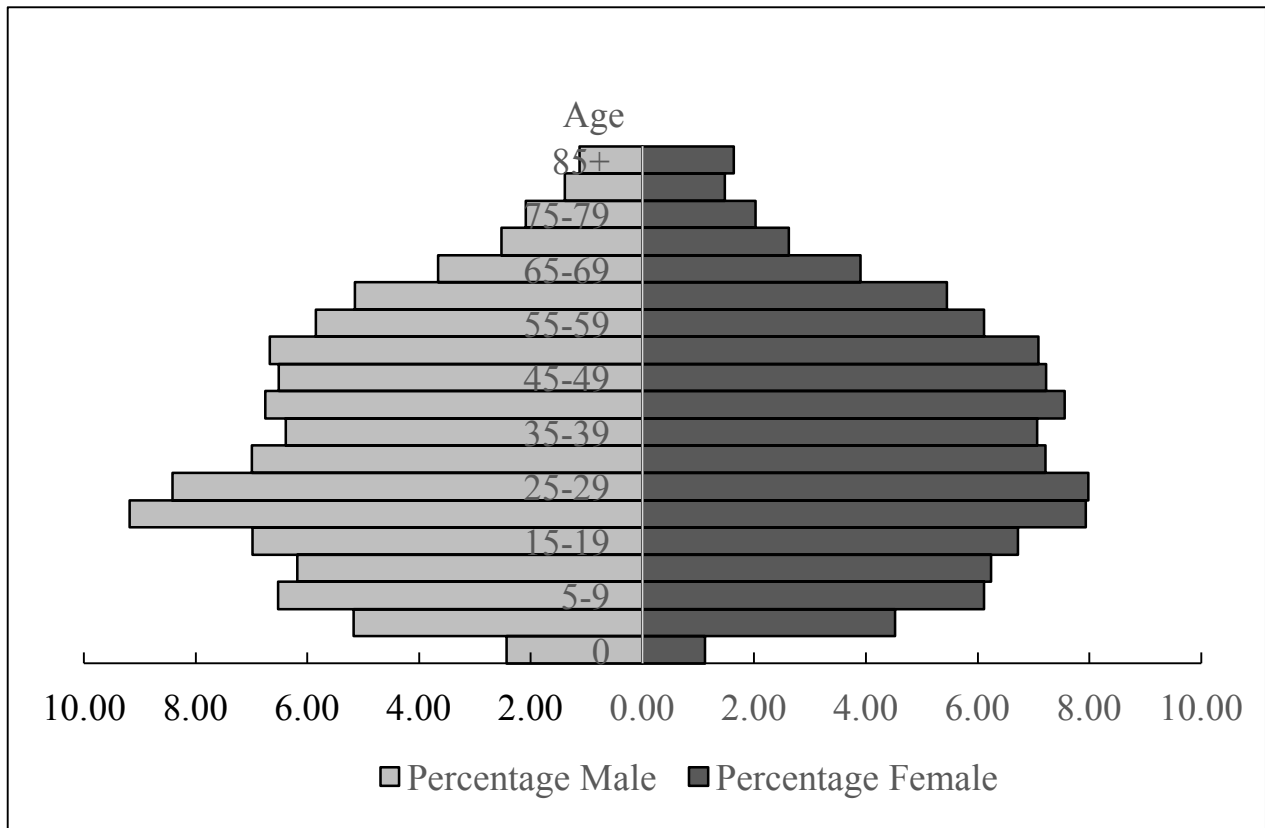
National Level Population Pyramids

Figure 1. Population Pyramid for All Asians in the USA, 2016



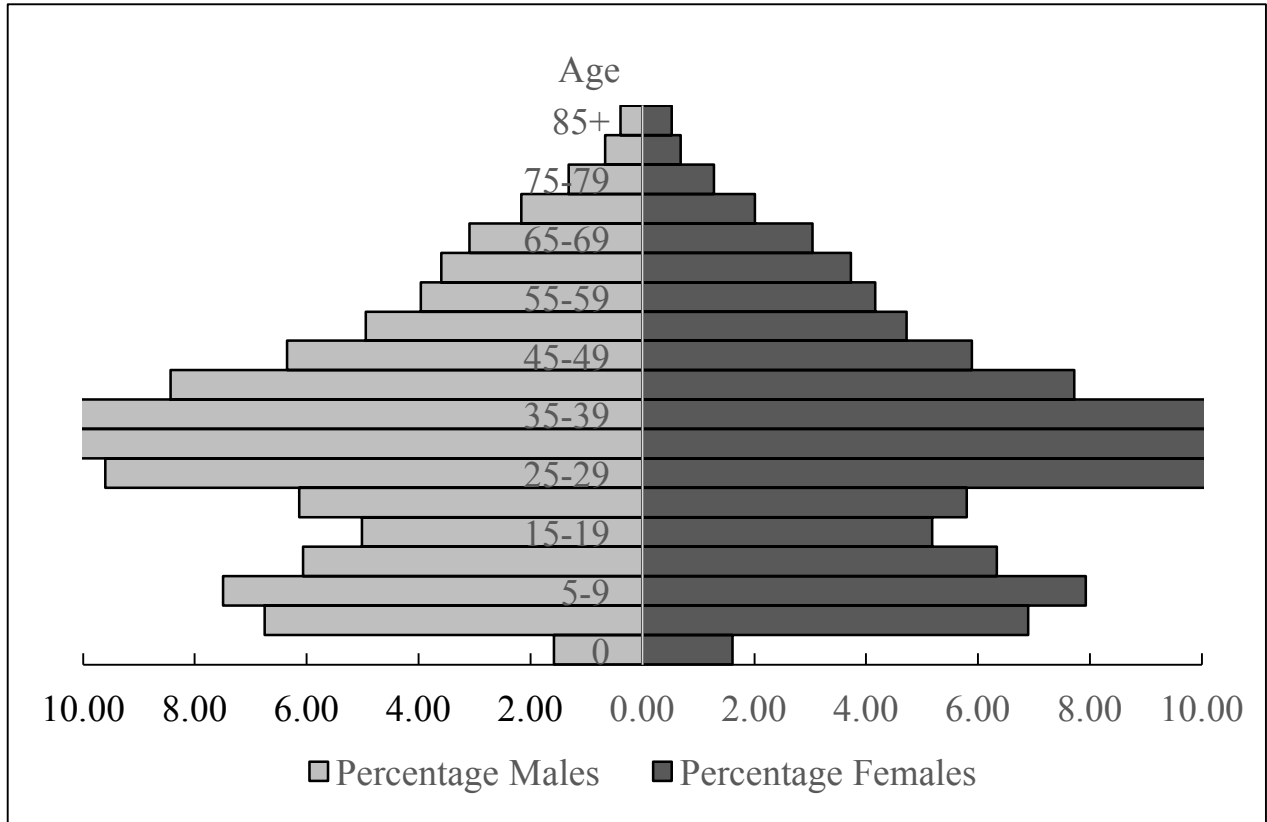
Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Figure 2. Population Pyramid for Chinese in the USA, 2016



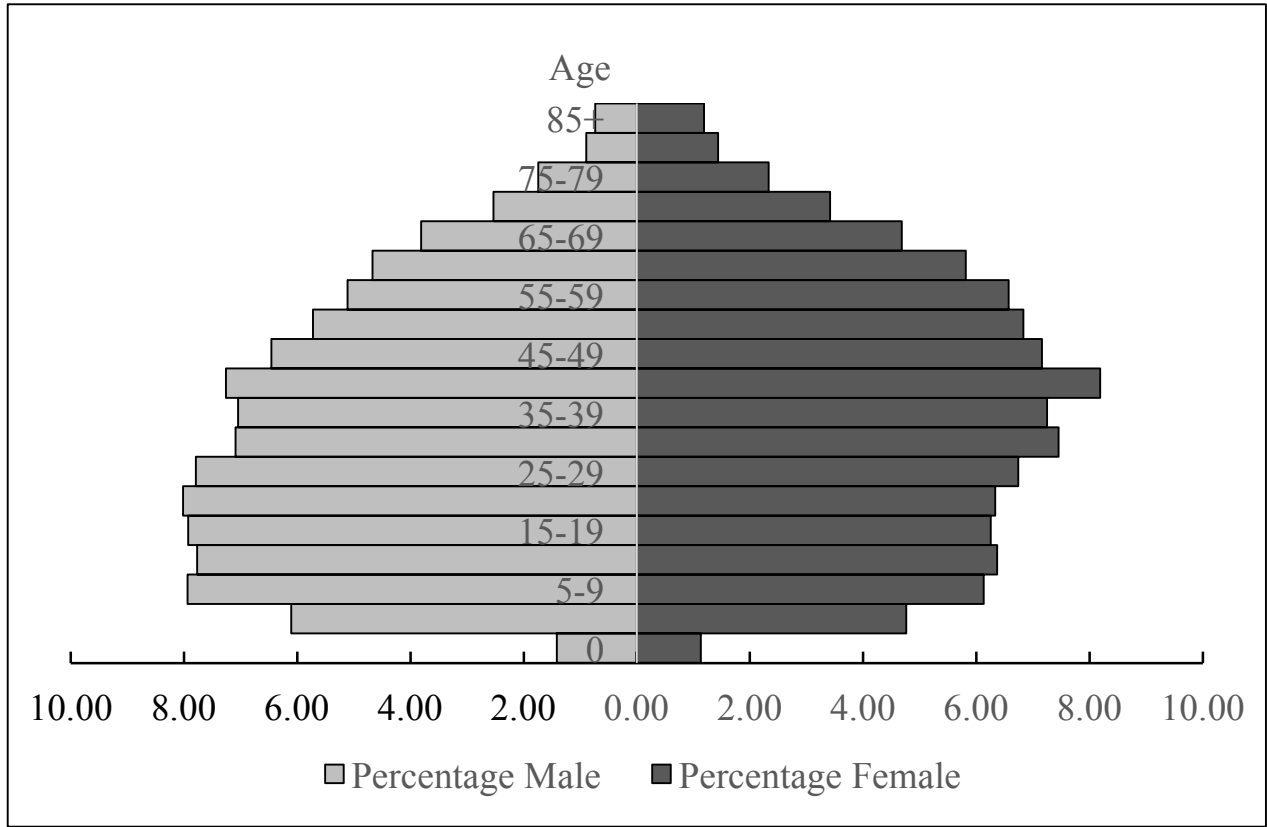
Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Figure 3. Population Pyramid for Asian Indians in the USA, 2016



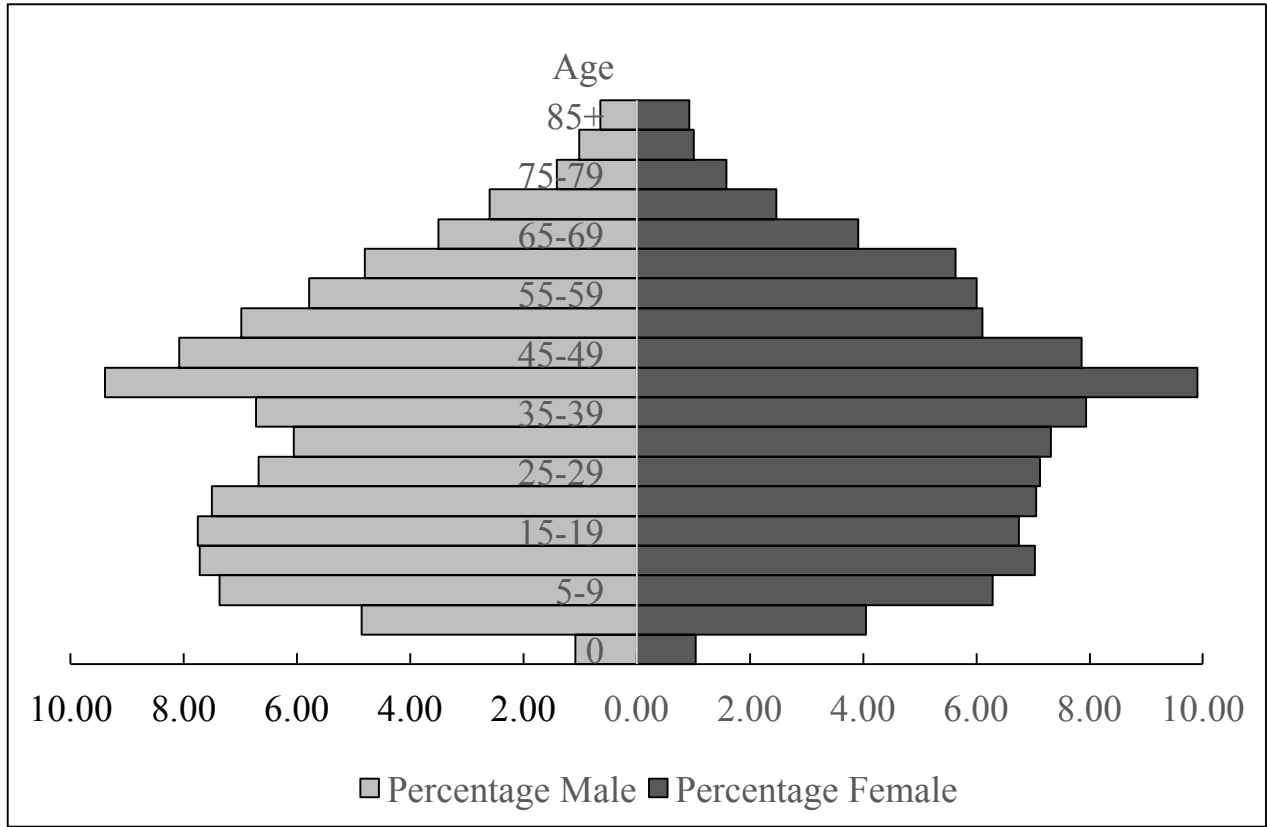
Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Figure 4. Population Pyramid for Filipinos in the USA, 2016



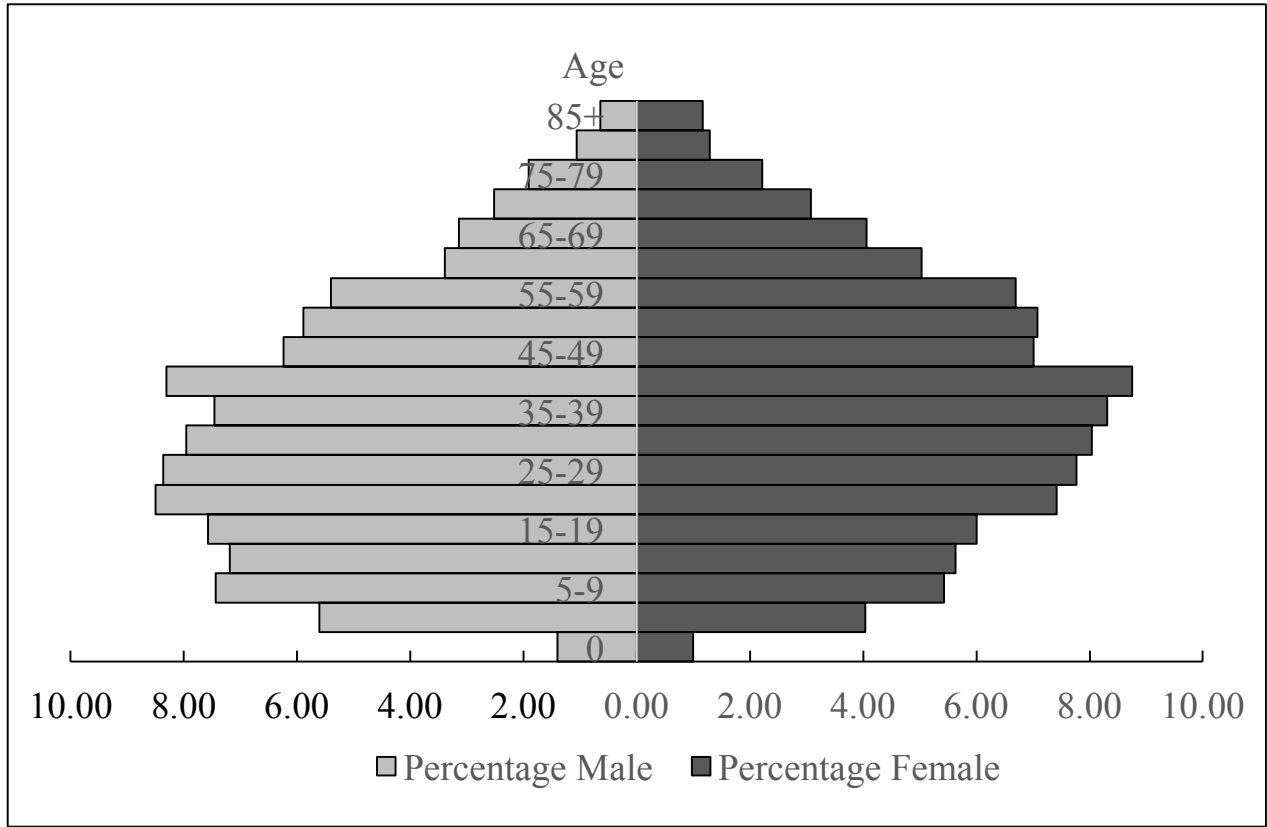
Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Figure 5. Population Pyramid for Vietnamese in the USA, 2016



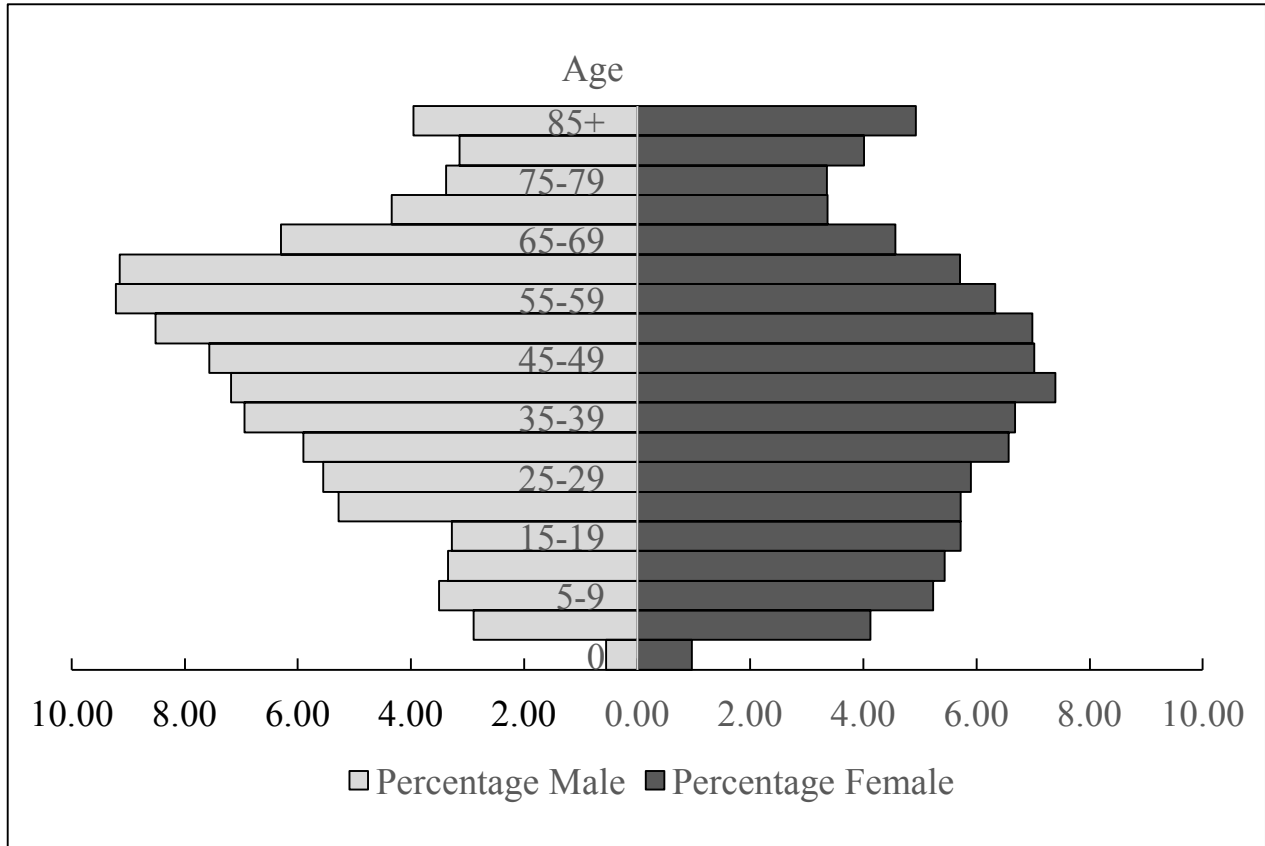
Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Figure 6. Population Pyramid for Koreans in the USA, 2016



Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Figure 7: Population Pyramid for Japanese in the USA, 2016



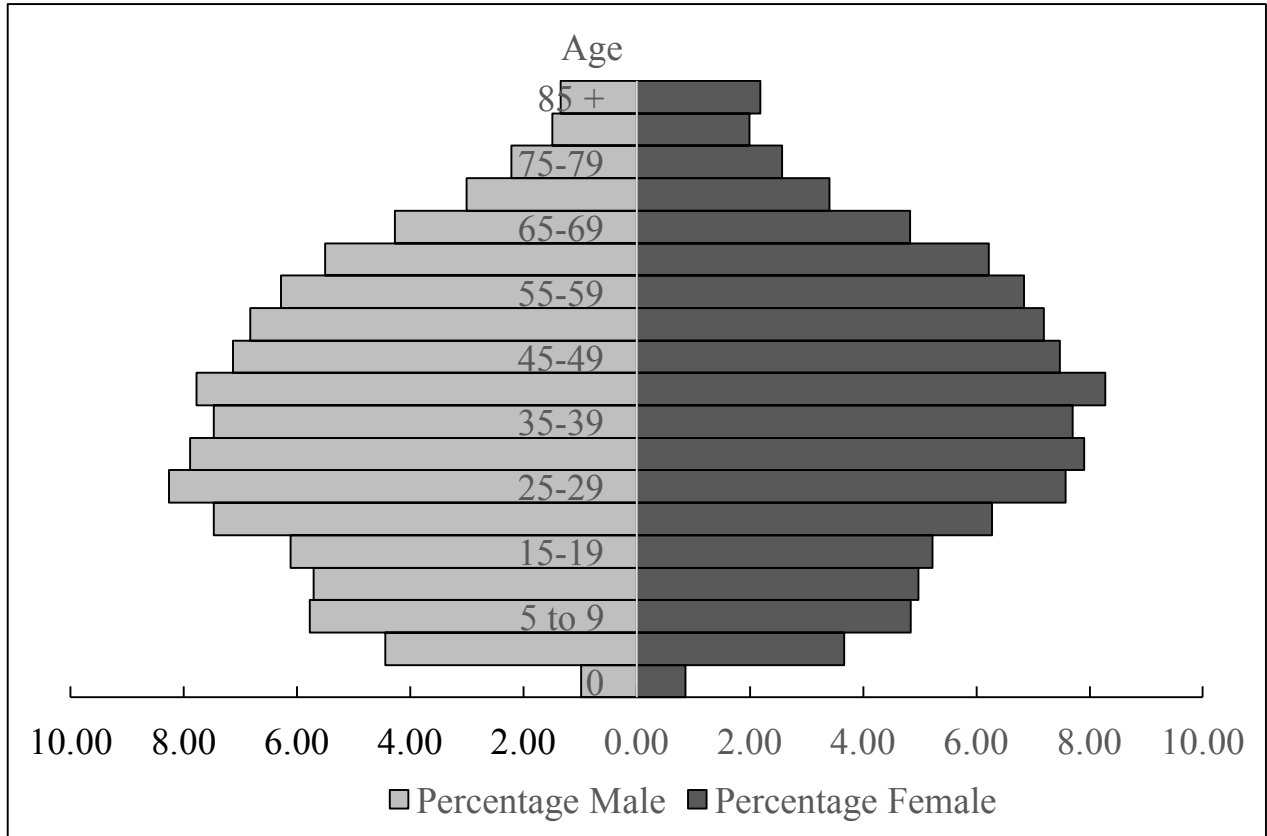
Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

The population pyramids above demonstrate the national level age structures of the Asian groups of interest. Figure shows that a large proportion of Asians (as an aggregate) are between the ages 20 and 50. Figure 2 demonstrates that the Chinese have a relatively high proportion of adults over 50, thus making the Chinese population older than the aggregated Asian population. Moreover, Asian Indians have an interesting population pyramid (figure 3) with a large proportion of people between the ages of 25 and 45. Further, compared to the Chinese and the aggregated Asian group, a larger proportion of Asian Indians are under 15 years old. Thus Asian Indians are a younger population compared to the Chinese and aggregated Asian group. Among Filipinos, figure 4 demonstrates a large proportion of the population below the age of 50.

Additionally, a larger proportion of Filipina females are over 65 years old. Figure 5 shows that the largest proportion of Vietnamese are between 40 and 44 years old. Moreover, similar to Filipinos, a large proportion of Vietnamese are under 30 years old, thus making the Vietnamese and Filipino populations younger than the Chinese, Asian Indian, and the aggregated Asian group. Among Koreans, the largest proportion of the population are under 45 years old, with the age group 40 to 44 having the largest proportion of the population. Lastly, figure 7 shows a Japanese population that is older than the other ethnic groups in this study. Whereas as less than 3% of the male or female populations of the other ethnic groups are 85 years and older, nearly 6% of Japanese females and approximately 4% of Japanese males fall within that age group. Moreover, compared to the other ethnic groups, a much smaller proportion of the Japanese population are under 45 years old.

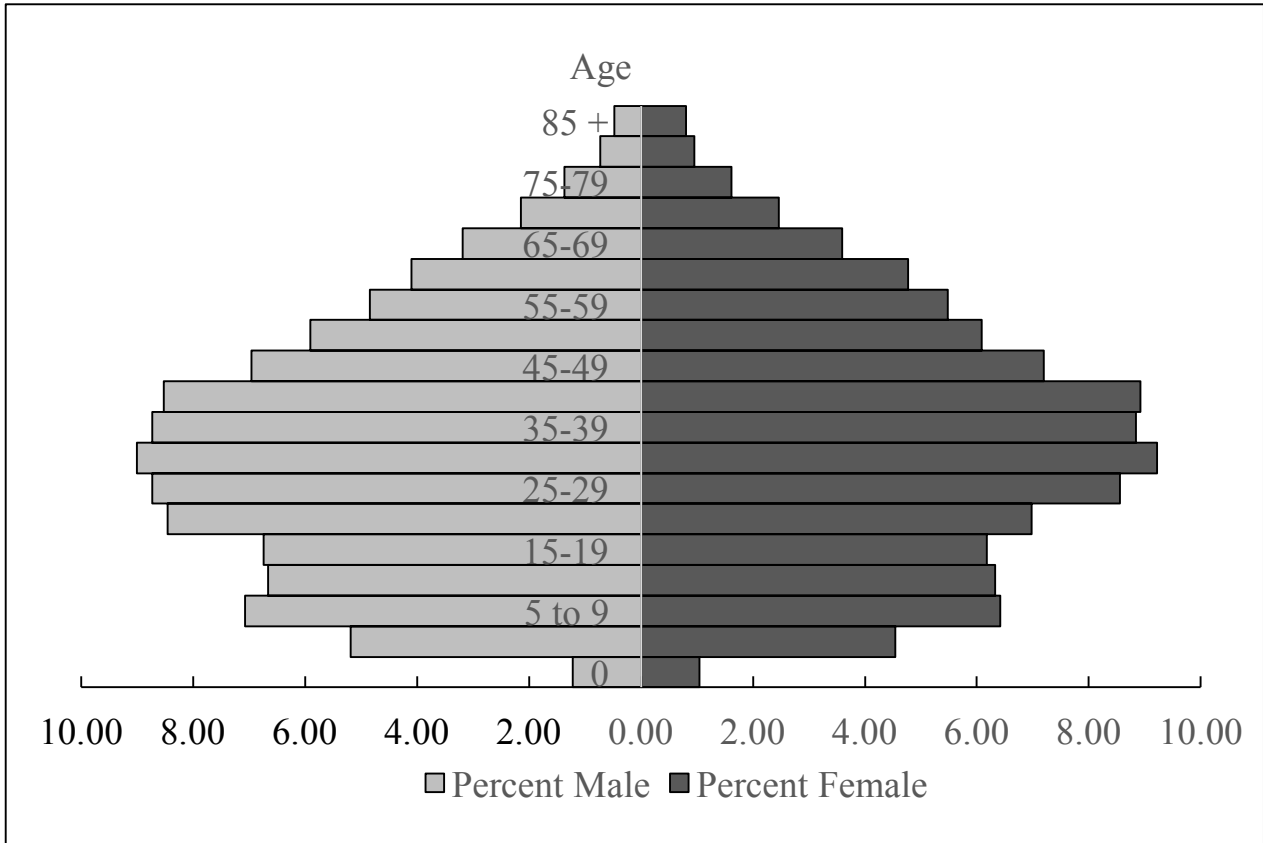
Regional Level Population Pyramids

Figure 8: Population Pyramid for Aggregated Asians in the West, 2016



Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Figure 9: Population Pyramid for Aggregated Asians in the Midwest-South Region, 2016



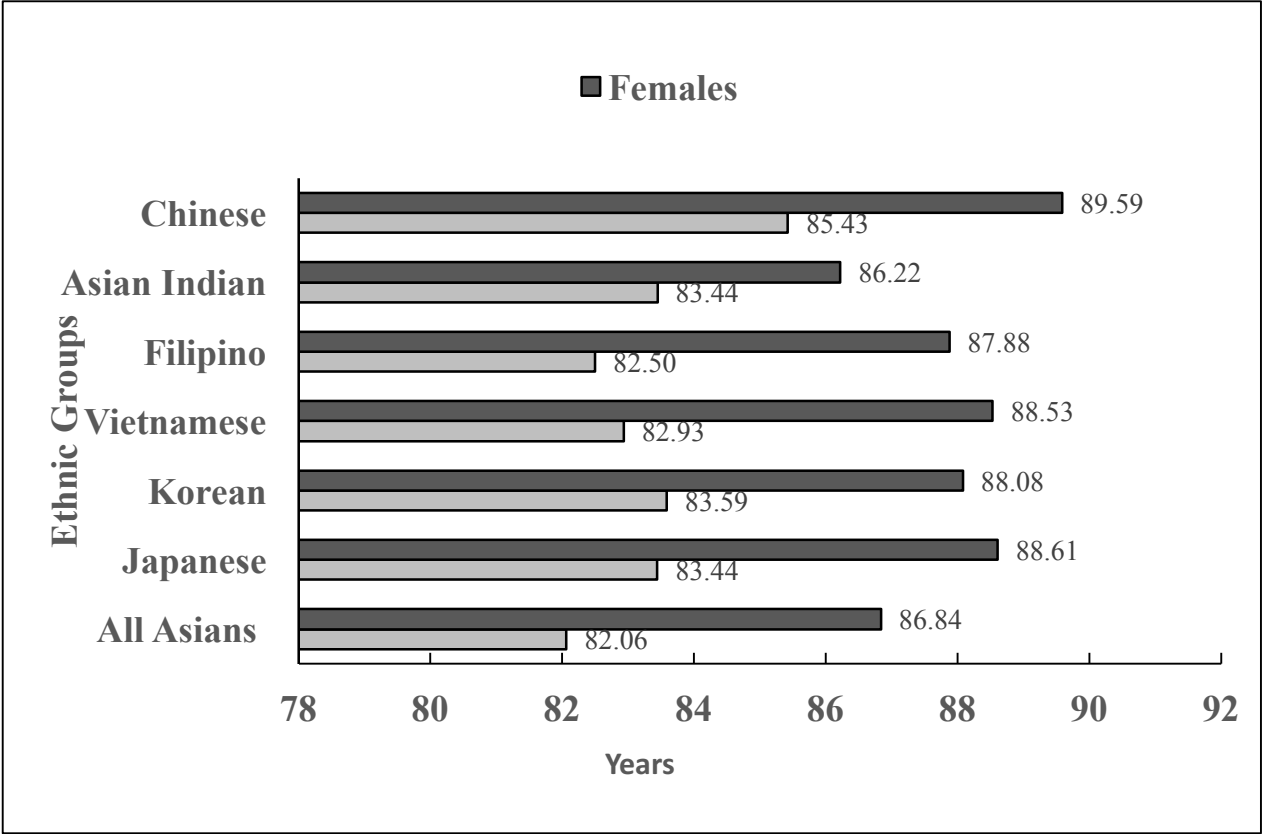
Note: Calculations made by the author. Source: American Community Survey 5-Year Estimates (2012-2106)

Given the population pyramid for aggregated Asians in the West (figure 8), I find that a large proportion of the Asian population in the traditional destination is over the age of 50. Moreover, figure 8 shows that in the West, there is a significant proportion of the Asian population who are of even older ages (70 years and above). On the other hand, figure 9 demonstrates that Asians in the Midwest-South region have a younger population structure. I find that a much larger proportion of the Asian population in the Midwest-South are under 60 years old. Further, the largest segment of the population in the Midwest-South are between 20 and 45 years old, which are prime working years. Lastly, figure 9 shows that relative to the age structure of Asians in the West, the Midwest-South has a smaller share of people above the age

70. These findings support my expectation that the Asian population new destination regions (the Midwest and South) is younger than the population in the traditional destination.

National Level Life Expectancy

Figure 10. National Level Life Expectancy at Birth by Ethnic Group, 2016



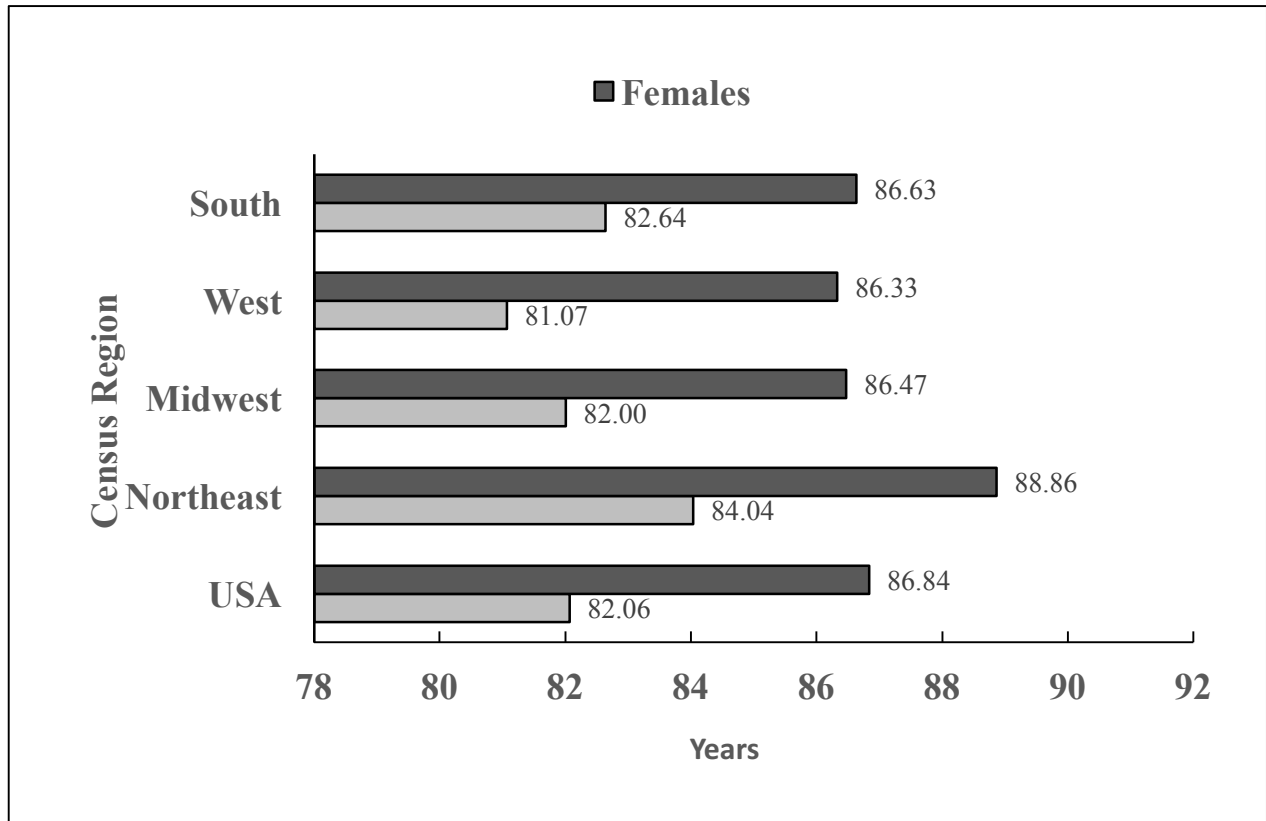
Note: Calculations made by the author. Sources: Multiple Cause of Death File (2016) & American Community Survey 5-Year Estimates (2012-2016)

Figure 10 describes the inter-ethnic variation in life expectancy among Asians at the national level. Among Asian males, Chinese exhibited the longest life expectancy at approximately 85.4 years. The Chinese male life expectancy in 2016 is more than 3 years longer than the life expectancy for aggregated Asian males ($e_0=82.06$). The male life expectancy for the

aggregated Asian group is shorter than the values for any of the six ethnic groups in the study, suggesting that other Asian groups have lower life expectancies than the groups under study. Moreover, Filipinos exhibit the shortest life expectancy ($e_0=82.50$) among males. Therefore, although I expected Asian Indian and Filipino males to experience a life expectancy advantage as a result of their high socioeconomic status, their life expectancy did not surpass that of Chinese males. Asian Indian males also did not have a very large life expectancy advantage over Vietnamese males, and they experience a shorter life expectancy than Korean males ($e_0=83.59$). Among females, Chinese also have the longest life expectancy at 89.59 years, while Asian Indians had the shortest at approximately 86.2 years. Additionally, figure 8 shows that Vietnamese females enjoy a 2.3-year life expectancy advantage over Asian Indian females. Further, Korean females can expect to live 1.8 years longer than Asian Indians. The life expectancy advantage over Asian Indians exhibited by Vietnamese and Koreans is surprising given the approximately \$40,000 median household income advantage enjoyed by Asian Indians relative to the other two groups. Therefore, at the national level I find no support for hypothesis 1: mortality rates and life expectancy among the different ethnic groups follow a gradient determined by socioeconomic status.

Regional Level Life Expectancy for Aggregated Asian Groups

Figure 11. Life Expectancy at Birth for Aggregated Asians by Region, 2016



Note: Calculations made by the author. Sources: Multiple Cause of Death File (2016) & American Community Survey 5-Year Estimates (2012-2016)

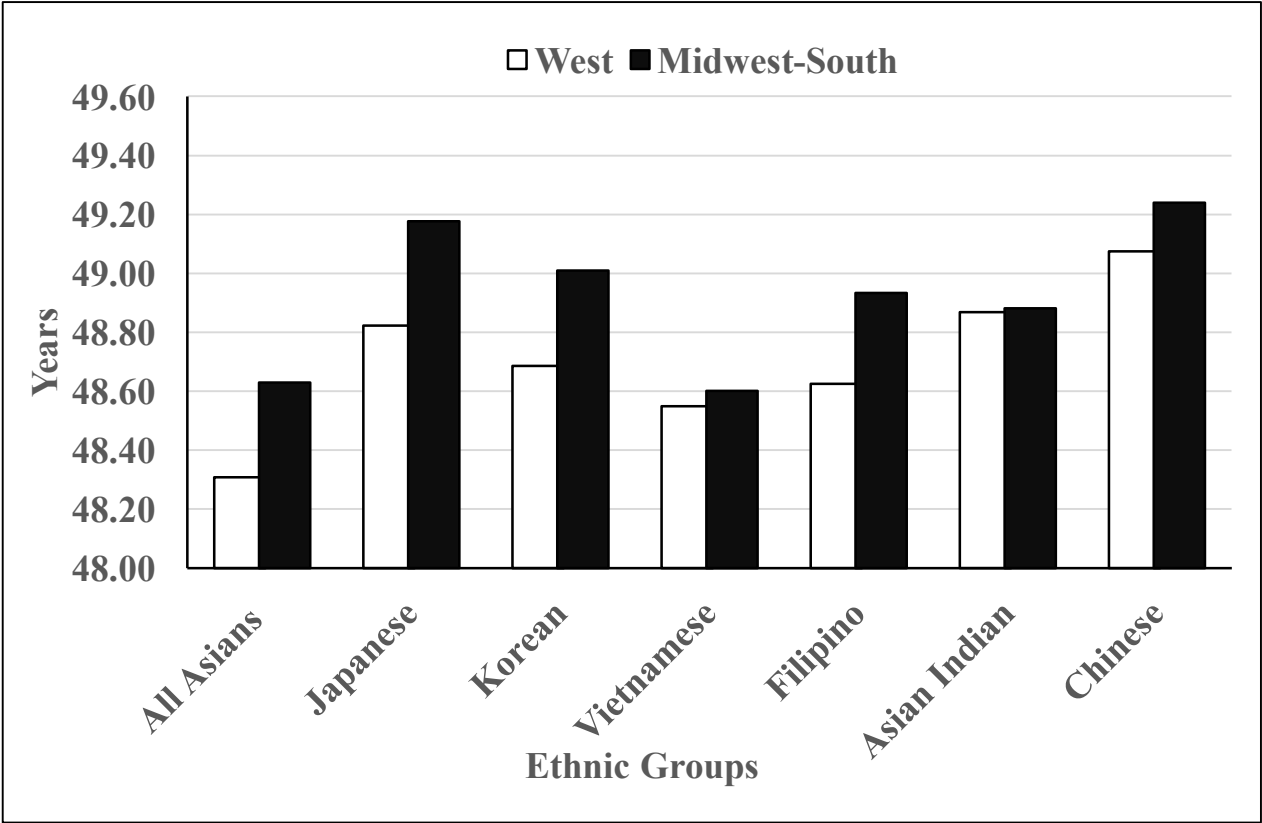
Figure 11 describes the variations in life expectancy at birth for Asians as an aggregate in the United States for the year 2016. Figure 11 shows that among Asian males, life expectancy was highest among those residing in the Northeast region, at approximately 84 years, and lowest among those residing in the West ($e_0=81.07$). Furthermore, Asian males residing in the West could expect an approximately 1-year reduction in life expectancy compared to Asian males nationally. Asian males in the West also have a nearly 3-year life expectancy disadvantage

compared to Northeast-region Asian males. Figure 11 also demonstrates that the life expectancies among Asians in the South ($e_0=82.64$) and the Midwest ($e_0=82.00$) are longer than life expectancy in the West. Therefore, Asian males in the South can expect to live more than 1.5 years longer than Asian males in the West, while Asian males in the Midwest can expect to live nearly 1 year longer than those in the West.

Furthermore, figure 11 demonstrates that similar patterns hold among females. Asian females in the Northeast exhibit the longest life expectancy ($e_0=88.86$), while those in the West experience the shortest ($e_0=86.33$). Therefore, at the aggregate level the findings presented in figure 11 offer support for hypothesis 2: that Asians living in the South and Midwest will have higher life expectancies than those living in in the West. However, although these findings support my expectations, they also show that inter-regional life expectancy differentials are more pronounced among males than among females.

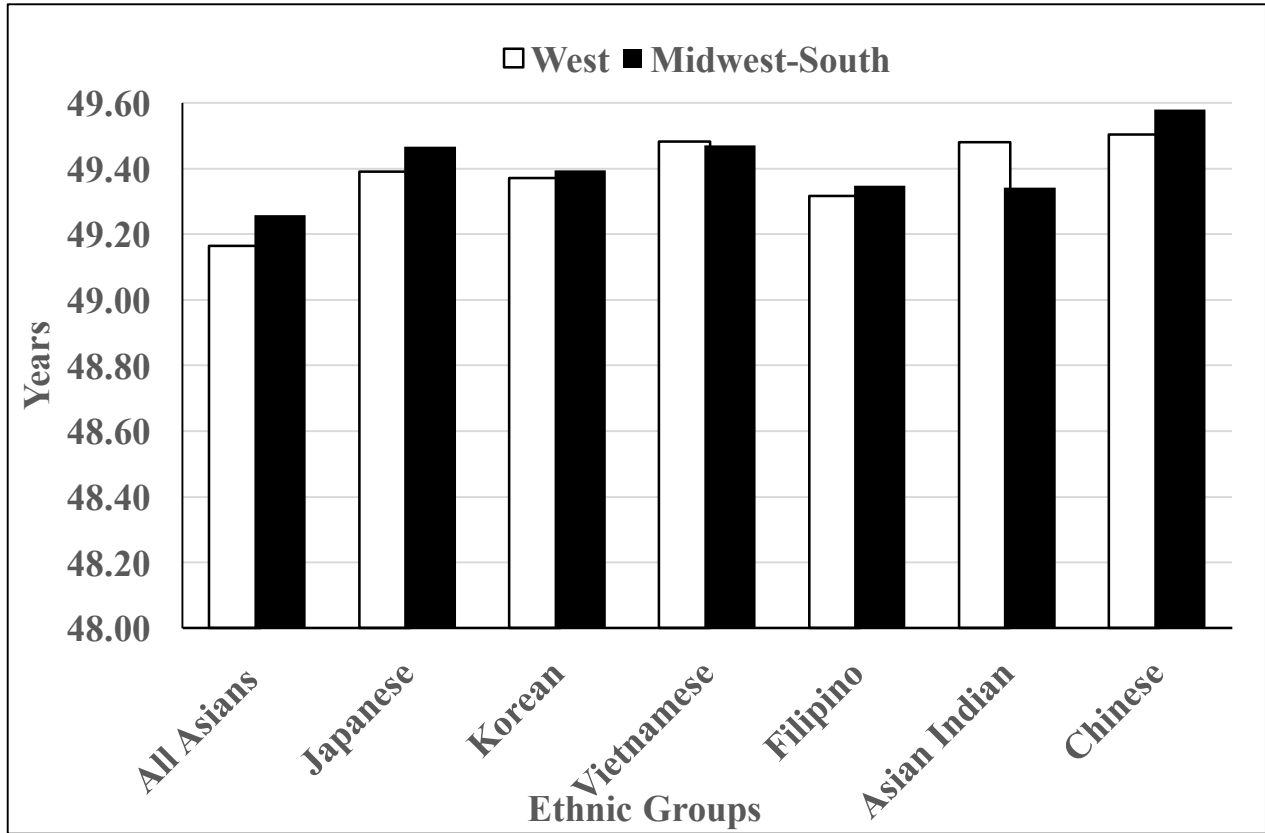
Traditional and New Destination Regions Life Expectancy Differences by Ethnic Group

Figure 12a. Average Number of Years Lived Between (15-68) among Males, 2016



Note: Calculations made by the author. Sources: Multiple Cause of Death File (2016) & American Community Survey 5-Year Estimates (2012-2016)

Figure 12b. Average Number of Years Lived Between (15-69) among Females, 2016



Note: Calculations made by the author. Sources: Multiple Cause of Death File (2016) & American Community Survey 5-Year Estimates (2012-2016)

Figure 12 demonstrates the average number of years an individual can expect to live between the ages 15 to 69. In figure 12a, I find that among males, those who live in new destination regions (Midwest and South) exhibit longer life expectancies than co-ethnics who reside in the traditional destinations of the West. Among the aggregated Asian category, those who reside in new destinations have a life expectancy of an additional 48.63 years at age 15—while those in traditional destinations have a life expectancy of 48.31 years—between the ages 15-69. This pattern of a new destination advantage holds among the disaggregated group. However, the life expectancy advantage held by those who reside in the Midwest and South is reduced to only 0.01 years among Asian Indians. Similarly, the difference in life expectancy

between ages 15-69 among Vietnamese males is only 0.05 years. On the other hand, figure 12a also shows a 0.36-year advantage for Japanese males who live in the Midwest-South region, relative to Japanese males in the West. Koreans and Filipinos exhibit similar patterns of new destination advantage among males, such that those who reside in the Midwest-South region can expect to live approximately 0.3 more years between the ages 15-69, compared to co-ethnics who live in the West. Lastly, among Chinese males those who live in the West experience a nearly 0.2-year disadvantage compared to co-ethnics in the Midwest-South region. Therefore, although I find support for a new destination advantage, the magnitude of that advantage varies by ethnic group.

Moreover, figure 12b demonstrates that for four of the six ethnic groups in the study, females who reside in the Midwest-South region have a life expectancy advantage over co-ethnics in the West. For Asians as an aggregate, I find that the new destination advantage is approximately 0.1 years. Among Chinese and Japanese females, that new destination advantage is approximately 0.08 years, whereas among Filipinos and Koreans, the new destination advantage is about 0.02 years. Therefore, while a new destination advantage exists among the Chinese, Japanese, Filipinos, and Koreans, the advantage is small. Additionally, figure 12b shows that Asian Indian females in the West can expect to live 0.14 years longer than co-ethnics in the Midwest-South, between the ages 15-69. Lastly, the inter-regional difference in average number of years lived between 15-69 among Vietnamese is only 0.01 years. The findings in figure 12a and figure 12b demonstrate partial support for hypothesis 2: Asian groups living in new Asian destination regions—the Midwest and the South—will have higher life expectancies than those living in the traditional Asian gateway destination—the West.

Discussion

The Effect of Socioeconomic Inequality

Given the corpus of research on the link between SES and health, I expected to find long life expectancies among Asian Indians and Filipinos, and shorter life expectancies among Vietnamese and Koreans. However, I found no support for the existence of a wealth/health gradient among the six groups in this study. Rather, I found that Filipinos had the shortest life expectancy among males, while Asian Indians had the shortest life expectancy among females. These findings are surprising considering the significant median income advantage enjoyed by Filipinos and Asian Indians relative to other Asian groups. These findings suggest that notwithstanding the large gaps in median household incomes between Asian ethnic groups (Lopez, Ruiz, and Patten 2017), SES does not seem to afford a significant advantage to the Asian groups in this study. Consequently, low SES also does not predict short life expectancy, at least for the Asian groups in this study. Therefore, the SES gradient in health (Marmot et al. 1991) is not a good predictor of Asian/Asian-American health trajectories—at least for the largest groups. These findings suggest that the overwhelming emphasis that current research places on socioeconomic explanations for health inequalities leads to limited explanations for health inequalities that exist beyond the Black-White binary.

Regional Differences in Life Expectancy

At both the aggregated and disaggregated levels, I found that Asians who live in the South and Midwest experience relatively better health compared to those living in the West—a traditional Asian immigrant destination region. This finding suggests that the Southern health

disadvantage described in the current health literature (Levi, Segal, Rayburn, and Martin 2015; Murray et al. 2006) may not apply to all groups. As the migration literature described in a previous section, the Asian groups in this study are a highly selected group. Moreover, the Asians who now reside in non-traditional destinations, such as the South and Midwest, are likely to be more positively selected for health and SES, thus affording them a life expectancy advantage over Asian groups who live in the West. As figure 9 demonstrates, the Asian population in the combined Midwest-South region is younger than the Asian population in the West. Furthermore, a larger proportion of the Midwest-South population is between 20 and 45 years old, and only a small proportion of the population is above 70 years of age. This finding supports the position that Asian groups in new destinations are likely to be in the first immigrant generation. New destinations will have younger populations because the migration stream selects for people in prime working years. Moreover, the small proportion of people in older ages residing in Midwest-South region reflects the fact that Asian groups have only recently grown in these regions.

On the other hand, figure 8 suggests that the Western region is home to a large proportion of people who are the children and grandchildren of immigrants and people who have lived in the region for a longer period. They have large proportions of people in older ages, suggesting that the region has been home to Asian groups for a long period. Moreover, if the assumption that immigrants are generally people in younger working ages holds true, the finding that a large proportion of Asians in the West are in ages above 40 points to immigrants' longer duration in the United States. Considering the literature that points to the attenuation of migration stream and immigrant health advantages, it is no surprise that Asians in the West exhibit shorter life expectancies than Asian groups in the Midwest and South. Notably, although findings support

the hypothesis that Asian groups who reside in recent Asian immigrant destinations benefit from a longevity advantage, the magnitude of the advantage varies by ethnic group. Therefore, ethnic variation must be considered in health research. Moreover, long-held assumptions regarding geographic inequalities based on Black/White comparisons warrants reconsideration.

Contextualized immigration-related factors must be considered in future research—particularly among Asian groups—in order to capture the nuances of health inequality. The findings regarding the inter-ethnic differences in regional life expectancy gaps suggest that health inequality must be examined at the intersection of geography, ethnicity, race, SES, and nativity.

Further, although this study focuses specifically on the gap between the West and Midwest-South region, figure 11 demonstrates that Asians who reside in the Northeast experience the longest life expectancy compared to those in other regions. However, unlike the other regions of the country, the Northeast cannot be easily categorized as a recent or traditional destination. Major metropolitan areas in the Northeast, such as New York City, have been home to large immigrant groups for generations, while other parts of the region have only recently witnessed significant Asian migration (Portes and Rumbaut 2014; Takaki 1998). Therefore, an investigation of traditional and recent destination effects on Asian health outcomes in the Northeast would require a sub-regional analysis.

Lastly, the data also demonstrate that females have longer life expectancies and smaller inter-regional life expectancy gaps compared to males. Therefore, regional effects on life expectancy are less pronounced among females than males. This finding is consistent with existing studies on the male-female-health-survival paradox, which notes that while females do worse than males in regard to disability and many health outcomes, they tend to exhibit lower death rates than males (Crimmins et al. 2010; Nathanson 1975; Oksuzyan Bronnum-Hansen, and

Jeune 2010; Case and Paxon 2005). However, scholars have yet to come to a consensus on how to explicate this paradox. The male-female survival paradox, coupled with this study's findings, suggests that at the aggregate level, investigating life expectancy and mortality differentials among Asian males may reveal more meaningful insights into the effects of various social factors on health outcomes.

Limitations

Unfortunately, the findings are limited by the lack of data on other Asian ethnic groups, including Southeast Asians—many of whom arrived as involuntary migrants—who may exhibit more significant health disadvantages than the groups included in this study. Thus, the life expectancy differentials presented above do not fully capture the health disparities within the Asian racial category. Additionally, the calculated life expectancies may be an underestimation or overestimation (depending on the ethnic group) when compared to other studies. This may be a result of the use of single-race categories for population denominators. Although the Multiple Cause of Death File contains mortality counts disaggregated by ethnic group for the six largest Asian groups, it remains unclear how b-racial and multi-racial Asians were categorized in the data. In response, I utilized population denominators for single race categories only. Further, the findings presented in this study represent life expectancy estimates for one year only. Notwithstanding these limitations, the findings presented above contribute to a greater understanding of the heterogeneity within the Asian racial category which is often studied and discussed as a monolith.

Conclusion

In this study, I investigated the variations in life expectancy among the six largest Asian ethnic groups in the United States—Chinese, Filipino, Asian Indian, Vietnamese, Korean, and Japanese. I applied key theories from the migration literature in order to investigate the effects of three key factors—SES, nativity, and geography—on life expectancy at the national and regional levels. The demographic analyses revealed two key findings. First, that the SES health gradient that has been applied to other groups do not explain the health differences among the six largest Asian ethnic groups in the United States. Second, the findings reveal that contrary to extant knowledge regarding the health disadvantages of living in the South, many Asian groups in the South actually enjoy a life expectancy advantage over co-ethnics in other regions. Moreover, the inter-regional examination also demonstrates that for four of the six groups in the study, there exists a new-destination life expectancy advantage over co-ethnics in the traditional destination region of the West. These findings highlight the ineffectiveness of existing health theories in explicating health inequality among Asian ethnic groups. The findings—particularly the results based on geography—suggest that migration theories may better explain the current state of health among Asian groups in the country. Thus future research should incorporate these theoretical perspectives in order to interrogate the mechanisms that produce these inequalities.

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