COLLEGE ENROLLMENT, ATTAINMENT, AND PERSISTENCE AMONG IMMIGRANT YOUTH: GENERATIONAL DIFFERENCES BETWEEN AND WITHIN RACIAL/ETHNIC GROUPS WITH A FOCUS ON ASIAN IMMIGRANTS

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ABSTRACT

COLLEGE ENROLLMENT, ATTAINMENT, AND PERSISTENCE AMONG IMMIGRANT YOUTH: GENERATIONAL DIFFERENCES BETWEEN AND WITHIN RACIAL/ETHNIC GROUPS WITH A FOCUS ON ASIAN IMMIGRANTS

The education and successful integration of immigrant youth are imperative for the U.S. economy. Indeed, first- and second-generation immigrants are estimated to account for 93% of the nation's working-age population growth over the next three decades (Pew, 2013). However, existing empirical work on postsecondary outcomes among immigrant youth mainly focuses on differences between pan-racial/ethnic categories, potentially masking within-group differences (e.g., ethnic/regional variations) arising from unique pre- and post-migration contexts and experiences. This dissertation aims to uncover heterogeneity within and between immigrant racial/ethnic groups' trajectories in higher education. A special focus is placed on Asian immigrants, a pan-racial group that represented about 28% of the immigrant population in 2018 but comprised several distinct ethnic and regional groups with considerable variation in pre- and post-immigration experiences (Pew, 2018). The dissertation also helps advance current knowledge by simultaneously examining variations by ethnic/regional groups and generational statuses for Asian youth. Utilizing data from the High School Longitudinal Study 2009, the first part of the dissertation explores enrollment, attainment, and persistence differences among pan-racial/ethnic groups and, in turn, disaggregated analyses specifically for Asian ethnicities and regions. Second, the dissertation examines variations in postsecondary outcomes as a function of immigrant generation (i.e., first, second, or third generation, focusing on both within– and across–racial and ethnic group differences). For this second aim, variations within and between Asian ethnicities and regions are closely examined. The findings indicate that pan-racial/ethnic

differences follow patterns previously highlighted in the literature; however, evidence of generational differences within and between groups in this study extends the existing literature. For example, there was evidence of generational advantages in educational outcomes for first- and second-generation youth compared with the third generation for Asian and Black youth. On the other hand, there was evidence of disadvantage among first-generation Latinx youth. The disaggregated analyses for Asian immigrants also revealed several important findings. For example, the second-generation advantage found at the pan-racial level for Asian immigrants persisted for Southeast Asians and partially for Chinese and South Asian immigrants. However, it disappeared for other Asian ethnic/regional groups for several outcomes. These findings have implications for the discourse around immigrants by challenging current pervasive pan-racial/ethnic narratives. In particular, for Asian immigrants, often stereotyped as the "Model Minority," the immigration and assimilation process is not monolithic. Therefore, postsecondary outcomes reflect these complex and heterogeneous processes.

Dedication

To my family and community

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Chapter 1: Problem Statement and Introduction

The education of immigrant youth is imperative for the continued success of the U.S. economy given that first- and second-generation immigrants are estimated to account for 93% of the nation's working-age population growth over the next 3 decades (Pew, 2013). More specifically, college readiness is critical for immigrant youth given the increasing demand for workers with college degrees in the labor market (Carnevale & Rose, 2015; Carnevale et al., 2016). The body of research examining differences in immigrant youth's postsecondary educational outcomes mainly uses broad pan-racial lenses and often does not acknowledge generational differences within and between groups which may be a consequence of different assimilation processes rooted in immigration contexts. These current approaches are problematic given that pan-racial/ethnic differences conflate many ethnic/regional effects, masking true differences among groups (Portes & Rumbaut, 2001); moreover, these approaches ignore *generational* differences between and within groups, which limits the holistic exploration of a host of immigration contextual factors that may have consequences for educational outcomes. Take, for example, Asian Americans, who comprise 28% of the immigrant population in the United States: As a whole, they often outperform other racial/ethnic groups in terms of educational attainment (Pew, 2018); however, these pan-racial outcomes conceal disparities between and among Asian ethnic/regional communities. Furthermore, the diverse immigrant context within the Asian immigrant community suggests that there may be generational differences between Asians and other pan-racial/ethnic groups and within Asian ethnic/regional groups. However, these factors have yet to be fully explored for enrollment, attainment, and persistence outcomes in higher education longitudinally, nor have these differences been examined by institution types (i.e., 2- and/or 4-year colleges).

This dissertation aims to address these limitations in the field. First, it aims to elucidate differences in college enrollment, attainment, and persistence among pan-racial/ethnic groups and to conduct a deep dive into Asian ethnic/regional differences, specifically surfacing the heterogeneity in this population. The second aim is to examine variations in postsecondary outcomes as a function of immigrant generation (i.e., first, second, or third generation), focusing on both within– and across–pan-racial/ethnic group differences and, again, within and across Asian ethnic/regional groups. That is to say, do educational outcomes differentially vary across racial/ethnic groups as a function of generational status? Or said differently, do educational outcomes vary across generational statuses as a function of racial/ethnic groupings?

It is anticipated, at least at the pan-racial/ethnic level, that regardless of generational status, immigrants from groups that have faced entrenched systematic discrimination in the United States, such as Black and Latinx youth, will experience lower enrollment, attainment, and persistence compared with White and Asian youth; this is a finding that has been demonstrated repeatedly in the literature for several years (e.g., Blau & Duncan, 1967; Kao & Tienda, 1995; Lieberson, 1980; Rong & Grant, 1992; Yang, 2004). This is aligned with segmented assimilation theory, which posits that educational outcomes among *racial/ethnic groups* will vary depending on both the host country's reception of different groups' racial and ethnic backgrounds and the immigration context, such as resources available at the time of immigration (Glick & Hohmann-Marriott, 2007; Portes & Rumbaut, 2001). Pan-racial/ethnic differences are already prevalent in existing research which has demonstrated that academic outcomes (e.g., access to academic preparation for college, enrollment, and attainment) across pan-racial/ethnic groups were higher among White and Asian immigrants compared with Black and Latinx youth (Balfanz & Legters, 2004; Jerald et al., 2009; NCES, 2006, 2017; Orfield & Lee, 2006; Peske & Haycock, 2006; Pew

Research, 2016; Swail et al., 2003; Welton & Martinez, 2013; Zuckerbrod, 2007). These findings often lead institutions and researchers to group Asians with White youth and perpetuate the "model minority myth"—that all Asian youth overperform, assimilate into U.S. dominant-group culture, and do not need resources (Museus & Kiang, 2009; Yi & Museus, 2015). However, this focus on pan-racial/ethnic differences alone likely masks within-group variations that result from unique immigration contexts and can maintain harmful stereotypes that disadvantage entire communities.

Alongside post-immigration factors contributing to educational disparities among immigrant groups is the role of the *immigration context,* such as the labor market needs of the United States, geopolitical events, and resources (capital) underlying many migration processes (Glick & Hohmman-Marriott, 2007). These factors may be most salient for explaining differences not only between Asian and many other pan-racial/ethnic groups, such as Latinx and Black immigrants, but also between Asian ethnic/regional groups, specifically the lower achievement patterns of Southeast Asians compared to their other Asian counterparts. Unlike many Asian groups who primarily immigrated for economic reasons, Southeast Asians have a history of armed conflicts that forced them to migrate as refugees to the United States, which has implications for the capital associated with their migration and, in turn, contributes to youth's academic outcomes. Existing research notes the heterogeneity across Asian ethnic groups. For instance, East Asian youth (e.g., Chinese, Korean, and Japanese) have higher rates of college enrollment and attainment than Southeast Asians (e.g., Laotians, Cambodians, and Vietnamese) and Pacific Islanders (e.g., Samoans and Filipinos) (Nguyen et al., 2015; Pang et al., 2004). When further broken down by nationality, college enrollment and graduation rates are highest among Chinese, Japanese, and Koreans, while these outcomes are lowest among Burmese and

Bhutanese youth (de Brey et al., 2019). However, what remains understudy is the persistence patterns and types of postsecondary institutions these groups attend and how these outcomes vary by generational status. The current study will further examine enrollment, persistence, and attainment by institution types concurrently among five ethnic/regional Asian groups (Chinese, Filipinos, Southeast Asians, South Asians, and Other Asians) and subsequently estimate how generational statuses moderate these effects.

In addition to examining racial and ethnic differences, the dissertation will also break down immigrant generational statuses among pan-racial/ethnic groups and, in particular, among Asian ethnic/regional groups. In addition, informed by segmented assimilation theory, which posits that generational differences between and within immigrant groups are a product of the assimilation process, the dissertation will examine the moderating effects of generational statuses on racial/ethnic effects on higher education enrollment and persistence outcomes for different institution types. It is expected that *pan-racial/ethnic* differences among groups will continue to exist regardless of generational effects. In fact, existing research shows that first- and second-generation Black and Latinx youth follow patterns of downward assimilation, while Asian and White youth follow patterns of upward assimilation (Blau & Duncan, 1967; Kao & Tienda, 1995; Lieberson, 1980; Rong & Grant, 1992; Yang, 2004). However, even as generational differences are expected to drastically alter the directionality of commonly reported *pan-racial/ethnic* differences, there will likely be within–generational group differences, where for some groups, differences among generations will be more pronounced than for others. Unlike pan-racial/ethnic differences, which may be a result of both post-immigration and contextual migration factors, generational differences between *ethnic/regional* groupings may be especially

likely to capture underlying unique geopolitical events and the selectivity process that contextualizes the migration of specific groups of immigrants from certain regions and countries.

Take, for example, Asian immigrants. At the pan-racial level, the existing research suggests a second-generation advantage, where the second generation outperforms the first, and performs just as well as or, in some cases, better than third and later generations (Kao & Tienda, 1995; Rong & Grant, 1992; Yang, 2004). Evidence suggests that this advantage is seen in labor market outcomes for Vietnamese, Chinese, and Koreans (Lee & Zhou, 2015; Tran, Lee & Huang, 2019). However, it is unknown if this pattern continues to hold when data are disaggregated by ethnic/regional groups for enrollment, attainment, and persistence outcomes in higher education for different institution types. A focus on enrollment and persistence is essential, for it highlights potential intervention points throughout the higher education journey. Furthermore, the pathways by which youth come to attain a college degree are yet to be explored. In other words, are youth from certain ethnic groups and/or generation levels more likely to enroll exclusively in 4-year colleges, 2-year colleges, or both?

Following segmented assimilation theory, which posits that assimilation processes are influenced by immigration circumstances (i.e., resources, economic and social capital) in addition to the reception of the host country, it is predicted that for groups immigrating with lower capital or resources, second-generation advantages in enrollment and persistence at 4-year colleges will be less pronounced due to the lower resources parents bring with them to the host country. While it is anticipated that youth from immigrant groups with higher social/economic capital and an advantageous geopolitical climate at the time of their migration will have the highest educational outcomes (enroll and persist in 4-year colleges at higher rates) compared to those disadvantaged in these dimensions, it is also predicted that within groups, differential

resources between waves of immigration (i.e., earlier waves immigrate with higher resources than later waves) will function similarly to surface generational differences. Specifically, groups with higher disparities between waves of immigration will most likely display second-generation advantages—in other words, the second generation will enroll and persist in 4-year colleges at a higher rate. It is also expected that the socioeconomic status and geopolitical advantages will have a legacy effect, that is, allowing first-generation immigrants (as parents) to invest more in their children (the second generation), thereby producing stronger educational improvements for the second generation compared to contemporary first-generation peers.

Most research attributes group differences (particularly at the pan-racial/ethnic level) to inequities within the *post-immigration* context*,* but pre-migration and migration experiences also likely have lasting impacts. These contexts differ considerably within pan-racial/ethnic groups. In particular, the dissertation addresses diversity within Asian groups as a call to disaggregate other pan-racial/ethnic groupings*.* It also challenges the categorization of immigrants by pan-racial/ethnic labels and aims to highlight the heterogeneity within and between groups to better understand the postsecondary trajectories of immigrant youth beyond attainment outcomes.

Chapter 2: Literature Review

The demographic landscape of the United States has drastically shifted since the Immigration and Naturalization Act of 1965 (i.e., the Hart-Celler Act), which abolished immigration based on regional quotas and focused immigration policy on the reunification of families and the attraction of skilled labor (Hatton and Williamson, 1998). Indeed, it is anticipated that first- and second-generation immigrants will account for 93% of the nation's growth of the working-age population over the next 3 decades (Pew, 2013). Before 1965, European immigrants comprised about 88–89% of those immigrating to the United States, while immigrants from Latin America made up only about 2–3% and immigrants from Asia made up 1–2%. However, of the 44 million immigrants who have arrived in the United States since 1965, only 12% were from European countries, half were from Latin America, and 27% were from Asia. As a result, Asian immigrants—a focal group for this dissertation—make up more than one in four of the adult immigrant population in the United States today, and their children will be a critical force in our future labor market (Rumbaut, 2005; Tienda & Haskins, 2011).

In addition to the demographic changes in the United States, the labor market itself has transformed over the last few decades; one salient change has been increasing economic inequality between those who have some form of postsecondary education and those who do not (Hirschman, 2016). The United States has evolved from an industrial-based economy that relied on a low-skill workforce into an economy that relies on a highly skilled workforce to operate in the workplace (Carnevale & Rose, 2015; Carnevale et al., 2016). This transformation is most evident in the types of jobs recovered after the 2008 recession. According to the Georgetown University Center on Education and the Workforce's analysis of Current Population Survey (CPS) 2007–2016 data from the U.S. Census Bureau for the Bureau of Labor Statistics,

approximately 99% of the jobs created after the recession have been taken up by workers with at least some form of college education, while only 1% have gone to workers with a high school diploma or less (Carnevale et al., 2016). These inequalities are delineated sharply by race and ethnicity, and varied immigration contexts further contribute to these existing divides.

Drastically different educational realities based on one's race, ethnicity, and immigration background may further exacerbate growing economic inequities. At the pan-racial/ethnic level, education gaps between White youth and youth of color have remained constant or even have grown in some cases (Pell Institute, 2018). In particular, data from the Current Population Survey from the U.S. Census, analyzed in a report by the Pell Institute, indicates that from 1976 to 2016, the gap in college participation between Whites and Hispanics was stable at 7 percentage points, while the gap between Whites and Blacks widened from 8% to 15% (Pell Institute, 2018). Among immigrant adults, there are large proportions at both ends of the educational attainment spectrum—more specifically—about 29% of foreign-born immigrants have less than a high school education. A similar proportion (30%) is at the highest end of the educational spectrum, with a college education or more (Pell Institute, 2018). The highest-educated groups of immigrants were from Asia and Europe, followed by African and South American immigrants, while Central American and Mexican immigrants had the lowest educational attainment (Pew, 2016). These racial/ethnic differences indicate that immigrant groups may enter the United States with drastically diverse educational levels, which have implications for the resources and capital available to their offspring—impacting their children's assimilation into the American mainstream.

Segmented Assimilation Theory and Racial/Ethnic Differences

Segmented assimilation theory may explain the discrepant outcomes among immigrants. Specifically, discrepancies may arise as a result of a combination of both the host society's reception of each immigrant group as well as the context surrounding each group's migration and pre-migration experiences (Feliciano, 2005a, 2018; Feliciano & Lanuza, 2017; Fernandez-Kelly & Schauffler, 1994; Glick & Hohmann-Marriott, 2007; Portes & Zhou, 1993; Simms, 2012). One primary assertion of this theory is that the differing reception of immigrant groups based on race and ethnic background yields differing assimilation trajectories. In other words, the racial/ethnic differences evident in educational outcomes are a result of how immigrant groups are integrated into the existing racial/ethnic stratification of U.S. society, where certain racial groups encounter more structural barriers to opportunities than others (Glick & Hohmann-Marriott, 2007; Portes & Zhou, 1993). Immigrant groups that are categorized as racially and/or ethnically similar to traditionally marginalized groups in the United States will face barriers and are more likely to experience downward assimilation (assimilating into the working-poor population of the United States). In contrast, those who are more phenotypically and culturally similar to groups at the top of the stratification (White/European youth) will find it easier to assimilate into the middle class.

Segmented Assimilation via Reception

In particular, empirical work on segmented assimilation shows that a negative host country reception impacts how, and if, immigrants access resources within the host society or, on the other hand, face systematic barriers to assimilation. Luthra et al. (2007) delineated two types of reception—the first centers on "government reception" and the second on "societal reception." Those with undocumented status face negative government reception and are marred with "social

stigma," risk being deported, and are often cut off from access to institutional support, which impedes social mobility. On the other hand, groups arriving with refugee status experience more positive government reception. Government structures exist to support refugees, allowing immigrants access to government assistance for resettlement, therefore allowing for upward social mobility and successful integration into the U.S. middle class. Second, one's race/ethnic origins and phenotype play a role in societal reception.

Societal reception in the United States is strongly related to existing racial/ethnic stratification. For instance, immigrants from the Caribbean and Africa are likely to face entrenched systematic racism and prejudices experienced by Black Americans that have been pervasive for centuries in the United States (Blau & Duncan, 1967). Those from Latin American countries also face social reception obstacles such as prejudice—they are often stereotyped as low-wage workers or uneducated, for example. Asian immigrants, in contrast, may experience contradictory receptions. On the one hand, Asian immigrants may receive some protection from the prevalent "model minority" stereotype; however, they face rejection if they stray from expectations (Yi & Museus, 2015). Likewise, Asians also encounter the "perpetual foreigner" stereotype and are often seen as not "real Americans" (Huynh et al., 2011). This particular stereotype was most pronounced in the wake of Asian hate crimes during the COVID-19 pandemic.

These pervasive stereotypes that impose the U.S. racial/ethnic stratification on immigrant groups are likely one crucial reason pan-racial/ethnic groupings are strong predictors of educational attainment. Indeed, this may be key to understanding that, in general, White and Asian youth have better outcomes than Black and Latinx youth when it comes to access to academic preparation for college (Balfanz & Legters, 2004; Hirschman, 2001; Jerald et al., 2009;

Orfield & Lee, 2006; Peske & Haycock, 2006; Welton & Martinez, 2013; Zuckerbrod, 2007), college enrollment (NCES, 2006; Swail et al., 2003), and college attainment (NCES, 2017; Pew Research, 2016). Taken together, there is evidence that racial/ethnic differences in educational outcomes among immigrant groups may be a result of the impact of racial discrimination on the assimilation process (Blau & Duncan, 1967; Glick & Hohmann-Marriott, 2007; Hirschman, 2001; Portes & Zhou, 1993).

Segmented Assimilation via Labor Markets and "Selectivity"

In addition to the host country's reception of immigrants, which has direct implications on access to resources and interaction with institutions after settlement, segmented assimilation theory also draws attention to contexts such as geopolitical events, U.S. labor market needs, and capital underlying the migration process to explain differing educational outcomes among groups (Glick & Hohmann-Marriott, 2007). These factors are rooted in the idea that the immigration process is not random, but a highly selective process in which groups of people with certain characteristics are more likely to immigrate compared to non-migrants.

One of these contextual factors is the labor market needs of the United States, which draw different groups to the country for economic reasons. There is demand at both ends of the spectrum for skilled and unskilled labor. On the one hand, there is highly skilled labor from predominantly Asian countries and low-skilled labor from Latin America. This is particularly evident in the types of occupations occupied by specific groups—for instance, 42% of Asian immigrants occupied occupations that demanded analytical skills, while only 11% of Latinx immigrants occupied similar professions (Pew, 2020). Specifically, for Asian immigrants from Korea, India, Japan, and the Philippines, a primary channel of immigration was through the Occupational Preference category—where highly selective skills were the criteria for admission

into the United States. This was an extraordinary instance for Indian immigrants after the 1965 Act that resulted in an influx of skilled laborers from India (70% of Indian immigrants used this migration channel, compared to only 25% of the overall Asian immigrant population).

As a whole, Asian immigrants are highly selected, and some even argue "hyper-selected," from the upper ends of the social and economic distribution compared to those in their homelands (Feliciano, 2005; Lee & Zhou, 2015). For immigrants from Latin America, particularly Mexican immigrants, selectivity plays a different role. Mexicans who are educated, economically stable, and have a firm footing within Mexican society often do not have an incentive to migrate; in contrast, it is those who are at the lower end of the social capital distribution who choose to migrate, although they are still "positively" selected given widespread and deep disadvantage in the country and the fact that migration requires some form of capital. As such, Mexicans who migrate tend to be better off than average, financially and in terms of education, compared to those in their homeland, but this is not so when compared economically or in terms of education to the U.S. population (Feliciano, 2005). As such, although almost all immigrant groups tend to be educationally positively selected in the United States, the degree of positive selection varies by region of origin and needs to be considered relative to the arrival context in the United States as well. In this regard, on average, immigrants from Asia tend to be more positively selected than those from Latin America and the Caribbean (Feliciano, 2005).

Segmented Assimilation Theory From a Developmental Social-Ecological Perspective

Bronfenbrenner's ecological systems theory, which has guided many research and policy conversations anchored in developmental science, complements segmented assimilation theory. Ecological systems theory posits that development occurs within nested systems and each system represents layers/levels of the environment that influences the individual (Bronfenbrenner,

1977). These systems include the *microsystem* (the developmental context within which the individual directly participates and interacts, such as the home or school environment), the *mesosystem* (the indirect effects of the connections between microsystems on the individual), the *exosystem* (the indirect effects of social institutions and settings, such as neighborhoods), and lastly the *macrosystem* (the effects of the greater cultural and societal milieu that filters through lower levels). Bronfenbrenner's original model only suggested one macrosystem; however, many scholars argue that for immigrant children, there is more than one macrosystem that impacts development—namely, the macrosystem of their country of origin and the macrosystem of their host country (Ferguson & Birman, 2016).

Segmented assimilation theory works in conjunction with the Bronfenbrenner model by highlighting immigrant-specific factors within each social-ecological systems and how these factors influence immigrant children's integration into their host country. Like development, acculturation (or integration into one's host culture), framed through ecological systems theory, also occurs within nested systems (Birman & Simon, 2014; Ferguson & Birman, 2016). Segmented assimilation suggests that immigrants integrate into their host societies (the U.S. society in this instance) through different avenues depending on varying macrosystem, exosystem, and microsystem factors. In other words, the effects of the host culture (the macrosystem) are not uniform across groups of immigrants because each group settles in communities (exosystems) that vary in terms of social class and ethnic makeup, which impacts how they experience their microsystems. As such, these varying factors result in groups integrating into different segments of the U.S. society (Ferguson & Birman, 2016). Some are able to successfully integrate into the middle class, while others must integrate into the working poor, a more disadvantaged segment of the U.S. population. Furthermore, segmented

assimilation also highlights the immigration context and pre-immigration factors (i.e., the macrosystem of the country of origin) that may influence pathways of integration.

Educational outcomes, in particular, can be explained through the combination of both frameworks (i.e., Bronfenbrenner's model and segmented assimilation theory). College readiness, the "leading cause" of socioeconomic disparities in college access and success in the United States, varies within socio-ecological systems (Arnold et al., 2012). College readiness is defined as the student's ability to enroll in a postsecondary institution, take credit-bearing courses during the first year, earn passing grades, and persist to their educational goals (Arnold et al., 2012). For immigrant youth, in particular, the effects of socioeconomic status on educational outcomes need to be further contextualized with pre- and post-immigration factors (specified by segmented assimilation theory). Immigrants do not arrive in the United States on equal footing; in fact, due to the diverse backgrounds of immigrants, some groups arrive with more resources than others. Those with more resources prior to immigration are able to bring these resources to the host country (e.g., wealth, language, technical skills/education that are in demand in the host countries labor market). These pre-immigration resources allow higher-selected immigrants to resettle in better neighborhoods (exosystem) with higher-quality schools (microsystem) and to afford better educational opportunities for their children. Those with fewer resources, on the other hand, resettle in lower-income neighborhoods, which limits the opportunities available to their offspring. The quality of the socio-ecological systems that more selective immigrants are able to cultivate and select into for their offspring result in better educational outcomes compared to immigrant groups who arrive in the United States with fewer resources. Although the two theories are contained within two distinct silos and disciplines (i.e., ecological systems theory is situated within the field of psychology and developmental science,

while segmented assimilation theory is primarily situated within the discipline of sociology), segmented assimilation theory posits the mechanism and specific circumstances of how social-ecological systems interact to influence developmental outcomes.

The Role of Generational Status in Segmented Assimilation

Positioned at the core of segmented assimilation theory is the comparison between generations within and between groups; the theory posits that generational differences or similarities are evidence of downward/upward assimilation. Within this particular body of research, and for the rest of this dissertation, immigrant generational statuses are defined as follows: First-generation youth are foreign-born, second-generation youth are native-born and have at least one foreign-born parent, and third-generation youth are native-born with parents who are also native-born (Duong et al., 2015). Upward assimilation occurs when immigrant-origin children are able to integrate into the middle class, while downward assimilation refers to the inability to join the middle class and instead integrating into the working-poor segment of the U.S. society (Duncan & Trejo, 2018; Ferguson & Birman, 2016). These generational differences between and within groups are likely explained by both the host country reception and the immigration contexts for specific groups. In particular, within the literature, there has been some evidence of the second-generation advantage for immigrants as a whole; however, disaggregated, certain groups are more successful at integrating into the U.S. middle class compared to others. The second-generation advantage was first observed by Kao and Tienda (1995), with national educational attainment data suggesting that the second generation had an educational advantage over the first and third or later generations. The second-generation advantage has been found to be most pronounced for Asian and White youth. In particular, educational outcomes (enrollment in high school, higher educational attainment, and overall socioeconomic outcomes) have been

found to be better for the second generation than both the first and third generations for Asian and European immigrants (Duncan & Trejo, 2018; Hirshman, 2001). Likewise, for immigrants from Latin America, research indicates that second-generation students also perform better than the first generation; however, their outcomes are on par with the third generation (Duncan & Trejo, 2018; Hirshman, 2001). Meanwhile, immigrants from Africa saw an advantage in the first and second generations and a sharp decline in the third generation for educational outcomes before college; however, for African-origin youth, there are mixed findings of generational differences in postsecondary outcomes (Benent & Lutz, 2009; Duncan & Trejo, 2018; Hirshman, 2001; Keller & Tillman, 2008; Massey et al., 2007; Obinna, 2015; Rong & Brown, 2001).

Beyond generational differences found *within* pan-racial/ethnic groups, there are also generational differences across pan-racial/ethnic groups to consider. Demand for both high- and low-skilled labor from immigrants contributes to the heterogeneity in the immigrant population and has implications for the varying resources and capital immigrants bring with them from their sending countries. These varying degrees of pre-migration capital associated with parent educational attainment contribute to children's achievement and outcomes. In fact, research has shown that post-immigration socioeconomic status (SES) does not explain all achievement differences among immigrant groups (Feliciano, 2018; Simms, 2012) and that *pre-immigration* SES measured through parental educational selectivity (defined as where parents are situated in the educational attainment distribution of their country of origin) is a pre-immigration factor to consider for a more focused understanding of immigrant youth achievement (Feliciano, 2005, 2018; Ichou, 2014; Simms, 2012).

The idea of comparing immigrants to counterparts who chose not to immigrate has allowed researchers to better understand the immigrant population in receiving countries such as

the United States. Immigrants to a host country can be positively or negatively selected—those who are positively selected tend to have higher incomes, more education, and come from a higher social status compared to non-migrants from their home countries; on the other hand, immigrants who are negatively selected have lower incomes, lower educational attainment, and are of lower social status compared to counterparts who chose not to immigrate (Feliciano, 2005). A study conducted in 2005 specifically explored the *educational* selectivity of immigrants who have settled in the United States (Feliciano, 2005). The study examined whether immigrants to the United States had higher or lower educational attainment compared to counterparts who did not immigrate from 32 major sending countries. The findings indicated that, with the exception of those from Puerto Rico (a U.S. territory), immigrants to the United States from all 32 countries were, on average, positively selected in regards to educational attainment—in other words, immigrants were on average more educated than counterparts in their home country (non-migrants). These findings hold true even among political refugees, where the "push" factor for immigration is less of a choice than in other countries.

Immigrant parent educational selectivity, a component of the immigration context, also influences how social and economic capital may promote educational resources available to children within ethnic communities. Within the context of the United States, ethnic-specific educational resources such as tutoring services, afterschool programs, educational networks, and even private schools are created through ethnic capital and have been shown to influence children's educational outcomes (Lee & Zhou, 2017; Moodhood, 2004; Zhou & Kim, 2006). As such, it is expected that ethnically aggregated educational selectivity will capture community-level resources contributing to immigrant children's educational outcomes. In fact, research has shown that family and community resources play a vital role in shaping how children from

different immigrant communities access college (Kao & Tienda, 1995; Lee, 2018; Zhou & Kim, 2006). Conceptualized as pre-immigration assets, parental educational selectivity influences how communities and families create opportunities for children either through setting high expectations or by organizing tutoring services, networks of knowledge, or even separate educational institutions to help immigrant children achieve college (Kao & Tienda, 1995; Lee, 2018; Lee & Zhou, 2017; Zhou & Kim 2006). Ethnic capital serves to enhance knowledge networks and allow for the creation of community educational resources such as tutoring services that contribute to children's achievement (Lee & Zhou, 2006; Moodhood, 2004; Zhou, 2000). On the other hand, individual measures of parental educational selectivity (as opposed to community aggregate measures) capture pre-immigration resources available to the child within the family context. Both measures of parental educational selectivity, examined separately, have been shown to explain educational outcomes above and beyond post-immigration SES (Feliciano, 2005a; Feliciano, 2018; Feliciano & Lanuza, 2017; Simms, 2012). What is clear from previous research is that parental educational selectivity varies across and within countries of origin (Feliciano & Lanuza, 2017; Ichou, 2014).

Given that immigrants from Latin American countries arrive, on average, with less education compared to both Asian and Black immigrants, we expect those families to have fewer resources to help their offspring succeed. For instance, only 7% of Mexican and 11% of Central American immigrants possessed a bachelor's degree or higher, compared to 40% of African immigrants and 54% of Asian immigrants (Pew, 2018). As such, it is expected that Latinx first-generation youth will enroll and persist in higher education at a lower rate overall, but especially at 4-year colleges, compared to the second generation. However, it might be the case that first-

generation Latinx are more likely to enroll in and complete 2-year degrees due to the accessibility of community colleges compared to 4-year institutions.

Most research to date has focused primarily on how the second generation compares to the first and third generations within/across groups for educational attainment; however, there has not yet been any documentation of how outcomes along the higher education trajectory (enrollment, persistence, and participation in 2- and/or 4-year institutions) vary by generation across and within groups. The current dissertation explores both within- and between-group differences simultaneously by utilizing generational status not only as a predictor variable but as a moderator of the effects of pan-racial/ethnic groups specifically on enrollment, attainment, and persistence in higher education. It expected that for Black and Latinx youth, participating in 2-year colleges compared to 4-year colleges will be higher than in other groups. However, among the first and second generations, because Black immigrants arrive—on average—with higher selectivity than Latinx immigrants, 2-year participation might be higher for Latinx youth compared to Black youth, and 4-year participation might be higher for Black youth compared to Latinx youth. It is also expected that first-generation Asian and Black youth will have higher 2- to 4-year transfer rates compared to Latinx counterparts.

Disaggregated Asian Ethnic/Regional Outcomes

The variation of immigrant educational selectivity and diverse immigration contexts at the granular level challenges the pervasive pan-racial/ethnic lens used to understand the immigrant population's educational experiences. In fact, research indicate that ethnic/regional differences are often masked by pan-racial/ethnic differences (Portes & Rumbaut, 2001). Therefore, beyond examining the effects of pan-racial/ethnic groups on postsecondary outcomes,

the current study will also closely examine patterns of educational outcomes along the higher education experience disaggregated for Asian ethnic/regional groups.

Among Asian American youth, college participation rates vary considerably. At the high end, 78% of Chinese immigrants and 70% of Japanese and Korean youth attend college (de Brey et al., 2019). Among Southeast Asians, the overall percentage is 57%, with Vietnamese youth at 68%, followed by Cambodians at 47% and Burmese immigrant youth at 23% (de Brey et al., 2019). College completion rates also follow a similar trend, with Koreans (56%), Chinese (55%), and Japanese Americans (52%) at the high end of the range. On the other hand, Southeast Asians have an overall completion rate of 29%, with Vietnamese Americans at 29%, followed by Burmese (21%) and Cambodians, with the lowest rate of 16% (de Brey et al., 2019). These within-group variations underscore the weaknesses of framing education inequity around pan-racial/ethnic categories. They also evoke questions around segmented assimilation effects of why differences exist within pan-racial/ethnic groups.

Among Asian ethnic/regional groups, variations in selectivity, pre-migration context, migration experiences, and reception are all likely involved in the disparate outcomes. Here, some of the more salient factors are discussed from a socio-historical perspective. Immigration from China, for example, had its origins as early as the 1800s in connection with low-skilled labor demands on railways and mines, and later in agriculture (Bonacich, 1972). Later immigration waves from China, in turn, were categorized through the family reunification distinction. However, most recent Asian immigrants arriving in the wake of the 1965 Act were much more advantaged socially and economically than those who arrived before. The rise of skilled labor immigration under the Occupational Preference category drew higher-educated immigrants from Korea, India, Japan, and the Philippines to the United States for work.

Therefore, newer Asian arrivals had more resources to help their children succeed compared to later generations (Zhou et al., 2016).

Yet, the story of migration was distinct for Southeast Asian immigrants. Unlike South Asian and East Asian immigrants, Southeast Asian immigrants arrived as refugees after the U.S. intervention in Southeast Asia during the Cold War. The first wave of Southeast Asian immigrants, for the most part, were refugees from the higher social echelons of their homelands; later waves of immigrants arrived with fewer resources and for family reunification (Bankston & Hidalgo, 2016). As a result, Southeast Asians possess lower educational attainment (i.e., less educationally selective) than South and East Asian immigrants. In addition, the lower selectivity may be compounded by their "forced" migration due to armed conflicts in their homelands. As such, it is anticipated that due to the lower selectivity of Southeast Asians—resulting in lower economic and social capital compared to other Asian groups—Southeast Asians might have higher rates of utilizing 2-year colleges as a pathway towards 4-year college degrees and lower 4-year exclusive enrollment. Also expected are lower persistence rates in 4-year colleges among Southeast Asians compared to the South and East Asian groups.

Generational Differences for Asian Immigrants

Beyond helping explain ethnic/regional differences among Asian immigrants, these factors may also be relevant to generational differences and may also lead to different generational patterns within distinct ethnic/regional groups of Asians. Within the literature, there is evidence of a second-generation advantage for the Asian population as a pan-racial/ethnic group (Duong et al., 2016; Kao & Tienda, 1995). At the outset, Asian immigrants, as a pan-racial group, seem to be assimilating successfully into the American mainstream—as evidenced by the second-generation advantage. This is the basis of the harmful "Model Minority" myth, which

misconstrues the assimilation process for Asian immigrants. There is evidence of ethnic/regional differences, at least in immigration context, within the Asian population, which suggests that the second-generation advantage may not exist when Asian pan-racial data are broken down by ethnic/regional groups. Indeed, in the literature, there has been evidence of the second-generation advantage on the ethnic/regional levels specifically for Chinese, Vietnamese, and Koreans in regard to labor market outcomes (Tran et al., 2019). However, there has yet been any study to date examining the stability of the second-generation advantage across outcomes along the higher education pathway, starting with enrollment and persistence before reaching eventual attainment, by Asian ethnic/regional groups. Moreover, there has not yet been research documenting how Asian ethnic differences interact with generational differences to predict enrollment and persistence by type of institution (i.e., 2-year or 4-year college). Breaking outcomes down by different institutions is important to explore the potential differing pathways by which youth come to attain a college degree. The current dissertation aims to answer this call to expand the literature on the effects of the immigration context on immigrant youth's educational outcomes by specifically examining the effects of generation on not only pan-racial differences but also Asian ethnic/regional groupings.

Following the trends of educational attainment found in previous research, it is anticipated that Chinese and Southeast Asian second-generation youth might have higher enrollment and persistence in 4-year colleges versus 2-year colleges compared with the first and third generations. Furthermore, there might be a generational difference in 2-year enrollment and transfer rates (particularly from a 2-year to a 4-year institution) within Asian ethnic/regional groups, particularly among Chinese immigrants and Southeast Asian immigrants. For the two groups where generational differences are expected, Chinese and Southeast Asians, it is

predicted that the first generation will more likely utilize the 2- to 4-year pathway to eventual college attainment compared to the second generation, due to the accessibly of 2-year colleges. For both Chinese and Southeast Asian youth, the second-generation advantage over the first generation may be due to the culture and language barriers faced by the first generation but not the second. Unlike the first generation, second-generation youth are more likely to have acquired the language and socialized into American culture to navigate higher education successfully (Conger & Atwell, 2012). Compared to the third generation (and beyond), second-generation youth may still retain some connection to their ethnic heritage and culture, which may have protective factors against potential racial discrimination faced, and their internalization of the "immigrant optimism" may propel their achievement (Yang, 2004). Conger and Atwell (2012) described the second generation as individuals who are able to seamlessly navigate between two cultures and benefit from both. As such, the second-generation biculturalism advantages them compared to both the first and third generations. Moreover, for Southeast Asian immigrants in particular, the "waves" of immigration that select different groups from their homelands may also explain generational differences. It is likely that the second generation, whose parents came from earlier waves of migration, were more highly selected than newer waves of immigrants (Lee & Zhou, 2015). For Chinese immigrants, selectivity based on "waves" of migration may explain differences between the third and second generations, where in contrast to Southeast Asians, the earlier waves were less selective than newer immigrants (Lee & Zhou, 2015).

The Present Study

The present study aims to elucidate the heterogeneity within and between immigrant groups by exploring postsecondary educational outcomes by pan-racial/ethnic groups and then disaggregated by Asian ethnic/regional groups. The second aim of this study is to examine

generational differences, allowing for variations across generations to differ at the pan-racial/ethnic level and within ethnic/regional groups for Asians. It is anticipated that pan-racial/ethnic findings will follow pan-racial/ethnic differences already established in the literature. For example, it is expected that groups that face higher levels of systematic discrimination in the United States, for example, Black and Latinx immigrants, will have lower levels of enrollment, attainment, and persistence than Asian and White youth.

With regard to racial/ethnic subgroup differences among Asian youth (when averaged across immigrant generation), it is anticipated that patterns will closely follow known forces of educational selectivity, sociopolitical history, and geopolitical and labor markets. Specifically, Asian immigrants from countries that have higher rates of H1B visas (skill-based immigration) will also more likely have higher parental educational selectivity, while those who arrive as refugees are more likely to have lower levels of parental educational selectivity. Group-level parental educational selectivity captures community-level resources for an immigrant community in the United States, while the individual level captures family resources—cultural and educational capital parents bring with them from their homelands. Therefore, it is anticipated that youth who are from communities and families with high levels of parental educational selectivity will have the highest educational outcomes.

With regard to generational variations within and between pan-racial/ethnic groups, it is expected that findings will be consistent with existing literature (Glick & Hohmann-Marriott, 2007; Portes & Rumbaut, 2001). First- and second-generation Blacks will have higher outcomes at 4-year colleges versus 2-year colleges compared to the third generation. However, this generational trend might be reversed for Latinx youth. Also expected are higher 2- to 4-year transfer rates for Blacks compared to Latinx. In addition, it is predicted that that Asians, at the

pan-racial/ethnic level, will demonstrate a second-generation advantage in enrollment, persistence, and graduation rates at 4-year colleges. The state of the literature is such that we do not have descriptive data on how generational effects interact with racial/ethnic differences to predict the trajectory of postsecondary outcomes (enrollment, persistence, and 2- to 4-year pathways) for immigrant youth—particularly among Asian immigrants.

Beyond the expected generational differences at the pan-racial/ethnic level for Asians, it is expected that Chinese and Southeast Asians will exhibit the second-generation advantage at 4-year institutions. Also, participation in 2-year colleges, such as enrollment, attainment, and 2- to 4-year transfer rates, might be higher for the first generation than for the second in both of these groups.

Chapter 3: Method

The baseline data collection of the High School Longitudinal Study 2009 utilized a stratified two-stage random sample design. In the first stage, schools were randomly selected to participate, and in the second stage, students were randomly selected from the sampled schools. In total, 944 schools participated in the study out of a total of 1,889 eligible schools. The sample is nationally representative of ninth-grade students, although it was no longer so by the 11th grade due to attrition. The final sample at baseline consisted of 21,444 students (out of 25,206 who were sampled) who participated. Of 25,184 students originally sampled, 18,507 participated in the first follow-up.

In addition to student-level data, the study also provided school-level data through interviews with school administrators and staff and data from parent interviews. Of the 25,206 parents originally sampled, 16,995 parents participated at baseline. And at the first follow-up, parent questionnaires were administered at random to a subset of participating youth. In total, at the first follow-up, 11,952 parents were randomly sampled, of whom 8,651 participated.
For the update administered in 2013, when students were in the final year of high school, either parents or students could participate and respond to the questionnaire for the update. From the original sample, 18,558 students/parents participated in the update. Of those who participated, 53.9% were students and 46.1% were parents.

A second follow-up was administered from March 2016 to January 2017, when the initial sample of ninth-graders had graduated high school approximately 3 years ago. At this time, the researchers administered a web survey averaging 32 minutes in which the researchers asked participants questions pertaining to high school completion, postsecondary education experience,

employment experiences, participants' family, home life, finances, and community participation. The final sample in the second follow-up consisted of 23,316 participants.

Measures

Racial, ethnic, and immigration data

As part of the questionnaires administered at baseline, youth and parents reported race, ethnicity, and country of birth. Any missing information from the baseline survey was then derived from the school sampling roster, which included student demographic information. After the baseline data pull, any missing data were then inputted from the students' first follow-up survey, collected when students were in the 11th grade. Lastly, missing information after the imputation of data from the students' first follow-up was filled in using data from the parents' first follow-up survey (surveys administered to parents when students were in the 11th grade). Race, ethnicity, and country of origin variables were a compilation of information from three sources—namely, the baseline student surveys and rosters, students' first follow-up surveys, and parents' first follow-up surveys.

Pan racial/ethnic categories consisted of seven main categories: White (non-Latinx), Black or African American (non-Latinx), Asian, Native Hawaiian or other Pacific Islander, American Indian or Alaska Native, and Hispanic (Latinx). Respondents who selected multiple categories were placed into the "Multiracial" category. To further disaggregate Asian and Latinx groups within pan-racial/ethnic categories, follow-up survey items asked respondents to identify more detailed information around their ethnic affiliations. More specifically, Asian respondents were categorized into five *Asian ethnicity* categories: Chinese, Filipino, Southeast Asian, South Asian, and Other Asian. Note that for Asian ethnic classifications, some categories represent

country-level information (e.g., Chinese and Filipino), while others represent regional-level information (encompassing more than one country, e.g., Southeast Asian and South Asian).

Youth and parents also reported their place of birth. Responses to place of birth information were used to determine *immigrant generational status*. Specifically, respondents born in a country other than the United States were classified as first-generation, second-generation immigrants were born in the United States with least one foreign-born parent, and respondents were classified as "third-generation immigrants and higher" when youth and parents were all born in the United States.

Descriptive Sample Statistics: Generational Statuses by Racial/Ethnic Groupings

In Tables 1, 2, and 3, the proportion of youth who were first-, second-, or third-generation immigrants is displayed for each pan-racial/ethnic groups as well as within ethnic/regional groups for Asian and Latinx participants, the two largest pan-racial/ethnic groups represented in the sample.

Generational Status by Pan-racial/ethnic Groups. In Table 1, the total count of immigrant youth and their generational status is displayed by pan-racial/ethnic group. Significant differences between pan-racial/ethnic groups—regarding the proportion of participants who were first-, second-, or third-generation immigrants—are indicated using superscripts. The two largest groups of immigrant youth in the sample were Asian and Latinx, similar to the U.S. population. More specifically, in this sample, 98% of Asian youth were first- or second-generation immigrants, which was significantly more than the proportion of recent arrival generations in any other pan-racial/ethnic groups. Native Hawaiian/Pacific Islanders had the second highest proportion (66%) of youth who were first- or second-generation immigrants, followed by Latinx youth (60%). All other pan-racial/ethnic groups were substantially smaller. For instance,

Blacks/African-Americans and Whites had the lowest concentrations of first- and second-generation youth at approximately 17% and 8%, respectively.

For the purposes of this study, the differences between the two largest immigrant groups, Asian and Latinx youth, are most noteworthy: Among Asians, nearly all youth were first- and second-generation, while among those who were Latinx, most were second- and third-generation immigrants. Although Latinx youth had the third-highest proportions of first-generation immigrants (compared with the other pan-ethnic/racial groups), proportionately, Asian youth were more than twice as likely (45.46% vs. 19.85%) to be first-generation.

Table 1

Percentage of First- and Third+-Generation Compared to Second-Generation Immigrants by Pan-racial Groups

	First Generation		Second Generation		Third+ Generation	
	n	%	n	%	n	%
Pan-racial/ethnic Groups						
Amer. Indian/Alaska Native	--	--	--	--	78	79.59 [bdefg]
Asian	556	45.46 [cdeg]	636	52	31	2.53 [acdefg]
Black/African-American	82	6.14 [be]	142	10.64	1111	83.22 [bdefg]
Latinx/Latino	421	19.85 [be]	853	40.22	847	39.93 [abceg]
Multiracial	62	5.39 [abcdfg]	234	20.35	854	74.26 [abcdfg]
Native Hawaiian/Pacific Islander	19	28.36 [e]	25	37.31	23	34.33 [abceg]
White	184	2.33 [be]	421	5.32	7303	92.35 [abcdef]
Total	1,333	9.59	2,322	16.7	10,247	73.71

Note. Multinomial regressions were conducted to examine all combinations of group differences in immigrant statuses among pan-racial groups. Superscripts indicate significant differences as follows:

[a] Significantly different from American Indian/Alaska Native, non-Latinx, $p<.05$

[b] Significantly different from Asian, non-Latinx, $p<.05$

[c] Significantly different from Black/African-American, non-Latinx, $p<.05$

[d] Significantly different from Latinx, $p<.05$

[e] Significantly different from Multiracial, non-Latinx, $p<.05$

[f] Significantly different from Native Hawaiian/Pacific Islander, non-Latinx, $p<.05$

[g] Significantly different from White, non-Latinx, $p<.05$

Generational Status by Asian Ethnic/Regional Groups. The primary purpose of this study was to explore and call attention to the heterogeneity within the Asian immigrant pan-racial group, so in Table 2, Asian respondents are further disaggregated into *ethnic/regional* groups. In Table 2, generational statuses for Asian respondents are displayed by *ethnic/regional* group, with significant differences indicated with superscripts. Chinese, South Asians, and Other Asians had roughly 50–50 concentrations of first- and second-generation students within each group, with the concentrations slightly skewed higher towards the second generation. On the other hand, Filipinos and Southeast Asians had similar concentrations of first- and second-generation students—where approximately a third of the students were first-generation, and most were second-generation. Other Asians had the highest concentration of third+-generation youth (22%), and South Asians had the lowest concentration of third+-generation youth (2%). Although Filipinos and Southeast Asians had similar concentrations of first- and second-generation, Filipinos had higher concentrations of third+-generation students compared to Southeast Asians.

Table 2

Percentage of First- and Third+-Generation Compared to Second-Generation Immigrants by Asian Country/Region of Origin

	First Generation		Second Generation		Third+ Generation	
	n	%	n	%	n	%
Asian Country/Region of Origin						
Chinese	149	42.94 [bc]	171	49.28	27	7.78 [cde]
Filipino	82	30.71 [ade]	148	55.43	37	13.86 [cde]
Southeast Asian	89	29.18 [ade]	200	65.57	16	5.25 [abe]
South Asian	172	44.44 [bc]	207	53.49	8	2.07 [abe]

Other Asian	116	37.06 [bc]	127	40.58	70	22.36 [abcd]
Total	608	37.55	853	52.69	158	9.76

Note. Multinomial logistic regressions with the second generation as a base group were conducted to examine group differences in immigrant statuses between Asian subgroups.

[a] significantly different from Chinese, $p<.05$
[b] significantly different from Filipino, $p<.05$
[c] significantly different from Southeast Asian, $p<.05$
[d] significantly different from South Asian, $p<.05$
[e] significantly different from Other Asian, $p<.05$

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Unlike pan-ethnic/racial groups, which designate a category for multiracial individuals, subgroupings do not contain this category. Hence, subgroupings may contain individuals who identified as either "Asian" or "Multiracial" at the pan-racial/ethnic level.

Although not a primary focus of the present study, it is worth noting that among first- and second-generation Asian youth, Vietnam and Laos were the most common countries of origin among Southeast Asians, with 32% of first-generation youth reporting their place of birth as Vietnam and 59% of second-generation parents' country of origin being reported as Vietnam or Laos. Indian and Pakistani immigrants were highly represented among the South Asian regional group. Fifty-one percent of first-generation South Asian students were born in India, while 11% were born in Pakistan. Among parents of second-generation youth, 65% of mother and father figures were born in India and 8% in Pakistan. Among "Other Asians," Japanese and South Korean immigrants were highly represented. Among first-generation "Other Asian" students, 49% were born in South Korea and 10% were born in Japan. Among parents of second-generation youth, 30% of mother and father figures were born in South Korea, and 11% were born in Japan. More detailed on these breakdowns by country of origin on both Asian and Latinx immigrants are available in Appendix A.

Postsecondary Outcome Variables

There were two main buckets of postsecondary outcome variables. The first describes enrollment and was collected at the first follow-up immediately after high school graduation, and the second describes attainment and persistence at the second follow-up, which occurred approximately 3 years after high school graduation.

Enrollment. The enrollment variable used in the study captured the type of institution in which participants enrolled (i.e., 2- or 4-year institutions). Participants reported whether they were enrolled in postsecondary education at two time points: in 2013 (at the first follow-up) and in 2016 (at the second follow-up). At each of these time points, respondents reported whether they were currently enrolled in a 2-year institution or below (e.g., a 1-year certificate program), enrolled in a 4-year institution, or not enrolled in postsecondary education. Enrollment in both types of institution in both 2013 and 2016 was combined into one enrollment variable with four categories. Participants were categorized as "enrolled in a 2-year institution or below exclusively" if they reported enrollment in 2-year colleges or below at one or both time points and *never* reported being enrolled in a 4-year institution. Participants were categorized as "enrolled in a 4-year institution exclusively" if they reported enrollment at a 4-year institution at one or both time points and *never* reported enrollment in a 2-year institution. Those participants who reported being enrolled in a 2-year institution at one-time point and in a 4-year institution at the other were categorized as "enrolled in both a 2-year and a 4-year institution." Finally, participants were categorized as "not enrolled" if they reported not being enrolled at both time points. Table 3 below displays frequencies of enrollment by pan-racial/ethnic groups.

Table 3

Sample Statistics: Enrollment by Pan-racial/ethnic Groups

	Never Enrolled		2-Year Exclusive		4-Year Exclusive		Both		Total	
	n	%	n	%	n	%	n	%	n	%
Asian	108	8%	263	19%	801	57%	237	17%	1409	100%
Latinx	687	28%	837	34%	602	24%	347	14%	2473	100%
AIAN	46	40%	33	28%	25	22%	12	10%	116	100%
Black/AA	409	26%	497	31%	472	29%	223	14%	1601	100%
Multiracial	306	22%	401	29%	482	35%	174	13%	1363	100%
NHPI	18	24%	21	28%	19	25%	17	23%	75	100%
White	1,929	21%	2,041	22%	3,862	43%	1,251	14%	9083	100%

Note: Missing data not included. AIAN=American Indian/Alaska Native, AA=African American, NHPI=Native Hawaiian/Pacific Islander.

Attainment and Persistence. Degree attainment and persistence in postsecondary institutions were examined with a compilation of three variables from the dataset. In 2016, youth indicated whether they had attained a degree or were enrolled as of 2016 working towards a degree. Youth responses were grouped into the following four *degree-attainment* categories: (1) "2-year degree," (2) "still enrolled," (3) "no degree, no longer enrolled," and (4) "not enrolled." There were very few students who had attained a 4-year degree at the second follow-up (1%, *n*=59), which was approximately 3 years after high school graduation. Therefore, the first category describing credential attainment primarily represents 2-year (associate) degree attainment. Table 4 displays the raw frequencies of attainment statuses disaggregated by pan-racial/ethnic groups.

Table 4

Sample Statistics: Attainment by Pan-racial/ethnic Groups

	2-Year Degree		Still Enrolled		Dropped Out		Never Enrolled		Total	
	n	%	n	%	n	%	n	%	n	%
Asian	76	5%	1,080	77%	141	10%	108	8%	1405	100%
Latinx	266	11%	1,142	45%	435	17%	687	27%	2530	100%
AIAN	6	5%	42	35%	26	22%	46	38%	120	100%
Black/AA	127	8%	749	46%	335	21%	409	25%	1620	100%
Multiracial	121	9%	689	49%	282	20%	306	22%	1398	100%
NHPI	9	12%	38	52%	8	11%	18	25%	73	100%
White	802	9%	5,184	56%	1,360	15%	1,929	21%	9275	100%

Note: Missing data not included. AIAN=American Indian/Alaska Native, AA=African American, NHPI=Native Hawaiian/Pacific Islander.

In addition, the enrollment categories for those who persisted ("Still Enrolled") were further broken down into the following categories: (1) "persisting in a 2-year degree program" (i.e., enrolled in 2-year institution at both time points), (2) "persisting in a 4-year program" (i.e., enrolled in 4-year institution at both time points"), (3) "persisting with a 2-year to 4-year transfer" (i.e., enrolled in 2-year institution in 2013 and a 4-year institution in 2016), and (4) "persisting with a 4-year to 2-year transfer" (i.e., enrolled in 4-year institution in 2013 and a 2-year institution in 2016). Table 5 displays persistence details by pan-racial/ethnic groups.

Table 5

Sample Statistics: Persistence by Pan-racial/ethnic Groups

	Persist 2-Year		Persist 4-Year		2 to 4 Transfer		4 to 2 Transfer		Total	
	n	%	n	%	n	%	n	%	n	%
Asian	99	10%	637	65%	216	22%	21	2%	973	100%
Latinx	251	25%	418	41%	306	30%	41	4%	1016	100%
AIAN	4	13%	16	50%	11	34%	1	3%	32	100%
Black/AA	118	18%	316	48%	185	28%	40	6%	659	100%
Multiracial	102	17%	328	54%	152	25%	22	4%	604	100%
NHPI	3	9%	14	41%	16	47%	1	3%	34	100%
White	552	11%	3,022	63%	1,063	22%	192	4%	4829	100%

Note: Missing data not included. AIAN=American Indian/Alaska Native, AA=African American, NHPI=Native Hawaiian/Pacific Islander.

Chapter 4: Results

The first aim of this dissertation is to examine differences in college enrollment, attainment, and persistence by pan-racial/ethnic immigrant groups and subsequently by Asian ethnic/regional groups. The second aim is to examine variations in these educational outcomes as a function of immigrant generation (i.e., first, second, or third generation), with a focus on both within– and across–pan-racial/ethnic group differences and, again, within– and across–Asian ethnic/regional group differences. In other words, do educational outcomes differentially vary across racial/ethnic groups as a function of generational status?

Who Enrolled in College, and Where Did They Enroll?

Variations in enrollment in 2- and 4-year colleges were examined in multinomial regression models using four categories: 4-year only, 2-year only, both 2-year and 4-year, and not enrolled. Main effects were estimated for pan-racial/ethnic groups and generational statuses, and interactions were estimated between the two. In all models, gender was included as a covariate. The excluded comparison groups in the models were Asian, second-generation, and unenrolled students. However, all pairwise comparisons between and within groups were estimated in post-hoc analyses.

Main Effects for Enrollment: Pan-racial/ethnic Differences

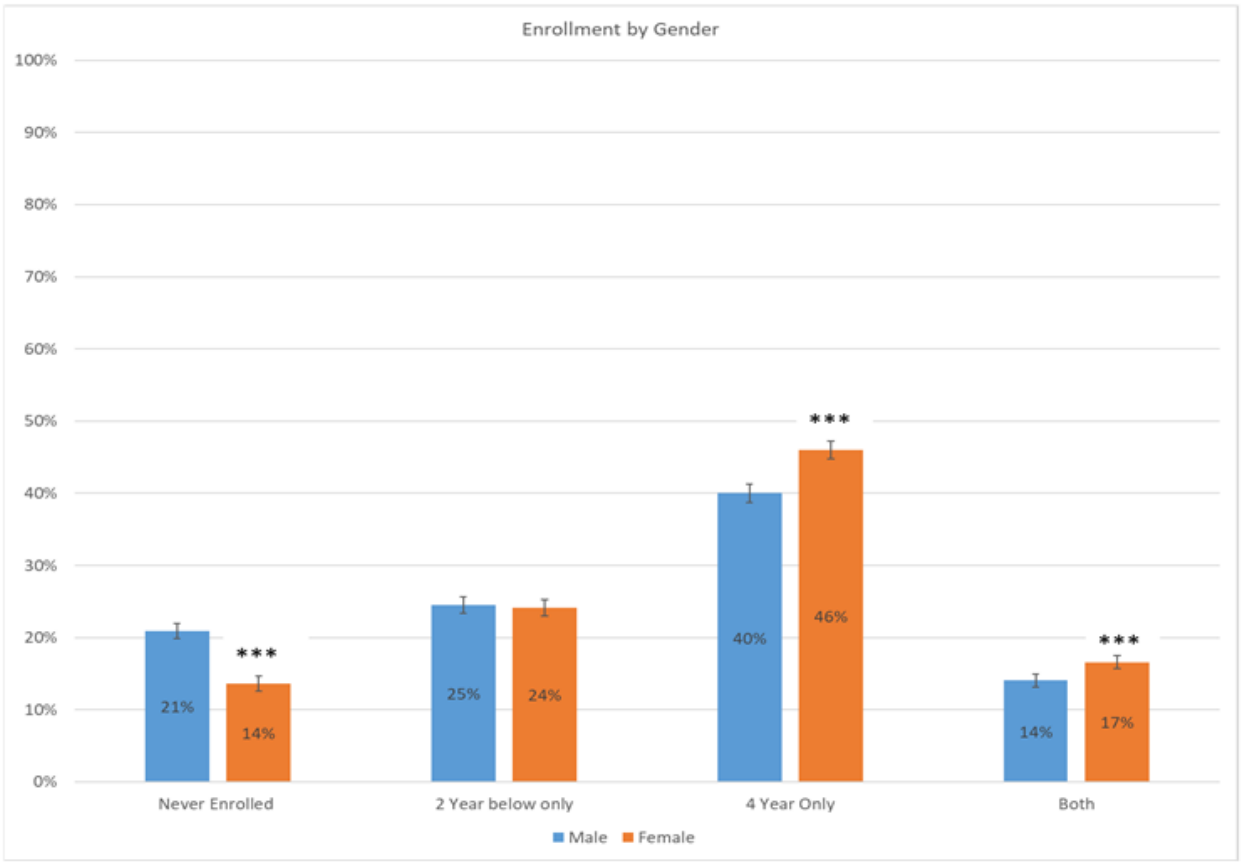
Relative risk ratio coefficients and standard errors are displayed below in Table 6. Note that the excluded (comparison) outcome category was "4-year only" (i.e., positive coefficients indicated a greater likelihood of enrollment in 2-year only vs. 4-year only, both 2-year and 4-year vs. 4-year only, or not enrolled vs. 4-year only). Predicted probabilities of enrollment associated with the regression results are graphed in Figure 1 (displaying differences by gender),

Figure 2 (displaying differences by generational status), and Figure 3 (displaying differences by pan-racial/ethnic group).

As displayed in Figure 1, males were 1.5 times more likely than females not to be enrolled in higher education (i.e., 21% of males vs. 14% of females were not enrolled in college). This difference between males and females was primarily driven by females' increased likelihood of enrolling in 4-year colleges, either through exclusive enrollment in a 4-year school or through enrollment in both a 2-year and a 4-year college. Females' exclusive enrollment in 4-

Figure 1

Predicted Probabilities of Enrollment Statuses by Gender



Note. Superscripts indicate differences in enrollment levels between males and females as follow: $p<.05$. $^{**}p<.01$. $^{***}p<.001$.

year institutions was 6 percentage points higher than males'. In addition, females' enrollment in both 2- and 4-year institutions was 3 percentage points higher compared with males.

Table 5

Main Effects: Multinomial Predicting Enrollment Statuses Among Pan-racial/ethnic Groupings by Generational Statuses

	Never Enrolled		2-Year or Below Only		Both	
Reference Group	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	1.77***	0.10	1.16**	0.06	0.96	0.05
Generation						
First generation	2.49***	0.1	1.58***	0.16	1.17	0.13
Third+ Generation	2.22***	0.01	1.39***	0.11	1.03	0.09
Pan-racial/ethnic Groups						
American Indian/Alaska Native	11.22***	4.00	4.96***	1.62	1.47	0.67
Black/African-American	5.55***	1.00	3.42***	0.44	1.79***	0.26
Latinx	10.47***	1.69	4.97***	0.55	2.07***	0.25
Multiracial	4.96***	0.90	2.67***	0.35	1.4**	0.2
Native Hawaiian/Pacific Islander	9.9***	3.94	3.61**	1.34	3**	1.15
White	3.2***	0.53	1.61***	0.18	1.23	0.15
Intercept	0.04***	0.01	0.19***	0.02	0.26***	0.03

Note. n=11,640. The multinomial regression above excluded female, second generation, and Asian as reference groups among independent variables. The reference level for the dependent variable was 4-year enrollment. *p<.05 **p<.01 ***p<.001 RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 806.56 with a p-value<0.001, indicating that the final model fits significantly better than an empty model.

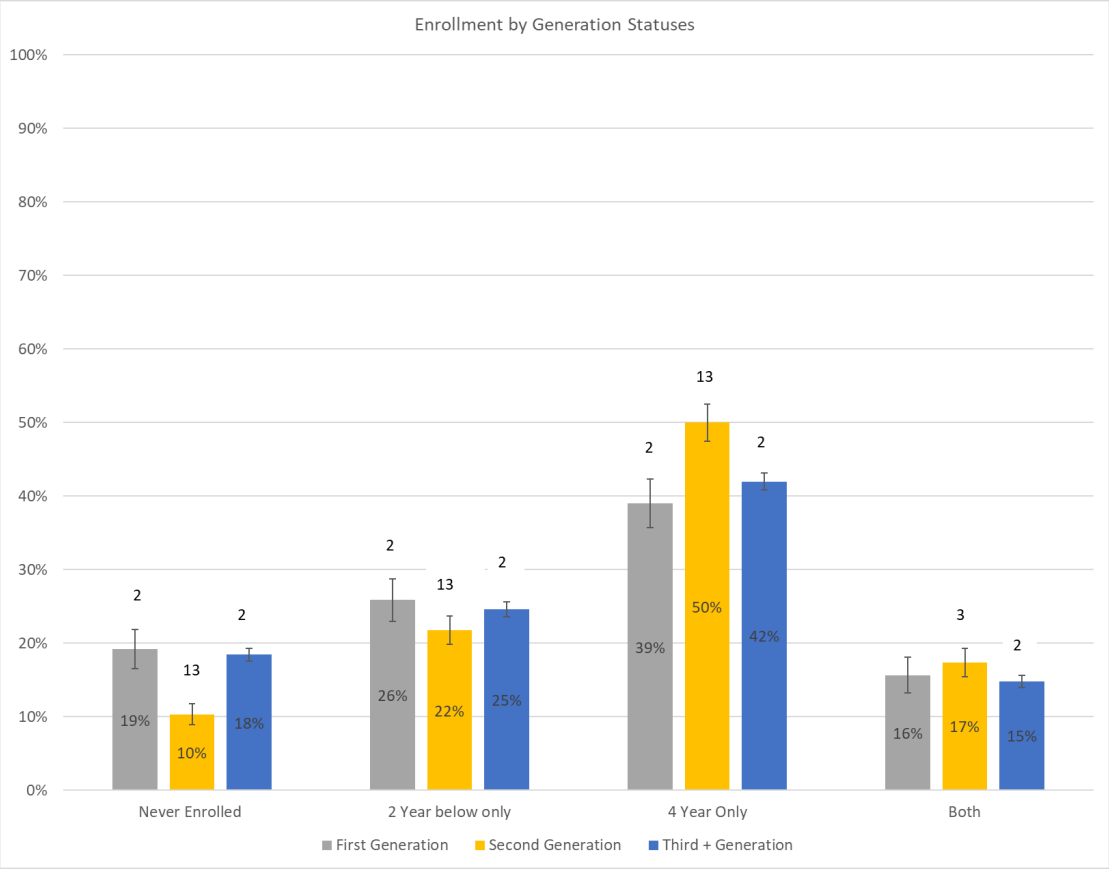
In Figure 2, second-generation students had the lowest percentage of non-enrollment in higher education (non-enrollment at 10%) compared to first- (non-enrollment at 19%) and third-generation (non-enrollment at 18%) students; both first- and third-generation students were nearly twice as likely as second-generation students to not enroll. This difference of non-enrollment was largely driven by the high enrollment rates of second-generation students in 4-

year colleges: Second-generation youth were 28% more likely to enroll in a 4-year college than first-generation students and were also 19% more likely to enroll than the third generation (in a 4-year college). Also notice in Table 3 that the relative risk ratio indicates that first- and third-generation students were more than twice as likely as the second generation not to enroll in college. On the other hand, first- and third-generation students were more likely than second-generation students to enroll exclusively in 2-year colleges (without going on to enroll in a 4-year college). First-generation students had a 2-year (exclusive) enrollment rate of 26%, third generation students had a 2-year enrollment rate of 25%, and second-generation students had a 2-year enrollment rate of 22%.

In Figure 3, variations across pan-racial/ethnic groups are displayed for the types of institutions in which youth were enrolled. All groups were compared to Asian youth—the main pan-racial group of interest in this dissertation. One important finding evident in Figure 3 is the significantly lower rate of never being enrolled in college among Asian youth compared with all other groups. Only 6% of Asian youth never enrolled in higher education, while other groups' rates ranged from 16% (White youth) to 29% (American Indian/Alaskan Native). Asian youth also had significantly lower exclusive enrollment rates in 2-year institutions compared to all other groups except Native Hawaiians/Pacific Islanders. In turn, Asian youth were significantly

Figure 2

Predicted Probabilities of Enrollment Statuses by Generation Statuses



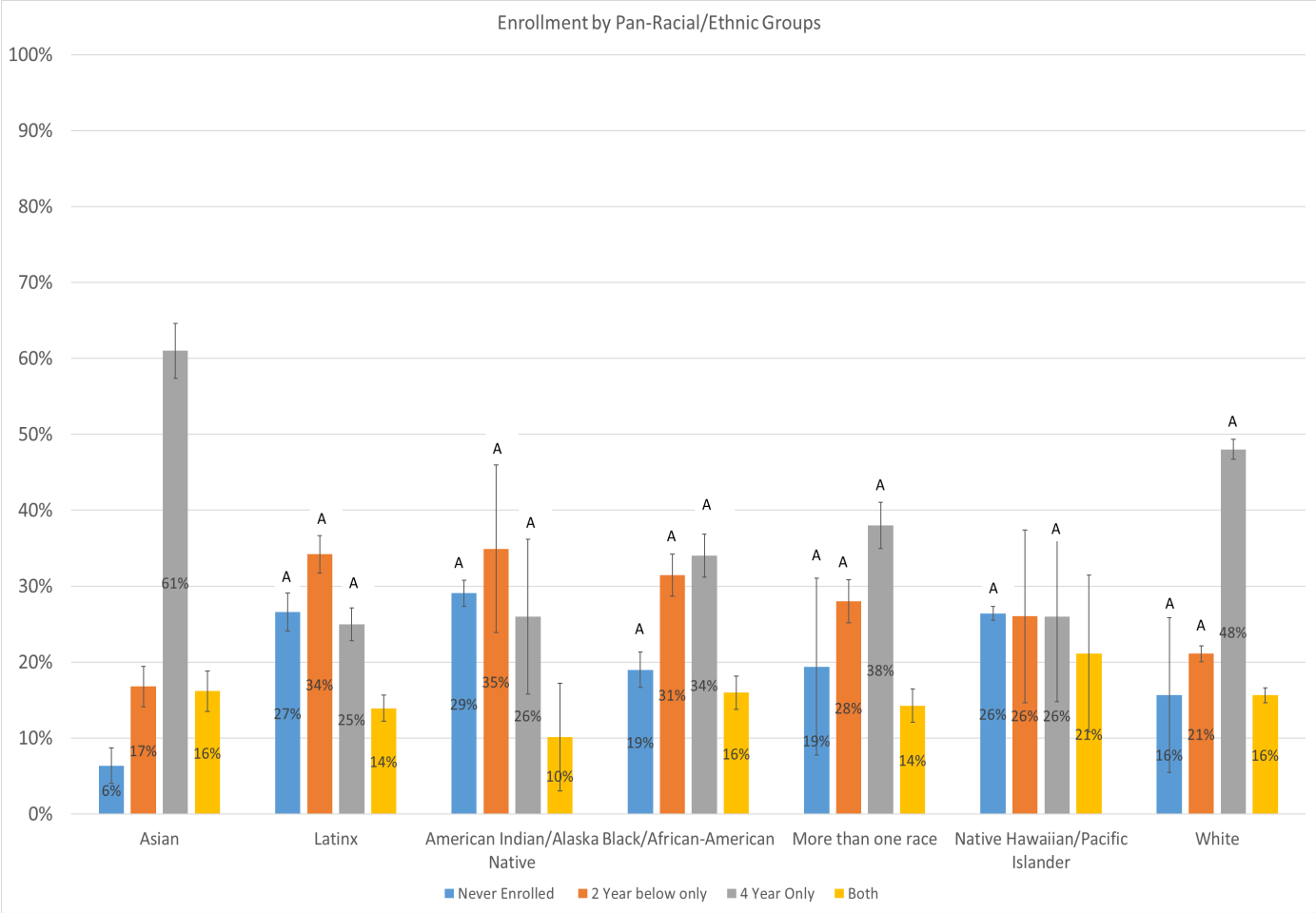
Note. Numerical values indicate significant differences at the $p<.05$ level between generations: "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from second generation.

more likely than all other pan-racial/ethnic groups to be enrolled exclusively in 4-year institutions.

Specific comparisons between Asians and all pan-racial/ethnic groups in the study show that enrollment patterns between Asians and Whites were most similar—characterized by low non-enrollment and disproportionately higher 4-year exclusive enrollment in both groups. However, White youth had higher rates of non-enrollment (6% vs. 16%) and lower rates of 4-year exclusive enrollment (48% vs. 60%) than Asians. Comparison of Asian with Latinx immigrants shows that Asians were more than 4 times *less* likely (6% vs. 27%) not to be enrolled, about 2 times *less* likely (17% vs. 34%) to be enrolled exclusively in 2-year institutions, and nearly 2.5 times *more* likely (61% vs. 25%) to be exclusively enrolled in 4-year institutions. Meanwhile, the relative risk ratios in Table 4 show that Black youth were 5.5 times more likely to never be enrolled at a 4-year institution (exclusively) compared to Asian youth. This relative risk ratio is even higher when comparing Latinx youth to Asians. Latinx youth were more than 10 times more likely to be never enrolled at a 4-year institution compared to Asian youth.

Figure 3

Predicted Probabilities of Enrollment Statuses by Pan-racial/ethnic Groups



Note. Differences across various enrollment rates from Asian are indicated with an "A" which signifies differences from Asian at the $p<.05$ level.

Interaction Effects for Enrollment: Generational Differences Between and Within Pan-racial/ethnic Groups

To follow up on the main effect differences (i.e., generational differences in enrollment averaged across all pan-racial/ethnic groups and pan-racial/ethnic differences averaged across all

generations), interactions between immigrant generation and pan-racial/ethnic group were estimated. These analyses were used to determine if the generational differences in enrollment varied across pan-racial/ethnic groups or, said differently, if pan-racial/ethnic differences in enrollment varied (in size or direction) across generations. Results from these models are displayed in Table 4 (with Asian youth being the excluded comparison group; see also Appendix B for this same analysis with Latinx youth as the excluded group).

In Figure 4, predicted probabilities of enrollment for Asian youth are displayed by generational statuses, with significant differences across generations indicated with numerals (e.g., a value of "2" above the first generation bar indicates a significant difference from second-generation youth) and significant differences from other pan-racial/ethnic groups indicated with letters (e.g., the letter "L" indicates a significant difference from Latinx youth). Similarly, in Figures 5, 6, and 7, the predicted probabilities are displayed for the remaining pan-racial groups.

Considering the results in Table 4, it is evident that the patterns of generational differences in enrollment among Asians significantly differed from the patterns of generational differences among three other pan-racial/ethnic groups (note the significant interaction effects for Black, Latinx, and White youth). First, note the predicted probabilities for Asian youth displayed in Figure 4 alongside those displayed in Figure 5 (for comparisons with Latinx youth) and Figure 6 (for comparisons with Black and White youth). As displayed in Figure 4, for Asian youth, there were three significant generational differences: (1) First-generation Asians were most likely not to be enrolled in college, (2) third-generation Asians were most likely to be enrolled in 2-year institutions exclusively, and (3) second-generation Asians were most likely to be enrolled in 4-year institutions exclusively. The significant interaction effects were concentrated in the domain of 2-year exclusive enrollment versus 4-year exclusive enrollment;

specifically, the significantly higher enrollment rates in 2-year institutions (exclusively) for third-generation youth that were evident for Asian youth were not evident for Black, Latinx, or White youth. For Black, Latinx, and White youth (see Figures 5 and 6), enrollment rates in 2-year institutions did not significantly differ across generations.

Among Latinx youth, however, there was a first-generation disadvantage, particularly with regard to exclusive enrollment in 4-year institutions—first-generation youth were least likely to enroll in 4-year institutions exclusively and were more likely not to be enrolled compared to other generations. In addition to the first-generation disadvantage, second-generation Latinx youths' path to higher education was more likely a combination of enrollment in both 2- and 4-year colleges; second-generation Latinx had significantly higher rates of enrollment in both institutions compared to other generations. This pattern was unique to Latinx youth and not seen among other pan-racial groups: Generational differences in enrollment in both 2- and 4-year colleges did not reach statistical significance for any group other than Latinx youth.

Unlike Latinx youth, who saw higher non-enrollment rates among the first generation compared with the second and third generations, first- and second-generation Blacks were less likely than the third generation not to participate in higher education. In fact, for Black youth, the rate of non-enrollment was 1.75 times lower for the first generation versus the third generation (11% vs. 23%, respectively) and even lower for the second generation. Second-generation Blacks (8%) were 2.3 times less likely not to be enrolled compared to the third generation. For second- and first-generation Blacks, enrollment in 2-year institutions was on par with the third generation, but the second generation's exclusive enrollment in 4-year colleges was 72% higher than that of the third.

Overall, there are generational differences in enrollment at 2 and 4-year colleges across pan-racial/ethnic groups. Both first-generation Latinx and Asians were more likely to enroll in higher education. However, first-generation Latinx were more likely to enroll at 2-year institutions exclusively compared to being exclusively enrolled at 4-year colleges or at both. Second-generation Latinx can be seen as better off than the first generation because they were more likely to be enrolled at 2-year colleges and had lower rates of non-enrollment. While both first- and second-generation Black youth had lower non-enrollment rates than the third generation, only the second generation enrolled at 4-year colleges more than the third.

Table 6

Interaction Effects: Multinomial Predicting Enrollment Statuses Among Pan-racial/ethnic Groupings by Generational Statuses

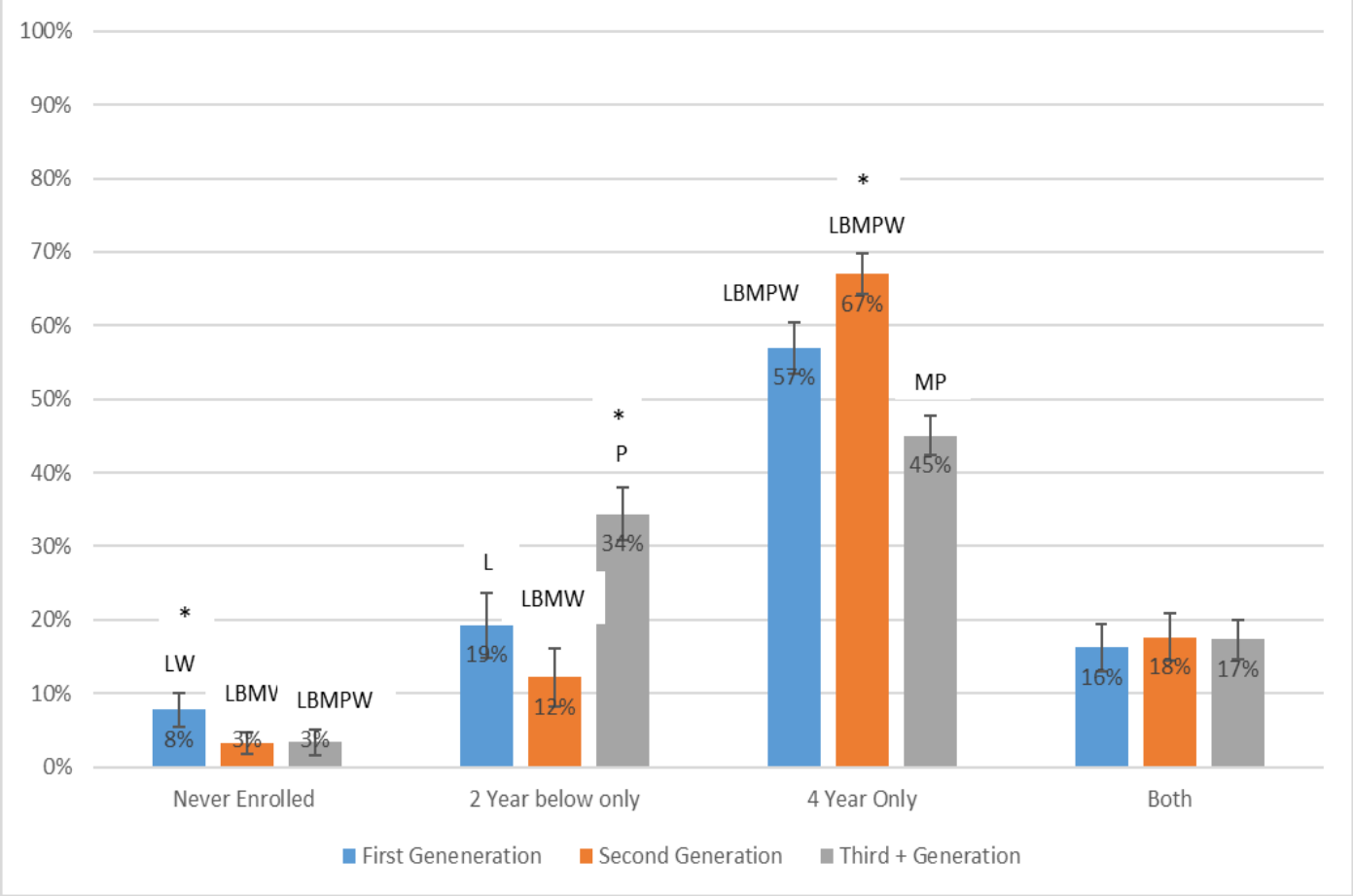
			2-Year or Below Only			
	Never Enrolled				Both	
Reference Group	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	1.78***	0.1	1.17**	0.06	0.96	0.05
Generation						
First generation	2.8**	0.83	1.86	0.33	1.08	0.19
Third+ Generation	1.55	1.66	4.21	1.86	1.46	0.79
Pan-racial/ethnic Groups						
Latinx	16.08***	4.28	7.2***	1.18	2.42***	0.40
American Indian/Alaska Native	0.00	0.01	3.56	3.29	5.1*	3.94
Black/African-American	4.46***	1.83	3.83***	0.98	1.53	0.43
Multiracial	2.99**	1.06	1.81	0.42	2.42	0.40
Native Hawaiian/Pacific Islander	2.09	2.25	3.32	1.77	1.25	0.27
White	2.48**	0.8	1.98	0.37	1.89	1.06
Interaction Effects						
Black/African-American #1	0.48	0.29	0.43*	0.18	1.36	0.60
Black/African-American #3	2.07	2.32	0.36*	0.18	0.81	0.49
Latinx #1	0.80	0.28	0.73	0.19	0.88	0.25
Latinx #3	0.60	0.65	0.19***	0.09	0.48	0.27

Multiracial #1	0.73	0.44	1.25	0.53	1.59	0.70
Multiracial #3	3.01	3.32	0.65	0.32	0.77	0.45
Native Hawaiian/Pacific Islander #1	6.12	8.05	2.10	1.85	1.84	1.84
Native Hawaiian/Pacific Islander #3	16.66	27.4	0.26	0.30	2.29	2.42
White #1	0.99	0.44	0.92	0.27	1.41	0.46
White #3	1.99	2.17	0.30***	0.14	0.86	0.48
Intercept	0.04***	0.01	0.17***	0.02	0.27***	0.03

Note. n=11,640. The multinomial regression above excluded female, second generation, and Asian as reference groups among independent variables. The reference level for the dependent variable was 4-year enrollment. **p*<.05. ***p*<.01. ****p*<.001. RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 917.40 with a *p*-value<0.0001, showing that the final model as a whole fits significantly better than an empty model.

Figure 4

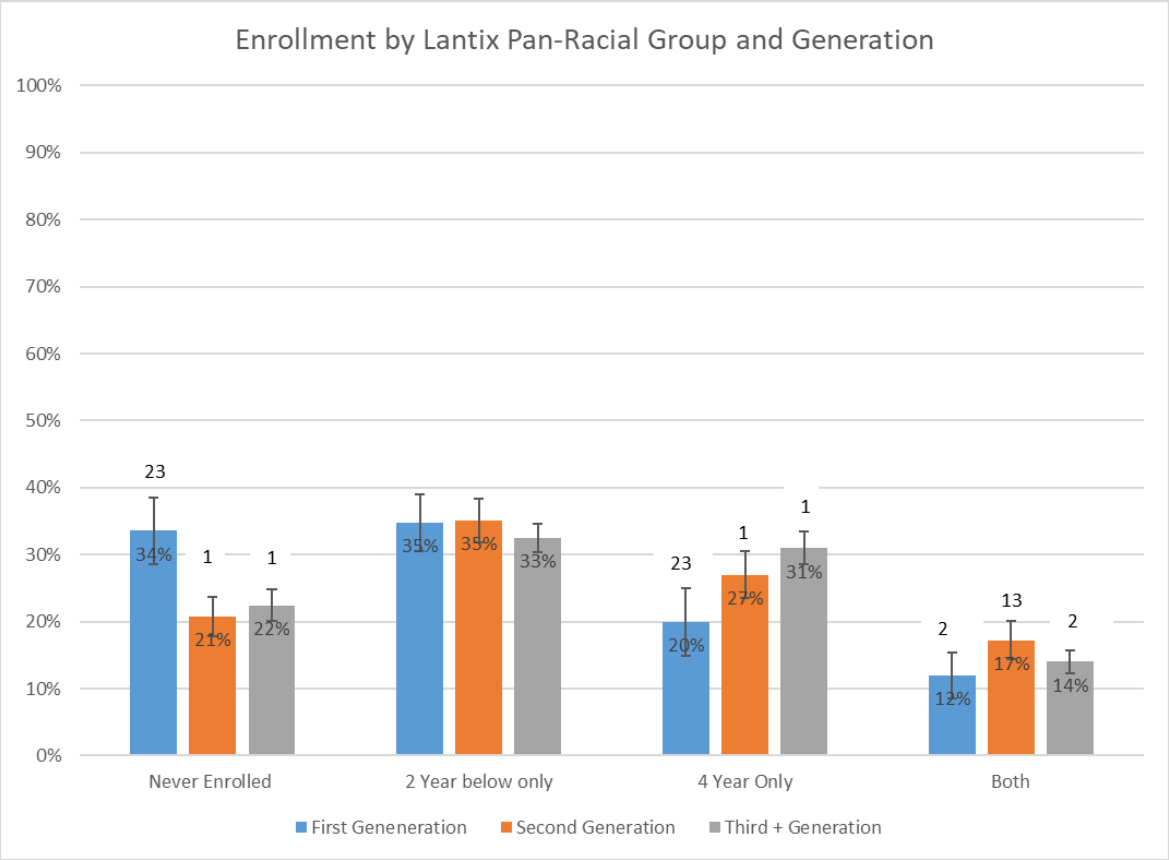
Predicted Probabilities of Asian Pan-racial Group's Enrollment Statuses by Generational Statuses



Note. This figure displays the predicted probability of enrollment rates for those who identified with the Asian pan-racial group. Letters above each bar indicate differences in enrollment across racial/ethnic groups within the same generational status from Asian in the following ways: "L" indicates differences from Latinx, "W" indicates differences from White, "B" indicates difference from Black, "M" indicates differences from more than one race, and "P" indicates differences from Native Hawaiian/Pacific Islander. Asterisks (*) above each bar indicate statistically significant differences at $p<.05$ for each enrollment type within Asian across generation groups.

Figure 3

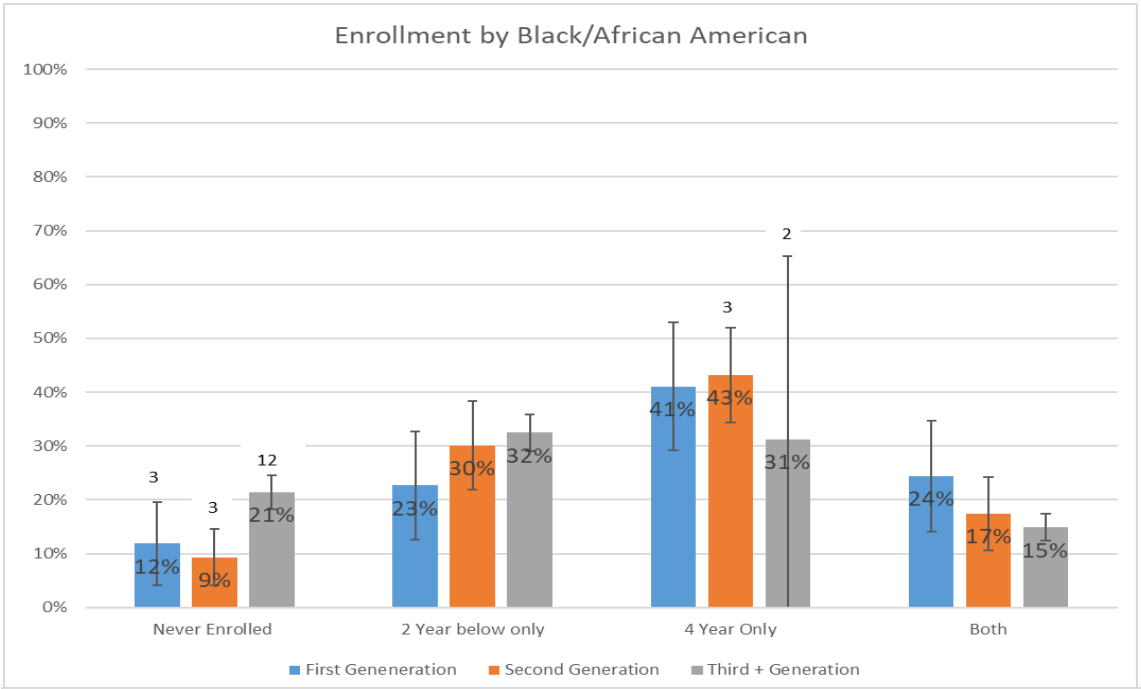
Predicted Probabilities of Latinx Enrollment Statuses by Generational Statuses

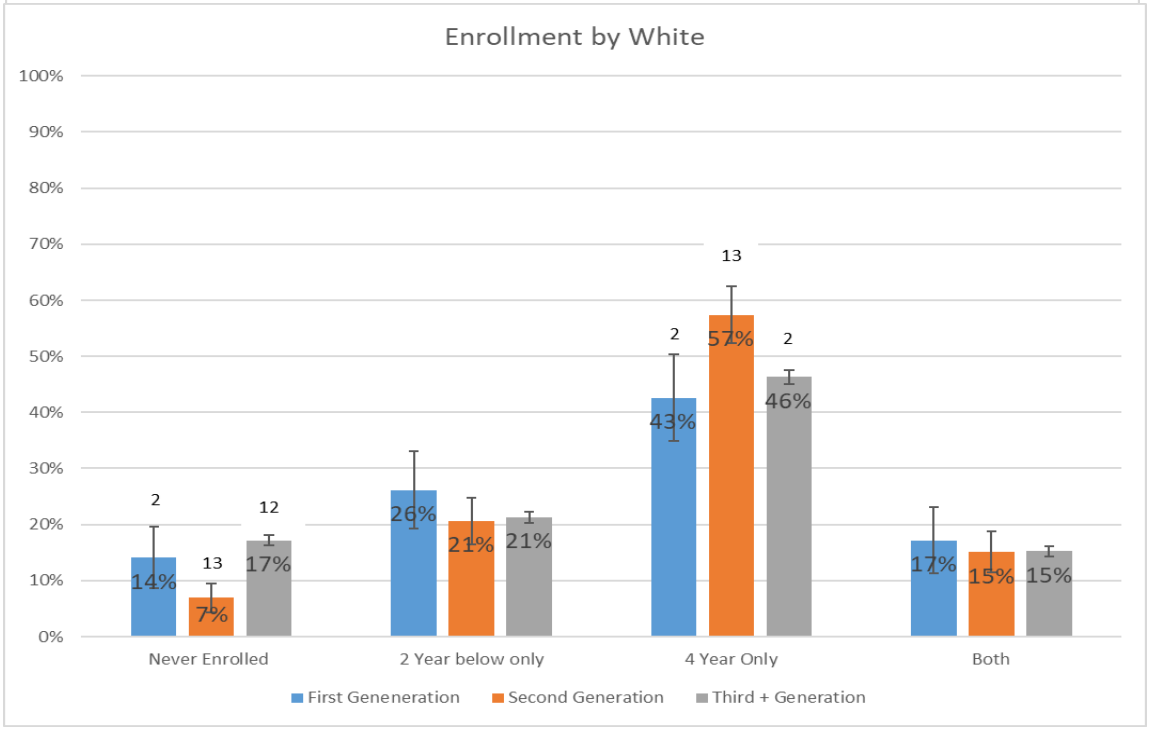


Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

Figure 4

Predicted Probabilities of Black and White Enrollment Statuses by Generational Statuses

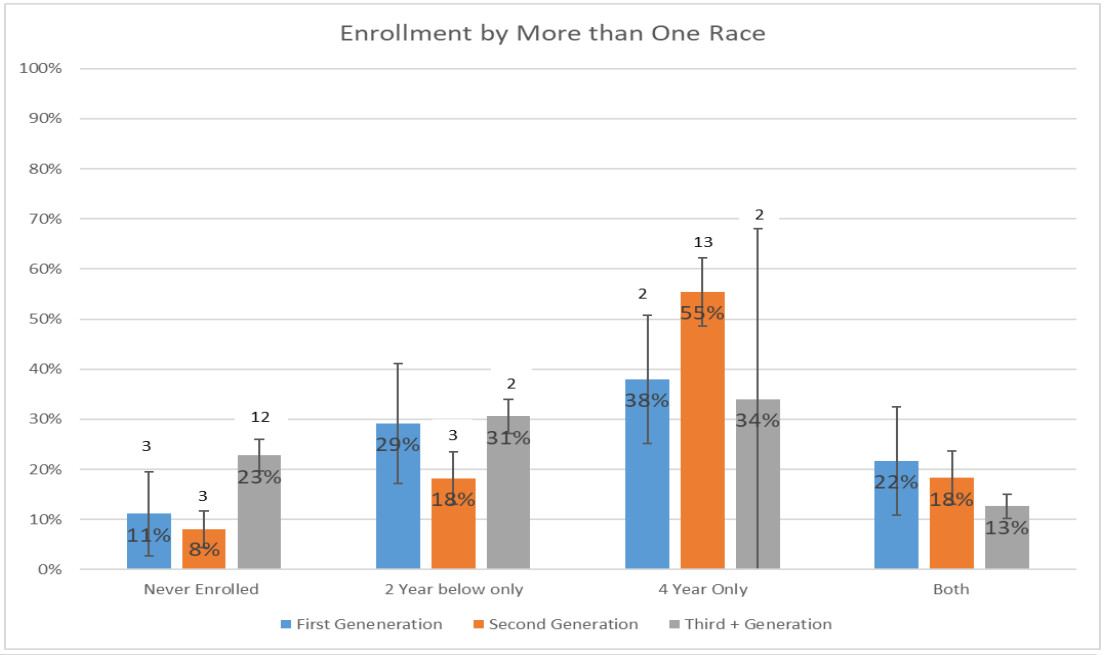


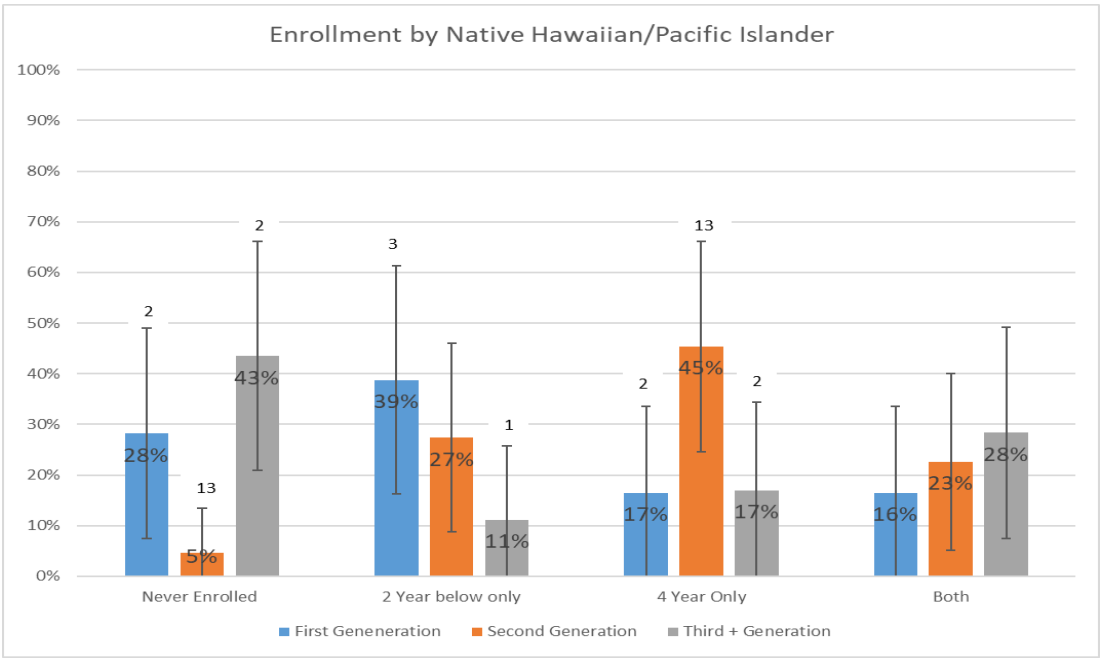


Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

Figure 5

Predicted Probabilities of Multiracial and Native Hawaiian/Pacific Islander Enrollment Statuses by Generational Statuses





Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

Asian Ethnic/Regional Enrollment Differences. Asian pan-racial/ethnic differences were further disaggregated into ethnic/regional groups (predetermined by the dataset and described in Methods). The primary aim of this section is to examine differences between Asian ethnic/regional groups. For example, does the second-generation advantage in 4-year enrollment, evident for Asian youth when examined as a pan-racial group, hold true for each of the Asian ethnic/regional subgroups? Results for the main effects of generational statuses and Asian ethnic/regional groups (controlling for gender) on various enrollment levels are displayed in Table 5 (Southeast Asian youth were the excluded/comparison group) with corresponding predicted probabilities for Asian ethnic/regional differences in Figure 8. As is evident in Table 8, there were several significant variations in enrollment patterns when comparing Southeast Asians with other Asian youth. And beyond these differences with Southeast Asian youth, several other subgroup differences were evident, as can be seen in Figure 8.

Enrollment patterns for Chinese and South Asian youth stood out in that these two groups were most likely to be exclusively enrolled in 4-year institutions (i.e., nearly 75% of these youth enrolled in 4-year colleges), being more than 30 percentage points higher than Southeast Asians, who had the lowest rates of exclusive enrollment in 4-year colleges. On the other hand, Southeast Asian youth were most likely not to be enrolled, followed by other Asian youth, with both of these groups having significantly higher non-enrollment rates compared with Chinese and South Asian youth.

Note, however, that rates of never being enrolled were low for all groups, ranging from 3% for South Asians to 11% for Southeast Asians. Indeed, despite relatively low rates of enrolling exclusively in 4-year colleges, Southeast Asian and Filipino youth were among those most likely to enroll in 2-year colleges, with significantly higher rates in these institutions than

Chinese or South Asian youth. And Southeast Asian youth were also most likely to enroll in both 2-year and 4-year institutions, with significantly higher rates of this enrollment pattern than all other Asians besides Filipino youth.

It is also worth noting that Filipino and Other Asian youth often fell in between those with the highest and lowest enrollment (or non-enrollment) rates. For example, both Filipino and Other Asian youth had lower 4-year exclusive enrollment rates compared to Chinese and South Asians but higher rates than Southeast Asians and non-Asians. Both Filipino and Other Asian youth also had rates of 2-year enrollment that were significantly higher than those of Chinese and South Asians and comparable to that of Southeast Asians. And, as mentioned, both Filipino and Other Asian enrollment rates at both 2- and 4-year colleges were significantly lower than that for Southeast Asians.

In sum, South Asian and Chinese youth had the highest overall rates of college enrollment (or conversely, the lowest rates of non-enrollment), driven in large part by their high rates of exclusive enrollment in 4-year institutions. This advantage in exclusive 4-year enrollment, however, was offset somewhat by the fact that these two groups had some of the lowest rates of enrollment in 2-year and both 2-year and 4-year institutions.

Table 7

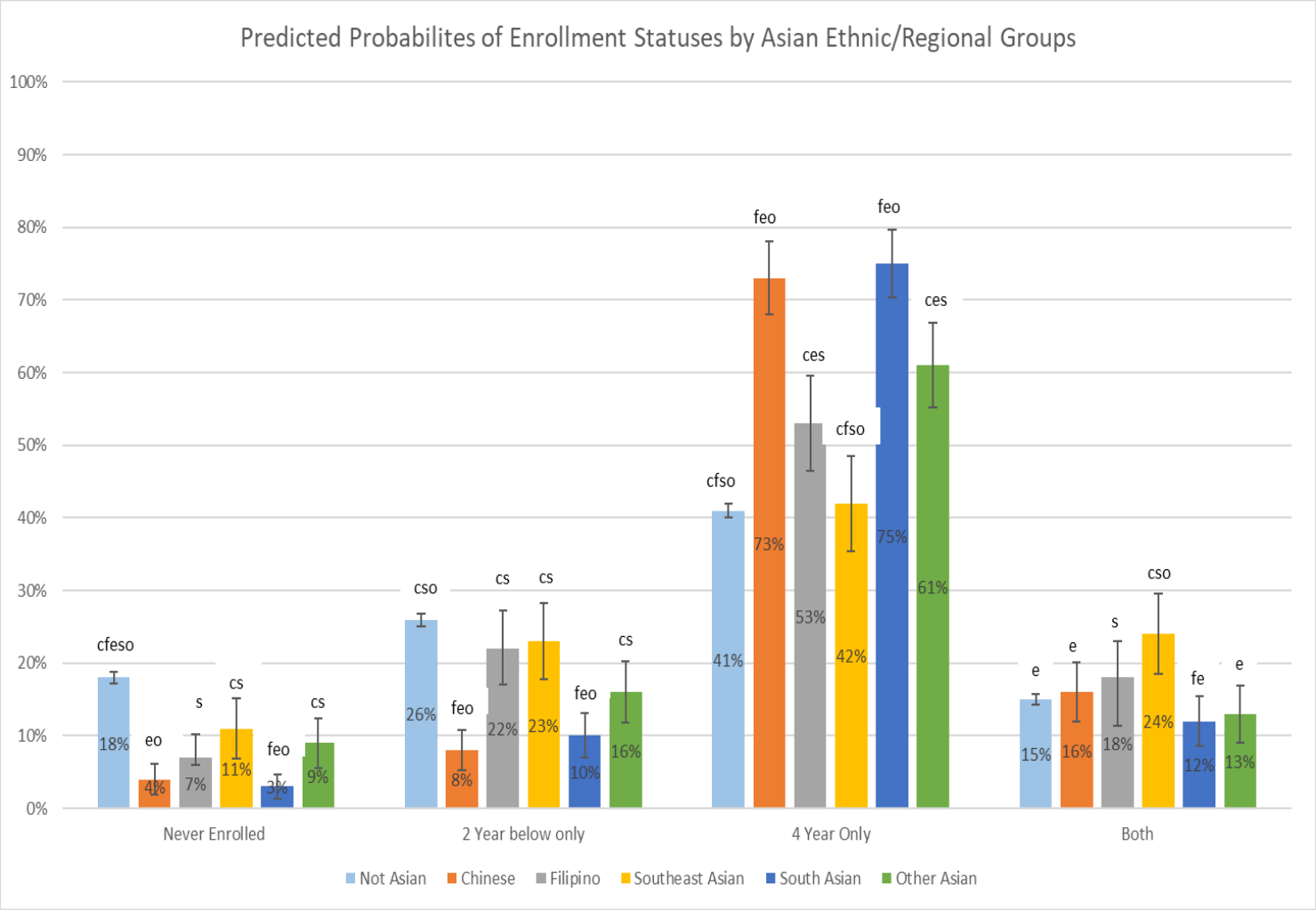
Main Effects: Multinomial Predicting Enrollment Statuses Among Asian Ethnic/Regional Groups

	Never Enrolled		2-Year or Below Only		Both	
	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	1.74**	0.09	1.13**	0.05	0.95	0.05
Generation						
First Generation	2.17**	0.27	1.2**	0.13	1.2	0.13
Third+ Generation	1.24*	0.11	0.85*	0.07	0.85*	0.07
Asian Ethnic/Regional Groups						
Not Asian	1.68*	0.39	1.14	0.2	0.65*	0.12
Chinese	0.18**	0.07	0.2**	0.05	0.38**	0.08
Filipino	0.46*	0.16	0.74	0.17	0.59*	0.14
South Asian	0.13**	0.05	0.25**	0.06	0.28**	0.06
Other Asian	0.55	0.17	0.48**	0.11	0.37**	0.09
Intercept	0.16**	0.04	0.56**	0.1	0.65*	0.11

Note. n=11,534. The multinomial regression above excluded female, second generation, and Southeast Asian as reference groups among independent variables. The reference level for the dependent variable was 4-year enrollment. *p<.05. **p<.01. ***p<.001. RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 540.11 with a p-value<0.0001, showing that the final model as a whole fits significantly better than an empty model.

Figure 6

Predicted Probabilities of Enrollment Statuses by Asian Ethnic/Regional Groups



Note: Differences at $p<.05$ between various enrollment levels across Asian ethnic/regional groups are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian. These predicted probabilities were generated from the main effects model controlling for gender and generational statuses, with all pairwise comparisons conducted.

Table 8

Interaction Effects: Multinomial Predicting Enrollment Status by Asian Ethnic/Regional Groups and Generation

	Never Enrolled		2-Year		Both	
	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	1.75***	0.1	1.13**	0.05	0.95	0.05
Generation						
First Generation	5.26**	2.57	1.80	0.68	1.9	0.72
Third+ Generation	14.55*	18.53	5.41	6.34	7.57	8.60
Asian Ethnic/Regional Groups						
Not Asian	2.86**	1.00	1.37	0.29	0.83	0.18
Chinese	0.12**	0.10	0.22***	0.08	0.45**	0.13
Filipino	0.7	0.36	0.57	0.18	0.79	0.23
South Asian	0.1**	0.08	0.15***	0.05	0.27***	0.08
Other Asian	1.1	0.53	0.44*	0.15	0.5*	0.17
Interaction						
Student is not Asian #1	0.39	0.20	0.75	0.3	0.63	0.26
Student is not Asian #3	0.08*	0.10	0.14	0.16	0.11*	0.12
Chinese #1	1.26	1.17	0.7	0.39	0.64	0.32
Chinese #3	0.3	0.54	0.33	0.45	0.12	0.16
Filipino #1	0.25	0.20	1.57	0.81	0.33	0.19
Filipino #3	0.25	0.36	0.31	0.39	0.17	0.21
South Asian #1	0.87	0.83	2.33	1.23	0.96	0.48
South Asian #3	4.09	7.04	0	0	0.3	0.49
Other Asian #1	0.15**	0.10	0.57	0.31	0.39	0.22
Other Asian #3	0.17	0.24	0.58	0.72	0.16	0.2
Intercept	0.1***	0.03	0.52**	0.1	0.54**	0.11

Note. n=11,534. The multinomial regression above excluded female, second generation, and Southeast Asian as reference groups among independent variables. The reference level for the dependent variable was 4-year enrollment. *p<.05. **p<.01. ***p<.001. RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 613.80 with a p-value<0.0001, showing that the final model as a whole fits significantly better than an empty model.

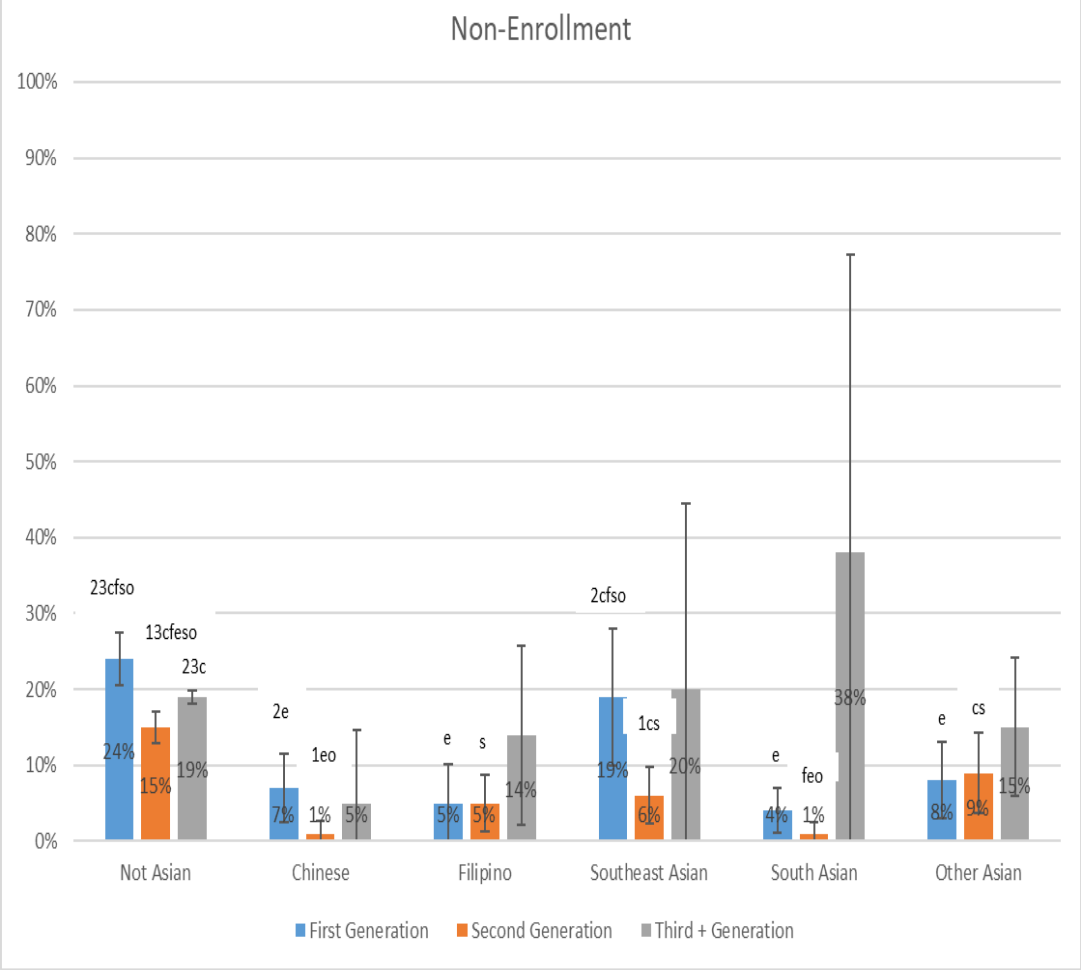
To address the second aim of this section, which is to examine generational differences in postsecondary enrollment outcomes across and within Asian ethnic/regional groups, an interaction term (between ethnic/regional group and generational status) was added to the main effects model. Table 6 displays postsecondary enrollment outcomes disaggregated by generational levels, with Southeast Asians and second-generation youth as the reference groups. Corresponding figures displaying predicted probabilities for each enrollment level for Asian ethnic/regional groups by generational status are also presented, and rates are included for non-Asian youth for comparative purposes. Figure 9 displays predicted probabilities for non-enrollment rates, Figure 10 displays predicted probabilities for 2-year enrollment, Figure 11 show predicted probabilities for 4-year enrollment and lastly Figure 12 show predicted probabilities for enrollment at both 2- and 4-year institutions. For each figure, numerical subscripts above each bar indicate generational differences within ethnic/regional groups and letters signify generational differences across ethnic/regional groups.

Beginning with Figure 9, while non-enrollment rates were, in general, relatively low for Asian youth (e.g., compared with non-Asian youth), there were significant differences by generational status, and these generational differences often varied in direction and strength across the ethnic/regional subgroups. Taken together, there were at least three findings worth noting for non-enrollment. First, while second-generation Asian youth were, in general, likely to be enrolled in college (i.e., low non-enrollment rates), differences between first- and second-generation youth were only significant for Chinese and Southeast Asians, with second-generation youth more likely to enroll in higher education compared with the first generation (i.e., these second-generation youths had very low non-enrollment rates). Second, compared to the other

Asian ethnic/regional groups, there was a particularly striking first-generation disadvantage for Southeast Asians: First-generation Southeast Asians had particularly high non-enrollment rates compared with all other first-generation Asian youth. Third, while smaller sample sizes often led

Figure 7

Predicted Probabilities of Non-enrollment Rates by Asian Ethnic/Regional Groups and Generational Statuses



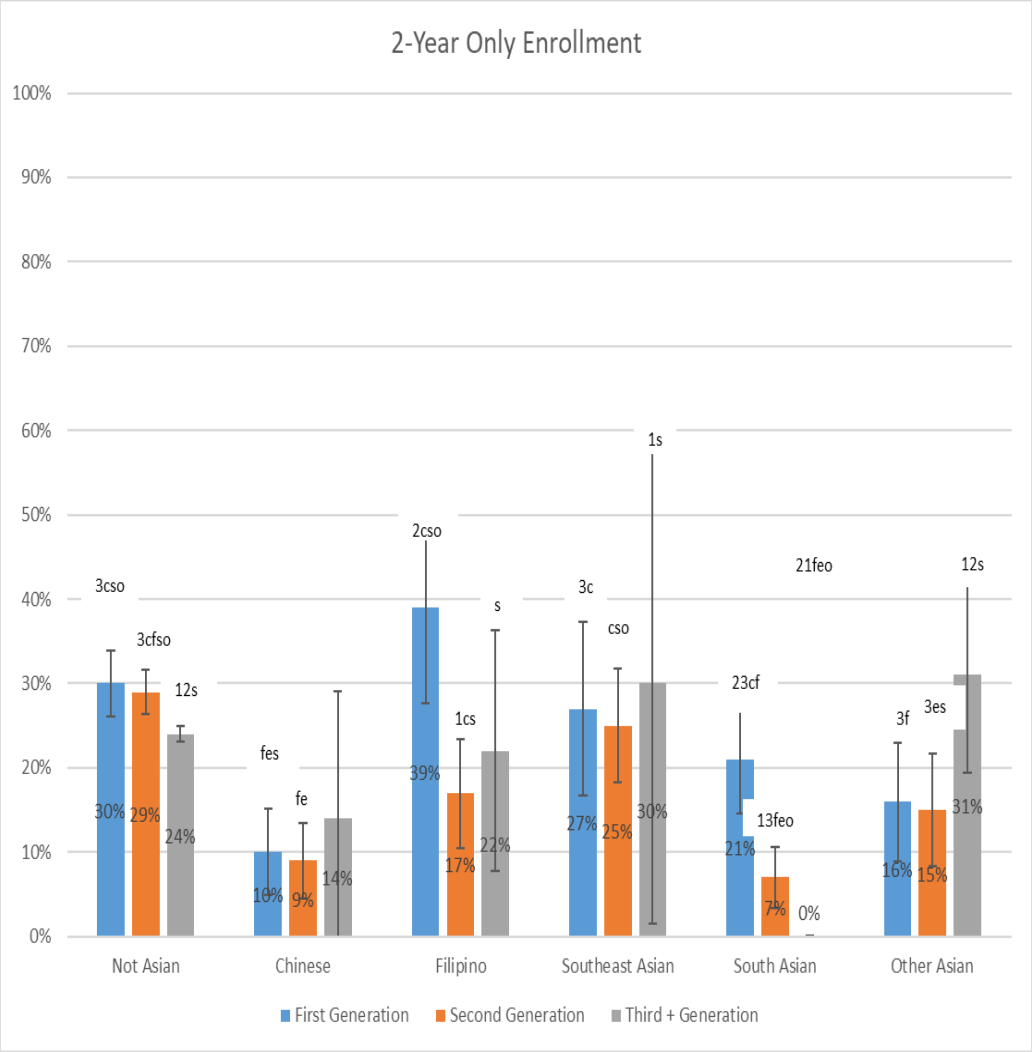
Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

to imprecise estimates (i.e., wide confidence intervals result in few differences that reached statistical significance) for third-generation youth, they often demonstrated the highest rates of non-enrollment.

Turning to rates of enrollment exclusively in 2-year colleges (Figure 10), it is noteworthy that for some Asian groups, third-generation youth were most likely to enroll in 2-year institutions, and for others, first-generation youth were most likely to enroll exclusively in these schools. Specifically, among Chinese, Southeast Asian, and Other Asian youth, third-generation immigrants were more likely to enroll in 2-year colleges compared to their first- and second-generation counterparts, although these differences were not statistically significant for Chinese youth. This difference was most pronounced for "Other Asian" youth, with third-generation "Other Asian" immigrants being approximately twice as likely as their first- or second-generation counterparts to enroll in 2-year colleges. On the other hand, among Filipinos and South Asians, first-generation immigrants were considerably more likely—twice as likely or more—to enroll in 2-year colleges compared with later generations.

Figure 8

Predicted Probabilities of 2-Year Enrollment Rates by Asian Ethnic/Regional Groups and Generational Statuses

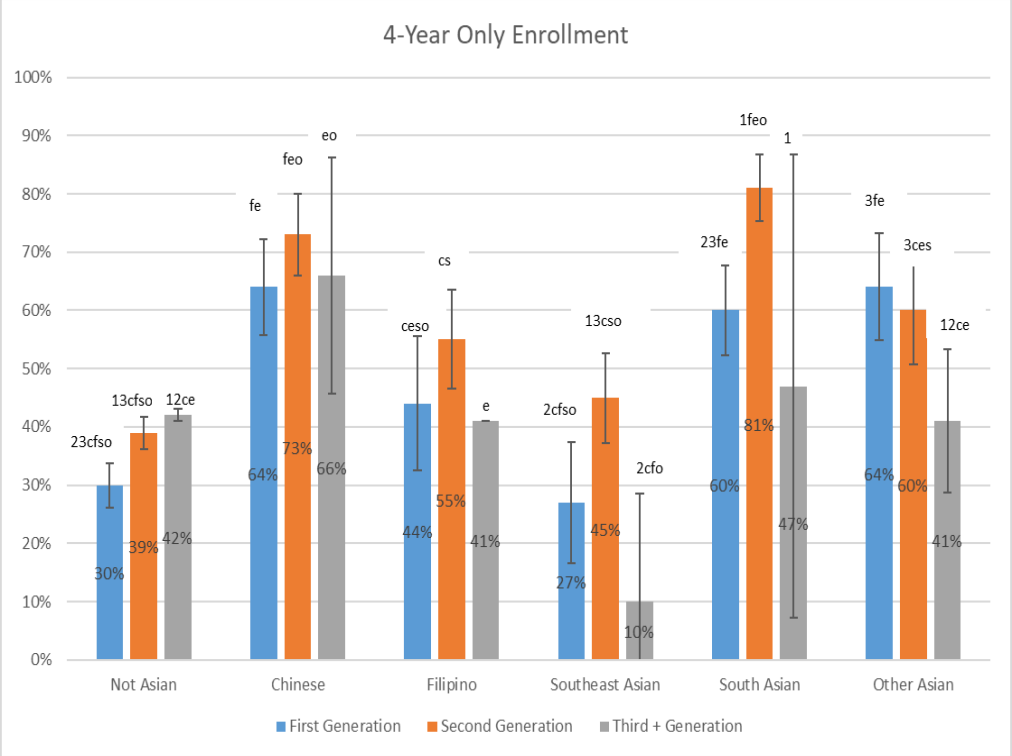


Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

With regard to exclusive enrollment in 4-year colleges (Figure 11), second-generation youth fairly consistently across ethnic/regional subgroups demonstrated the highest enrollment rates, with the exception of "other Asian" youth. This second-generation advantage in 4-year enrollments, however, was only statistically significant for Southeast Asians and South Asians. And for second-generation Southeast Asians, this "advantage" was only relative to other Southeast Asians; for example, their enrollment rates exclusively in 4-year colleges were not only significantly lower than those of most other second-generation Asians but also lower than those of first-generation Chinese and South Asian youth.

Figure 9

Predicted Probabilities of 4-Year Enrollment Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

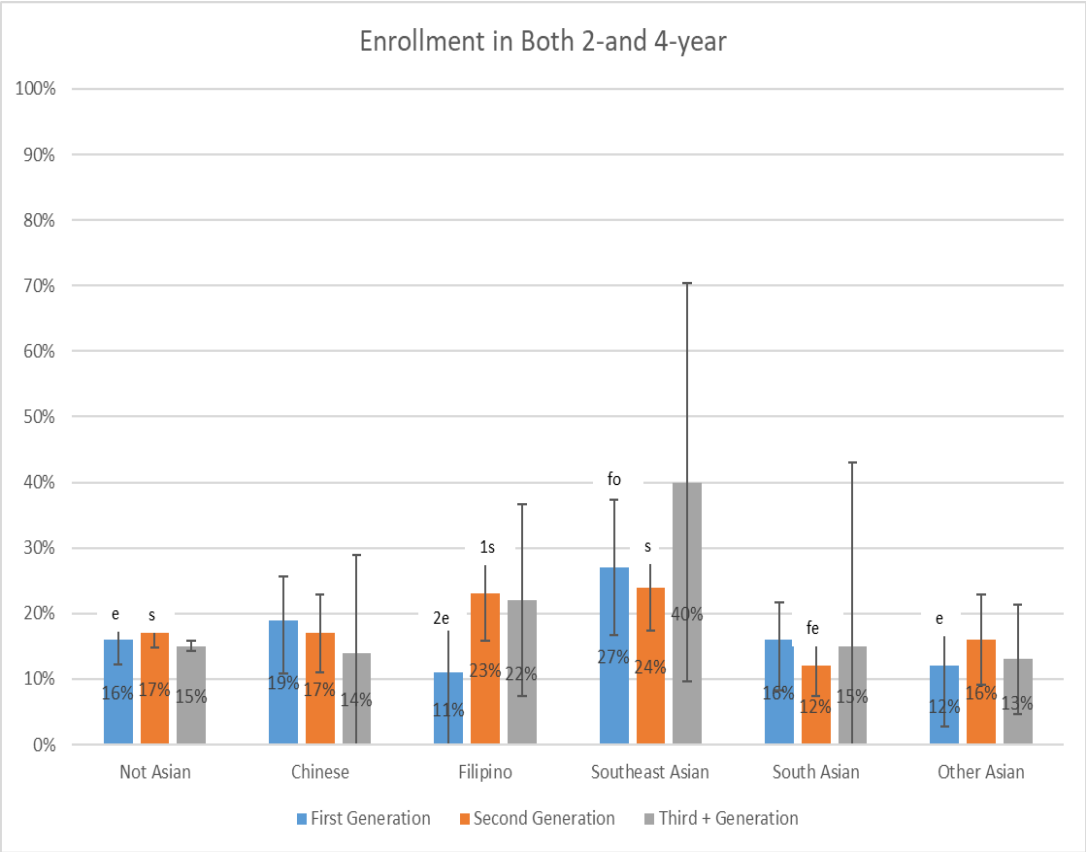
Finally, as displayed in Figure 12, while there were fewer differences—across generations or across ethnic/regional groups—in enrollment in both 2-year and 4-year institutions, at least two findings are worth attention. First, as indicated in the main effect analyses, Southeast Asian youth were particularly likely to enroll in both 2-year and 4-year institutions, and this appeared true regardless of generation (i.e., although rates were higher, in absolute terms, for third-generation youth, none of the generational differences for Southeast

Asians were significant). Second, Filipino youth were the only Asians to demonstrate a second-generation advantage for enrollment in both 2-year and 4-year institutions such that first-generation Filipinos demonstrated lower rates; all other ethnic/regional subgroups demonstrated fairly similar rates across generations, if not somewhat higher rates for first- and/or third-generation youth compared with second-generation youth.

In sum, considering the results across Figures 9–12, second-generation advantages were most dramatically evident for exclusive 4-year enrollment. However, for some Asian youth—notably Filipino, Southeast Asian, and South Asian—there were first- and/or third-generation advantages in 2-year enrollments and, to a lesser degree, in combined 2- and 4-year enrollments. Nonetheless, second-generation advantages were evident overall in college enrollment, as evidenced by their low non-enrollment rates, particularly for Chinese and Southeast Asian youth.

Figure 10

Predicted Probabilities of 2- and 4-Year Enrollment Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

Who Graduated and Persisted in Postsecondary Education?

Models parallel to those for enrollment were also estimated for college attainment and persistence outcomes 3 years after high school graduation. For these analyses, four categories were considered based on outcomes measured 3 years after high school graduation: "never enrolled in college" (*n*=3,503), "attained a 2-year college degree" (*n*=1,407), "still enrolled in college" (*n*=8,924), and "no longer enrolled/dropped out of college" (*n*=2,587). The excluded comparison groups in the multinomial logistic models were Asians, second generation, and those never enrolled. However, all pairwise comparisons were estimated in post-hoc analyses.

Main Effects: Pan-racial/ethnic Variations in Attainment and Persistence

Relative risk ratio coefficients and standard errors for the main effect analyses are displayed below in Table 7, and predicted probabilities are graphed in Figure 13 (displaying differences between gender), Figure 14 (displaying differences among generational statuses), and Figure 15 (displaying differences among pan-racial/ethnic groups).

As displayed in Figure 13, among youth who enrolled in college, males were 1.3 times more likely (i.e., 16% of males vs. 13% of females) than females to drop out of postsecondary educational institutions 3 years after high school graduation. On the other hand, females were 1.25 times more likely to attain a 2-year degree and 1.6 times more likely to continue their enrollment at the time of the second follow-up (i.e., 8% of males vs. 10% of females attained any credentials, and 55% of males vs. 64% of females were still enrolled).

Table 9

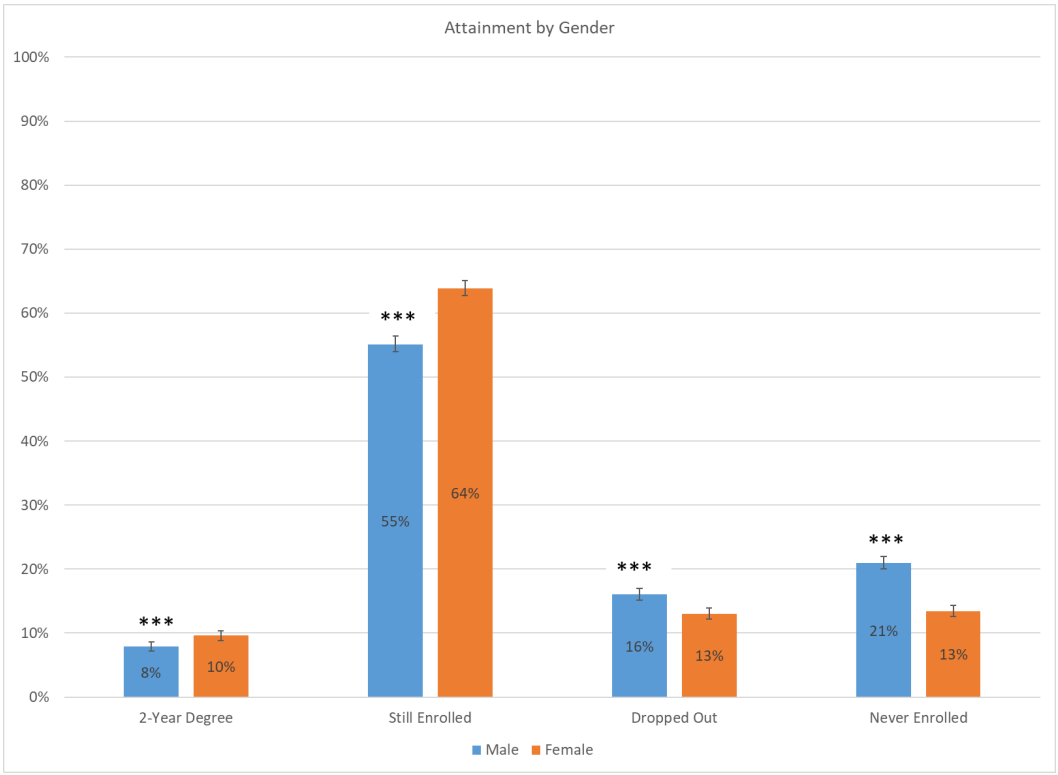
Main Effects: Multinomial Predicting Attainment Statuses Among Pan-racial/ethnic Groupings by Generational Statuses With Asian as Reference Group

	2-Year Degree		Still Enrolled		Dropped Out	
	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	0.52***	0.04	0.54***	0.03	0.79***	0.05
Generation						
First Generation	0.51***	0.09	0.47***	0.05	0.57***	0.08
Third+ Generation	0.55***	0.07	0.46***	0.04	0.76*	0.09
Pan-racial/ethnic Groups						
American Indian/Alaska Native	0.26*	0.14	0.11***	0.04	0.48*	0.18
Black/African-American	0.48**	0.12	0.23***	0.04	0.62*	0.13
Latinx	0.44***	0.09	0.14***	0.02	0.42***	0.08
Multiracial	0.5**	0.12	0.23***	0.04	0.56**	0.12
Native Hawaiian/Pacific Islander	0.50	0.25	0.16***	0.06	0.13**	0.09
White	0.62*	0.14	0.34***	0.05	0.5**	0.10
Intercept	2.17***	0.46	32.2***	5.1	2.46***	0.48

Note. n=11,718. The multinomial regression above excluded female, second generation, and Asian as reference groups among independent variables. The reference level for the dependent variable was non-enrollment. *p<.05. **p<.01. ***p<.001. RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 664.51 with a p-value<0.001, showing that the final model as a whole fits significantly better than an empty model.

Figure 13

Predicted Probabilities of Attainment Statuses by Gender

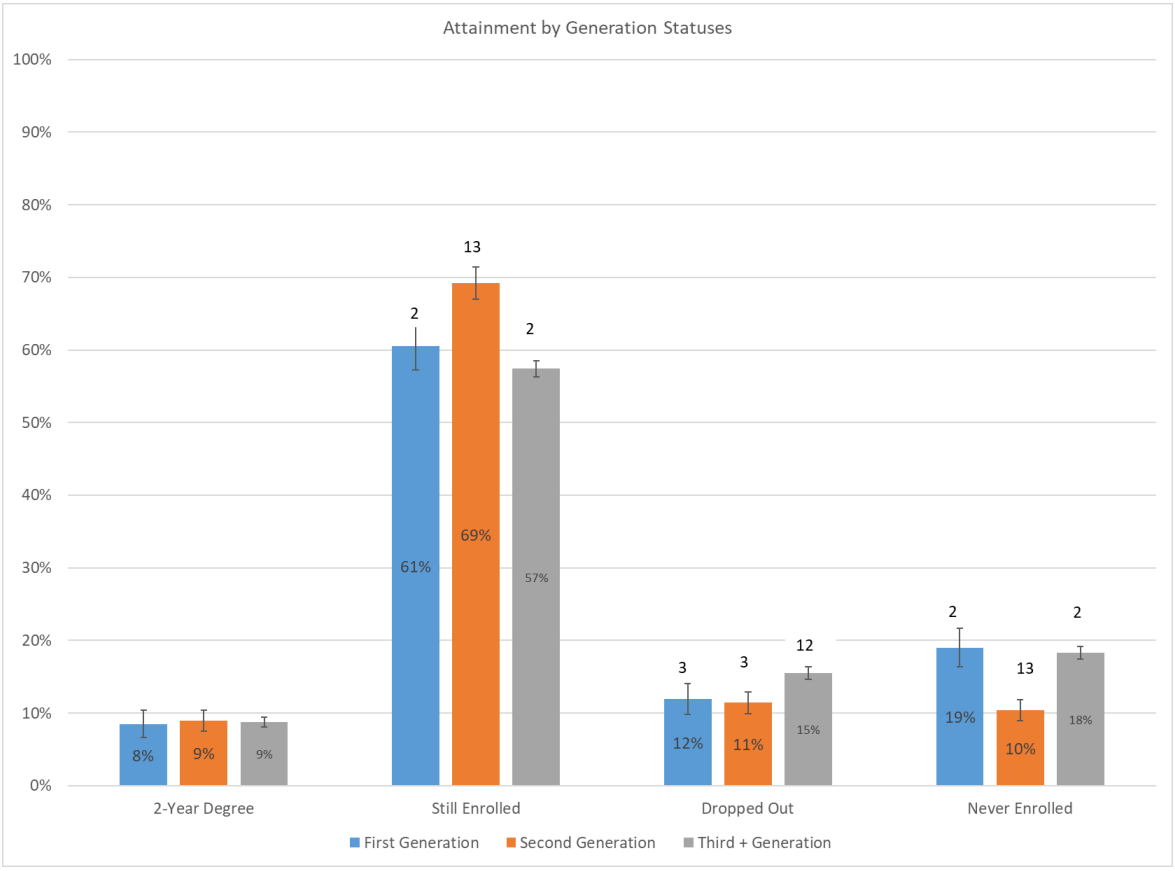


Note. Superscripts indicate differences in enrollment levels between males and females as follows: $p<.05$. $^{**}p<.01$. $^{***}p<.001$.

As displayed in Figure 14, second-generation students had the highest continued enrollment in a postsecondary institution (persistence), 7 percentage points higher than the first generation and 12 percentage points higher than the third generation. Importantly, however, this advantage was driven largely by their high rates of initial enrollment (i.e., their low rates of being in the unenrolled category). There were, in fact, no advantages for second-generation youth for attainment rates. And, while second-generation youth had significantly lower dropout rates than the third generation, so too did first-generation youth, with no significant difference between first- and second-generation youth in terms of dropout rates.

Figure 12

Predicted Probabilities of Attainment Statuses by Generation



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

In Figure 15, variations across pan-racial/ethnic groups are displayed for the types of attainment youth displayed during the second follow-up (3 years after high school graduation). One important finding in Figure 15 is the significantly higher rate of continued enrollment in postsecondary institutions evidenced by Asian youth (77%) compared with all other groups. Asian youth's continued enrollment rate was 14 percentage points higher than that of Whites (63%), the group occupying the second-highest continued enrollment rate. Asian continued enrollment rates (persistence) were also almost two times higher than those of American

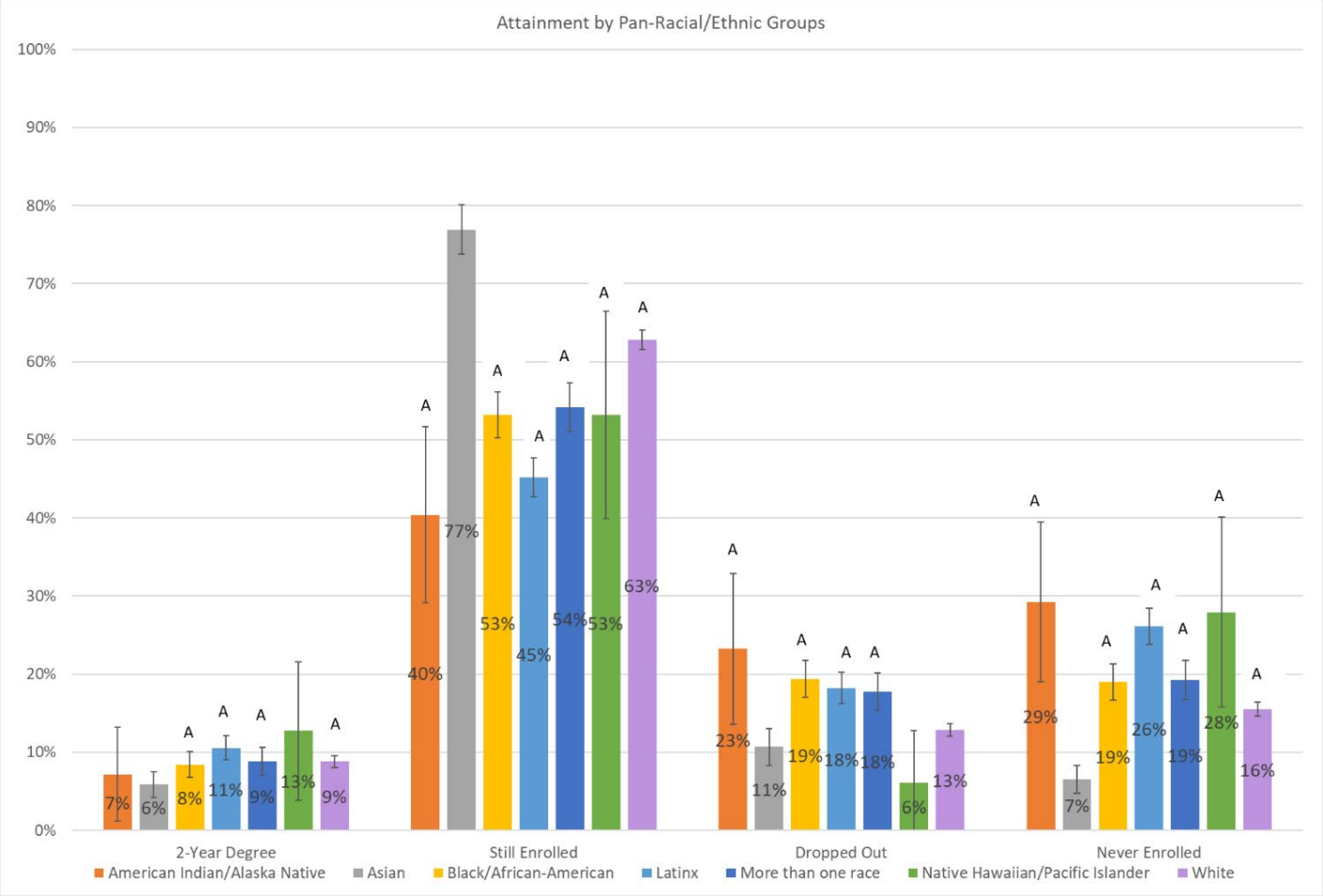
Indians/Alaskan Natives (40%), the group with the lowest continued enrollment rate. In turn, Asian youth were significantly *less* likely than all other pan-racial/ethnic groups to attain either a postsecondary degree (note that this outcome is heavily skewed towards 2-year attainment), drop out, or not be enrolled. Pan-racial/ethnic differences in postsecondary attainment were relatively small—differing only by a couple of percentage points, with statistically significant differences from Asians seen among Black, Latinx, Multiracial, and White youth. On the other hand, there were larger discrepancies seen between Asian and other groups in dropout and non-enrollment rates. As displayed in Figure 15, the American Indian/Alaskan Native (AIAN), Black, Multiracial, and Latinx groups had significantly higher rates of dropouts compared to Asians (23%, 19%, 18%, 18%, respectively). Among these groups, the most pronounced discrepancy was seen between Asians and AIANs, where dropout rates for AIAN youth were almost twice as high as for Asians (23% vs. 11%).

It is interesting to also note that lower continued enrollment for AIAN, Black, Multiracial, and Latinx youth compared to Asians was driven by higher dropout rates, but also by lower initial enrollment (or higher non-enrollment). In most cases, the relative risk ratios in Table 7 show that non-enrollment rates were higher than dropout rates among all of these groups—indicating that these groups were less likely to enroll in higher education initially. Notice that for Asian youth, *dropout rates* (11%) were 1.57 times higher than non-enrollment rates (7%), while among AIAN, Black, Multiracial, and Latinx youth, *non-enrollment rates* were either higher than or similar to dropout rates. For instance, in Table 7, Latinx were 42% less likely to drop out compared to not enrolling (Latinx dropout rates were 18% vs. non-enrollment rates of 26%). This is also the case with AIANs, among whom non-enrollment (29%) was higher than dropouts (23%), and the relative risk ratios indicate that the variation was statistically different from

Asians. For Black and Multiracial youth, dropouts and non-enrollment were relatively similar (19% for Black dropouts and non-enrollment, 18% for Multiracial dropouts and 19% for non-enrollment).

Figure 13

Predicted Probabilities of Attainment Statuses by Pan-racial/ethnic Groups



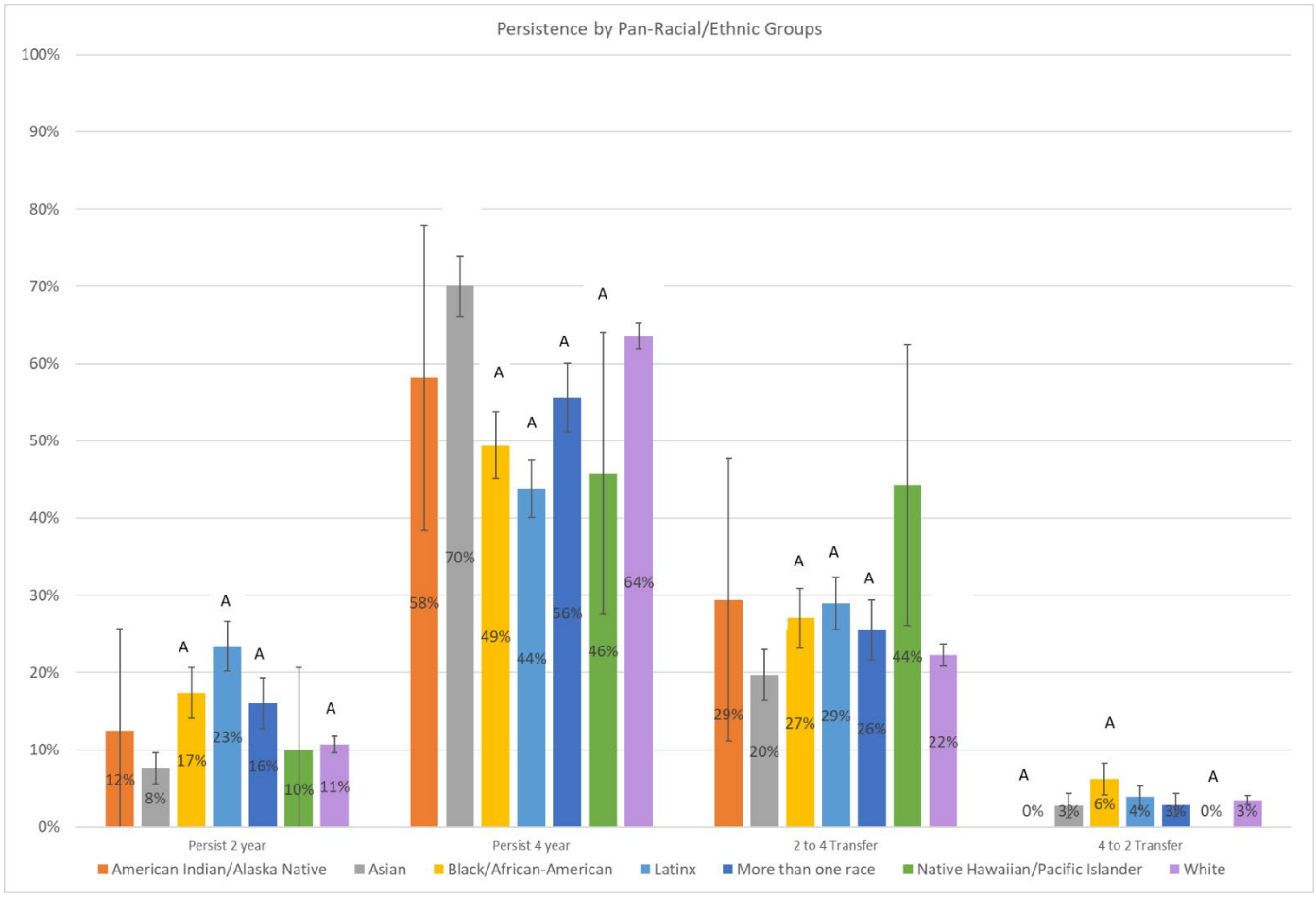
Note. Significant differences at the $p<.05$ level between each pan-racial/ethnic group and Asians are indicated with an "A."

Persistence Types by Pan-racial/ethnic Groups

As displayed in Figure 16, differences in persistence (continued enrollment) were found between Asians and several other pan-racial/ethnic groups. Beyond persistence differences, there were also differences in the types of institutions at which students persisted. In Figure 16, four different types of persistence were estimated, namely, persistence at 2-year institutions, persistence at 4-year institutions, upward transfers from 2- to 4-year institutions, and downward transfer from 4- to 2-year institutions. Black (17%), Latinx (23%), Multiracial (18%), and White (11%) youth all had higher persistence rates at 2-year institutions compared with Asians (8%). More specifically, Latinx had the highest 2-year persistence rate, which was 2.87 times higher than that of Asians. Also note that at the time of data collection, it had been 3 years since high school graduation; therefore, continued enrollment at a 2-year institution beyond the 2-year mark might in fact be an indication of a disadvantage rather than an advantage. Rather, upward transfer rates from 2- to 4-year institutions are a better indication of educational progression. In fact, upward transfer rates were higher for Black (27%), Latinx (29%), and Multiracial (26%) youth compared with Asians (20%). Meanwhile, Asian youth (70%) were more likely than Black (49%), Latinx (44%), Multiracial (56%), and Native Hawaiian/Pacific Islander (46%) students to persist at 4-year institutions. The most pronounced difference was evident between Asians and Latinx, where Asians were 1.59 times more likely to persist at a 4-year institution compared to Latinx. In addition, Black youth had twice the rate of downward transfers from 4- to 2-year institutions compared to Asians (6% vs. 3%).

Figure 14

Predicted Probabilities of Persistence Type by Pan-racial/ethnic Groups



Note. Significant differences at the $p<.05$ level between each pan-racial/ethnic group and Asians are indicated with an "A."

Interaction Effects for Attainment: Generational differences Between and Within Pan-racial/ethnic Groups

The next section estimates within– and between–pan-racial/ethnic differences in attainment at the second follow-up (3 years after high school graduation) by generational statuses. An interaction term was added to the main effects model to estimate these pan-

racial/ethnic variations as a function of generational effects. Or, said differently, the interaction model also estimated generational variations as a function of pan-racial/ethnic groupings. Table 8 displays relative risk ratios and standard errors estimating attainment statuses (i.e., attainment of either a 2- or 4-year credential, continued enrollment, discontinued enrollment, and non-enrollment) with an interaction term between pan-racial/ethnic groupings and generational statuses. Corresponding figures (Figure 17–20) display the predicted probabilities of attainment outcomes for each pan-racial/ethnic group disaggregated by generational statuses. Figure 17 displays the predicted probabilities of attainment outcomes for Asians, Figure 18 for Latinx, Figure 19 for Blacks and Whites, and Figure 20 for Native Hawaiians/Pacific Islanders and Multiracial youth. In Figure 17, above each bar, pan-racial differences compared to Asians are signified with letters. In all figures, generational differences within pan-racial/ethnic groupings are signified with numerical values above each bar.

As displayed in Figure 17 and signified by "L," Asian first- and second-generation youth's rates of postsecondary degree attainment was close to two times less than that of Latinx counterparts (Figure 17 displays Asian first- and second-generation 2/4-year degree attainment, 5% and 6%, respectively; Figure 18 displays Latinx first- and second-generation 2/4-year degree attainment, 9% and 12%, respectively). Note that the degree attainment outcome (4- or 2-year degree) primarily reflected 2-year degree attainment (less than 1% of those in this category had attained a 4-year credential). Meanwhile, Asian first-generation youth were less likely than second-generation youth to still be enrolled in a postsecondary institution 3 years after high school—a small 5-percentage-point difference signified by numerical values above each bar. Pan-racial/ethnic estimates for continued enrollment (still enrolled) show that first-, second-, and third-generation Asian youth were more likely to persist (continue enrollment) compared to

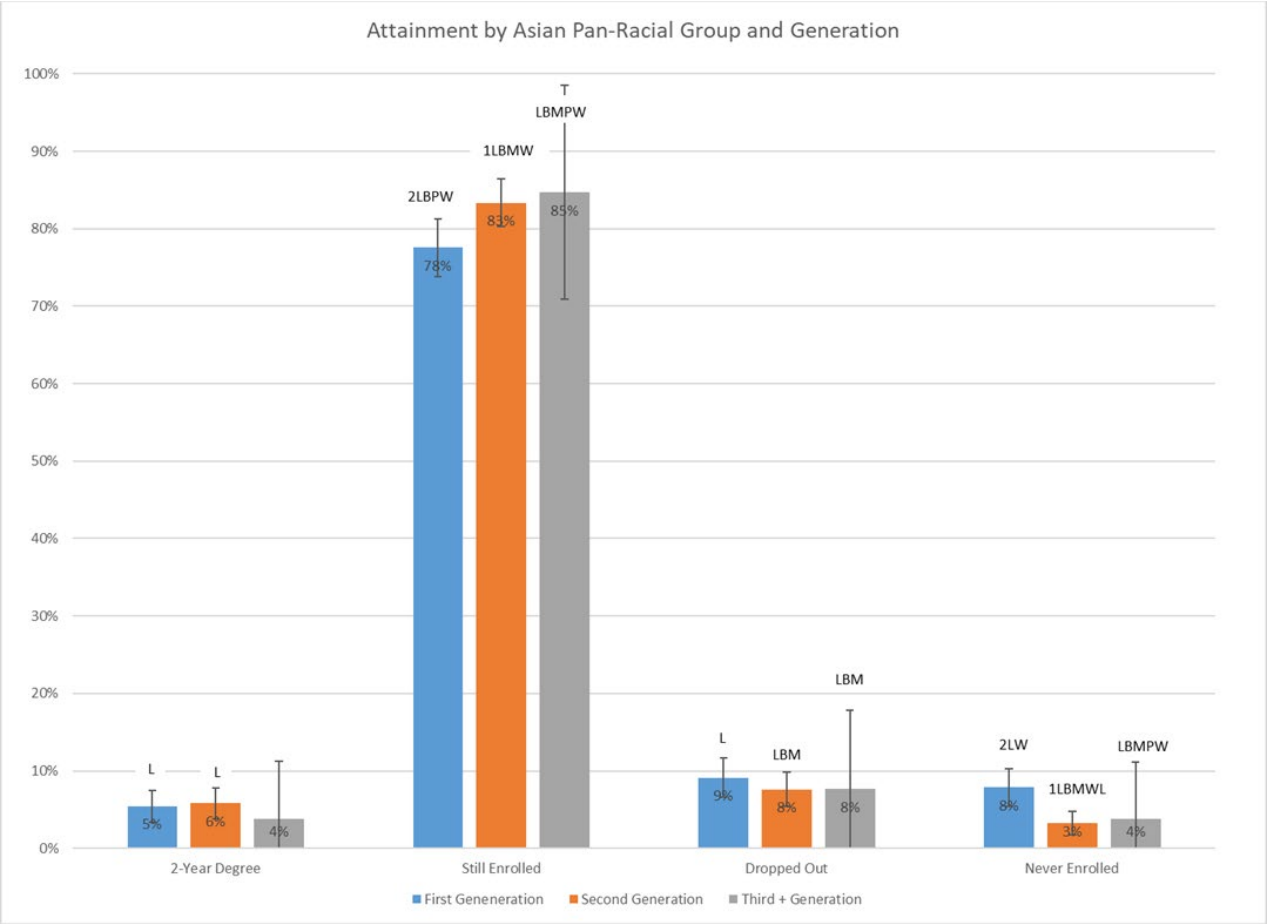
Latinx (rates displayed in Figure 18), Black (rates displayed in Figure 19), Native Hawaiian and Pacific Islander (rates displayed in Figure 20), multiracial (rates displayed in Figure 20), and White youth (rates displayed in Figure 19). With the exception of first generation multiracial youth who were not different in their continued enrollment rates compared to Asian counterparts. The most pronounced difference in continued enrollment rates for first- and third-generation Asians were with NHPI counterparts. Compared with NHPIs (rates for first generation were 46% and second generation were 81% in Figure 20), first-generation Asians (78%) were 1.7 times more likely and third-generation Asians (85%) were more than twice as likely to continue being enrolled.

On the other hand, second-generation differences were most pronounced between Asians and Latinx. Second-generation Latinx (52%, displayed in Figure 18) were 1.6 times less likely to be continuously enrolled compared to Asian counterparts (83%, displayed in Figure 17). Dropout rates are also displayed in Figure 17. Results indicate that first-generation Asian youth had lower dropout rates compared to Latinx counterparts—specifically, Latinx first-generation youth were 1.6 times more likely to drop out compared to first-generation Asians (first-generation Latinx had a dropout rate of 15%, and first-generation Asians had a dropout rate of 9%). However, the relative risk ratios displayed in Table 8 show that second-generation Latinx were 32% less likely to drop out as opposed to not enrolling compared to second-generation Asians. Specifically, second-generation Latinx were 1.3 times more likely to not enroll (21%) versus dropout (16%), while among second-generation Asians, dropout rates (8%) were close to three times that of enrollment rates (3%). In other words, the discrepancy evident between second-generation Latinx and Asians in persistence (continuous enrollment) is driven primarily by Latinx youth's lower initial enrollment (high non-enrollment rate) versus dropout rates and

Asian youth's higher initial enrollment (low non-enrollment) versus dropout rates. On the other hand, second- and third-generation Asian youth had significantly lower dropout rates than counterparts who identified as Latinx, Black, or Multiracial. Of these three groups, the most pronounced difference from Asians was with Black and Multiracial youth; Black second-generation youth (14%) were 1.75 times and Multiracial second-generation youth (13%) were 1.63 times more likely to drop out compared to their Asian counterparts (second-generation Asians' dropout rates were 8%). Meanwhile, third-generation Blacks (21%) and multiracial youth (2%) were more than 2.5 times more likely to drop out compared to third-generation Asians (8%).

Figure 15

Predicted Probabilities of Asian Pan-racial/ethnic Group's Attainment Statuses by Generational Statuses



Note. This figure displays the predicted probability of attainment statuses for those who identified with the Asian Pan-racial group. Letters above each bar indicate differences in enrollment across race/ethnic groups within the same generational status from either Asian in the following ways: "L" indicates differences from Latinx, "W" indicates differences from White, "B" indicates difference from Black, "M" indicates differences from More than one race, and "P" indicates differences from Native Hawaiian/Pacific Islander. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

Table 10

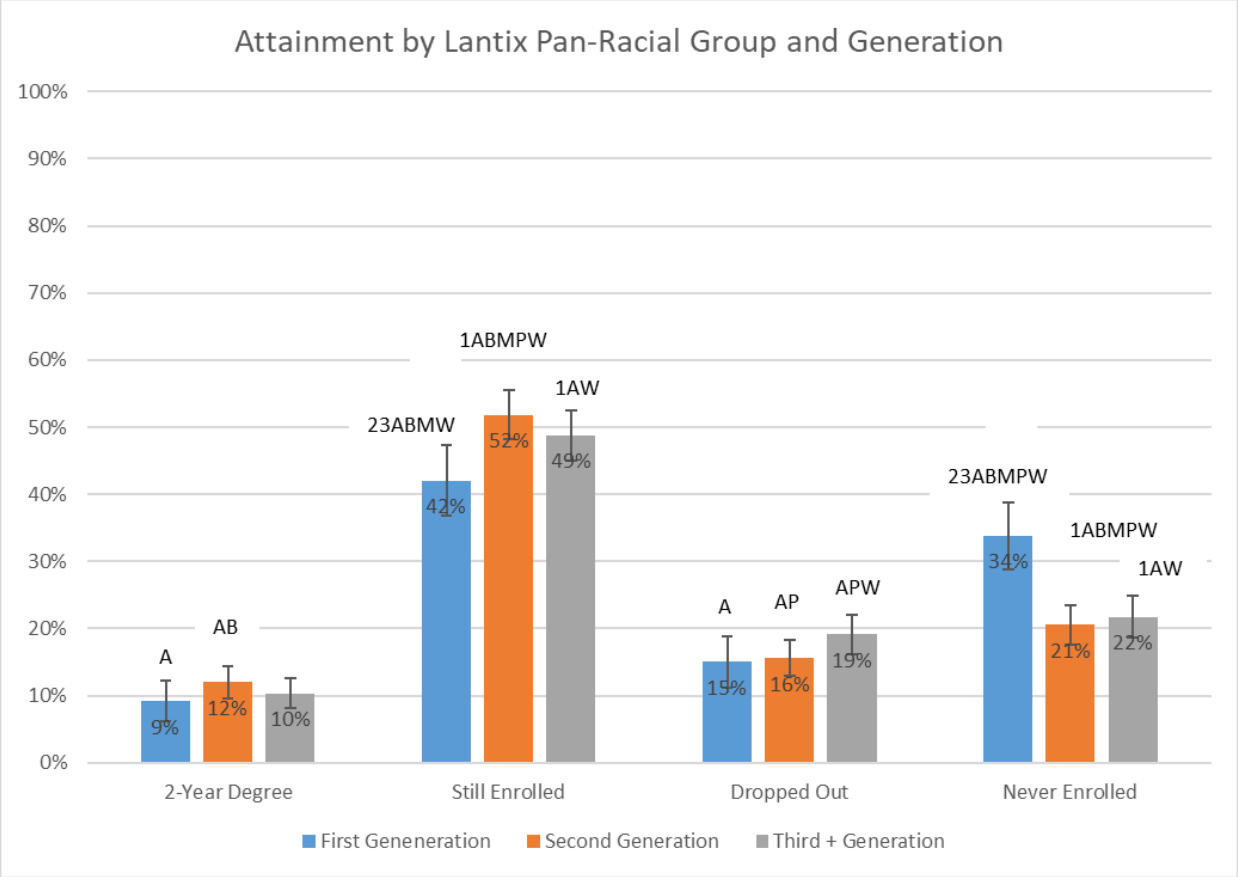
Interaction Effects: Multinomial Predicting Enrollment Statuses Among Pan-racial/ethnic Groupings by Generational Statuses With Asian as Reference Group

	2-Year Degree		Still Enrolled		Dropped Out	
	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	0.52***	0.04	0.54***	0.03	0.79***	0.61
Generation						
First Generation	0.39*	0.15	0.38**	0.11	0.5	0.91
Third+ Generation	0.57	0.82	0.86	0.91	0.86	0.24
Pan-racial/ethnic Groups						
Black/African-American	0.35	0.20	0.29**	0.12	0.66	0.31
Latinx	0.32***	0.10	0.1***	0.03	0.32***	0.1
Multiracial	0.61	0.27	0.34**	0.12	0.68	0.29
Native Hawaiian/Pacific Islander	1.11	1.41	0.66	0.7	0.43	0.62
White	0.68	0.27	0.4**	0.13	0.7	0.26
Interaction Effects						
Black/African-American #1	4.26	3.4	1.99	1.16	1.66	1.17
Black/African-American #3	1.09	1.67	0.35	0.38	0.73	0.97
Hispanic #1	1.18	0.55	1.27	0.43	1.17	0.49
Hispanic #3	1.44	2.1	1.03	1.09	1.35	1.71
Multiracial #1	2.76	2.1	1.76	1.04	1.04	0.8
Multiracial #3	0.61	0.91	0.28	0.3	0.63	0.82
Native Hawaiian/Pacific Islander #1	0.72	1.07	0.23	0.28	0.39	0.72
Native Hawaiian/Pacific Islander #3	0.23	0.47	0.05	0.08	0.15	0.32
White #1	1.13	0.67	1.19	0.51	1.11	0.6
White #3	0.75	1.1	0.4	0.42	0.57	0.73
Intercept	2.54**	0.76	35.93***	8.73	2.7***	0.77

Note. n=11,718. The multinomial regression above excluded female, second generation, and Asian as reference groups among independent variables. The reference level for the dependent variable was not enrolled. *p<.05. **p<.01. ***p<.001. RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 742.36 with a p-value<0.0001, showing that the final model as a whole fits significantly better than an empty model. American Indians/Alaskan Natives were omitted due to small sample size.

Figure 16

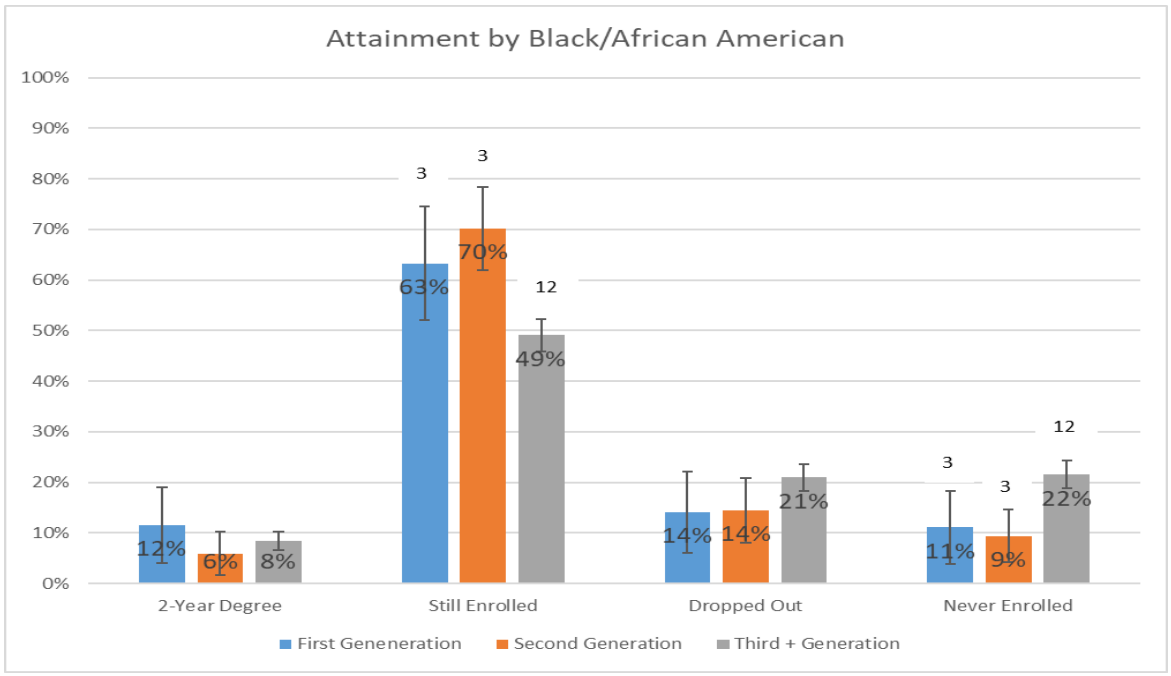
Predicted Probabilities of Latinx Pan-ethnic Group's Attainment Statuses by Generational Statuses

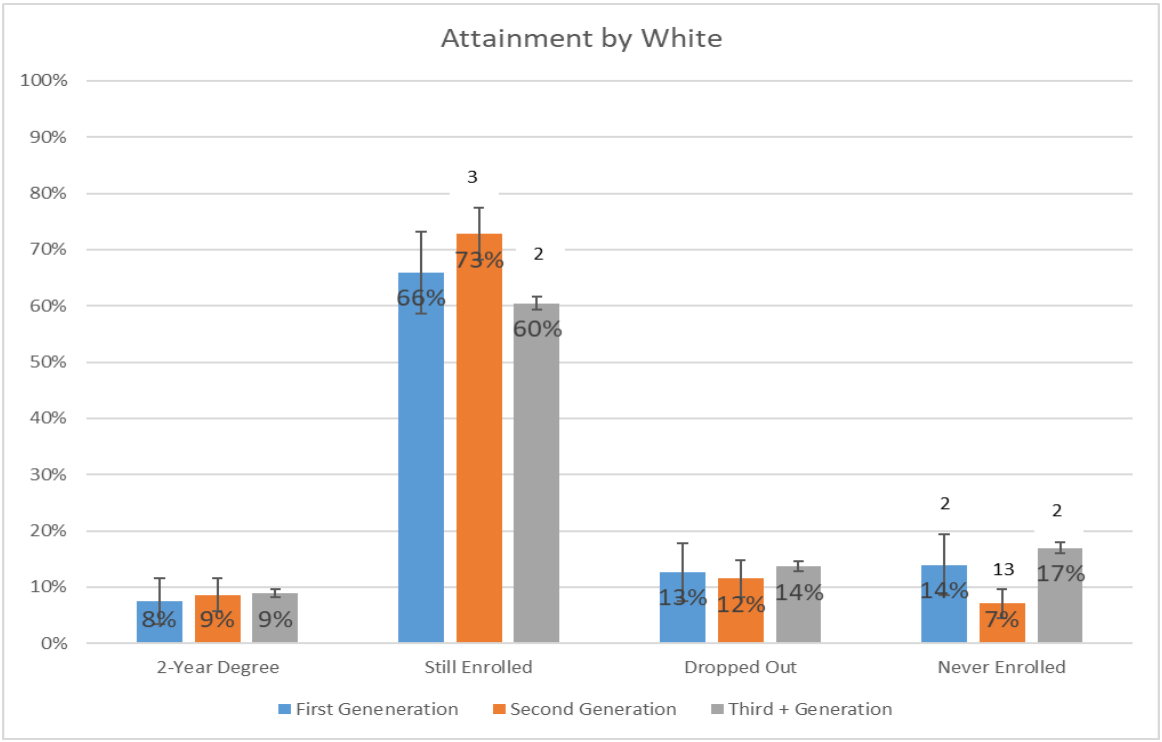


Note. This figure displays the predicted probability of attainment statuses for those who identified with the Latinx pan-ethnic group. Letters above each bar indicate differences in enrollment across race/ethnic groups within the same generational status from either Latinx in the following ways: "A" indicates differences from Asian, "W" indicates differences from White, "B" indicates difference from Black, "M" indicates differences from More than one race, and "P" indicates differences from Native Hawaiian/Pacific Islander. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

Figure 17

Predicted Probabilities of White and Black Attainment Statuses by Generational Statuses

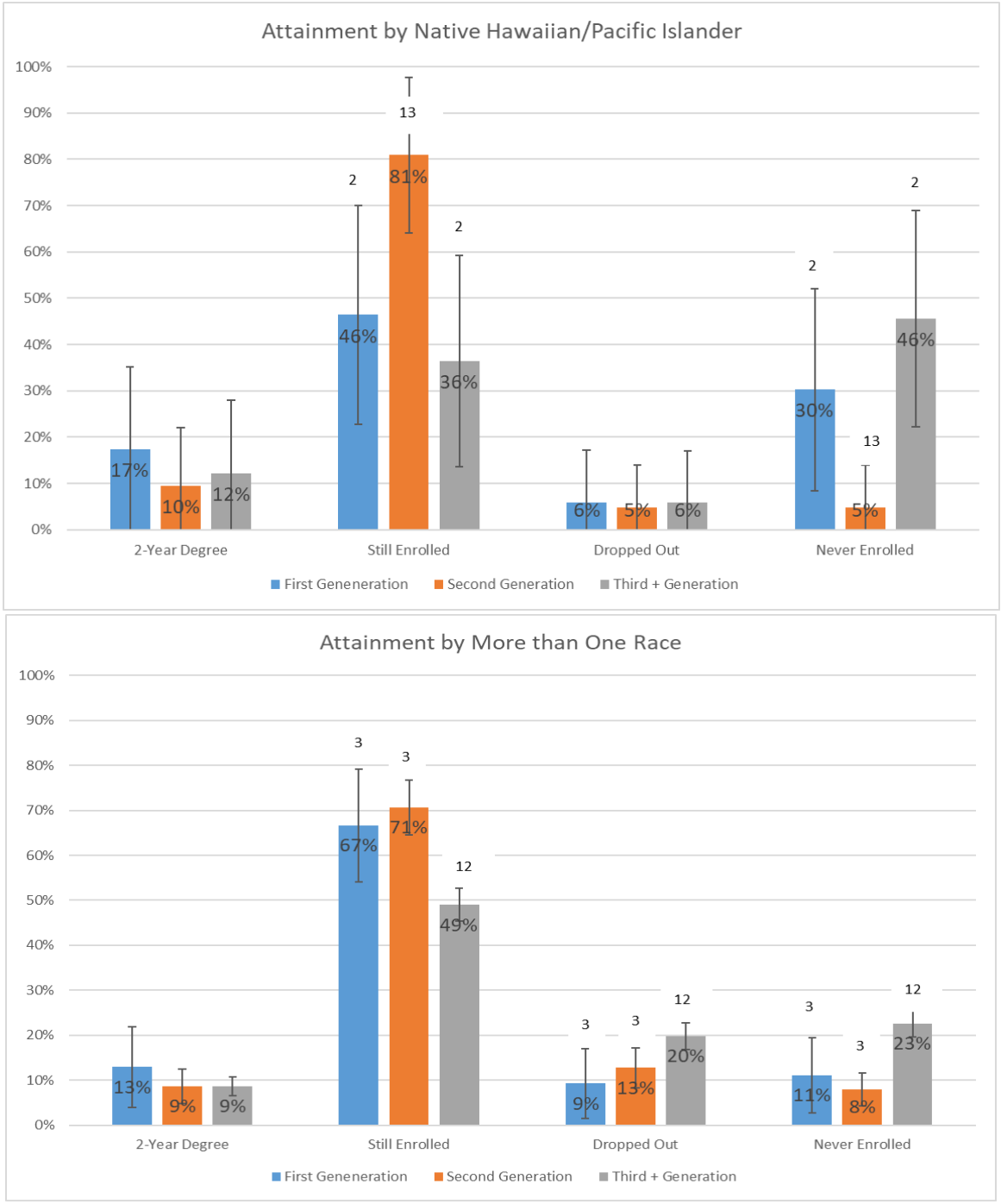




Note. Numerical values indicate significant differences at the $p<.05$ level between generations. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

Figure 18

Predicted Probabilities of Multiracial and Native Hawaiian/Pacific Islander Attainment Statuses by Generational Statuses



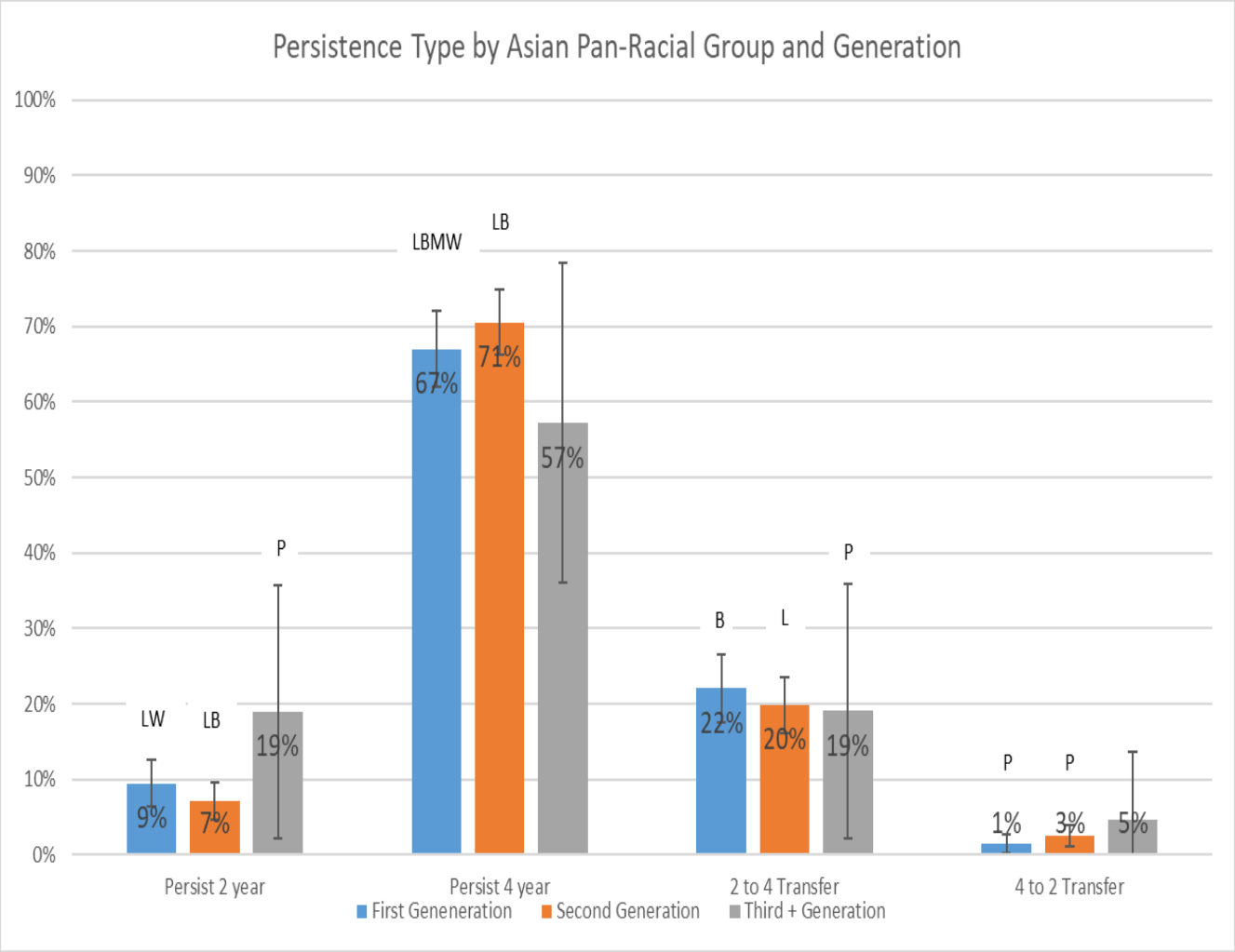
Note. Numerical values indicate significant differences at the $p<.05$ level between generations. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation.

Persistence Types by Pan-racial/ethnic Groups and Generational Statuses

The focus of this dissertation is on Asian immigrants; therefore, further disaggregation of persistence types for Asians by generational statuses is explored in this section. Figure 21 displays persistence type for Asians by generational statuses (i.e., 2-year persistence, 4-year persistence, 2- to 4-year transfers, and 4- to 2-year transfers). At the pan-racial level, no generational differences existed within Asian youth across all types of persistence. However, differences were found between Asians and other groups within the same generational status. For instance, Asian first-generation youth (9%) had significantly lower rates of persistence at 2-year institutions compared to Latinx (29%) and Whites (23%). On the other hand, second-generation Asians (7%) had lower 2-year persistence rates compared to Latinx (24%) and Blacks (18%). Next, estimates for 4-year persistence rates showed that first-generation Asians exhibited the highest rate (67%) compared to Latinx (39%), Black (46%), Multiracial (45%), and White (49%) counterparts. In addition, first-generation Black youth (41%) were more likely to transfer up from a 2- to 4-year college compared to Asians, as were second-generation Latinx (30%). Lastly, Native Hawaiians/Pacific Islanders were more likely to transfer up from a 2- to 4-year college compared to their Asian counterparts.

Figure 19

Predicted Probabilities of Asian Pan-racial/ethnic Group's Persistence Type by Generational Statuses



Note. This figure displays the predicted probability of attainment statuses for those who identified with the Asian Pan-racial group. Letters above each bar indicate differences in enrollment across race/ethnic groups within the same generational status from either Asian in the following ways: "L" indicates differences from Latinx, "W" indicates differences from White, "B" indicates difference from Black, "M" indicates differences from More than one race, and "P" indicates differences from Native Hawaiian/Pacific Islander. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. Estimates for Native Hawaiian/Pacific Islander in "4 to 2 Transfer" are unreliable due to small *n*-sizes.

Main Effects of Asian Ethnic/Regional Variations in Attainment and Persistence

Attainment outcomes among Asian pan-racial/ethnic differences are further disaggregated into ethnic/regional groups in the current section. The primary aim of this section is to examine differences between Asian ethnic/regional groups as they relate to attainment, with a secondary focus on generational differences within and between groups. Results for the main effects of generational statuses and Asian ethnic/regional groups (controlling for gender) on various attainment statuses are displayed in Table 9 (Southeast Asian youth were the excluded/comparison group), with corresponding predicted probabilities for Asian ethnic/regional differences in Figure 22.

Table 11

Main Effects: Multinomial Predicting Attainment Statuses Among Asian Ethnic/Regional Groups

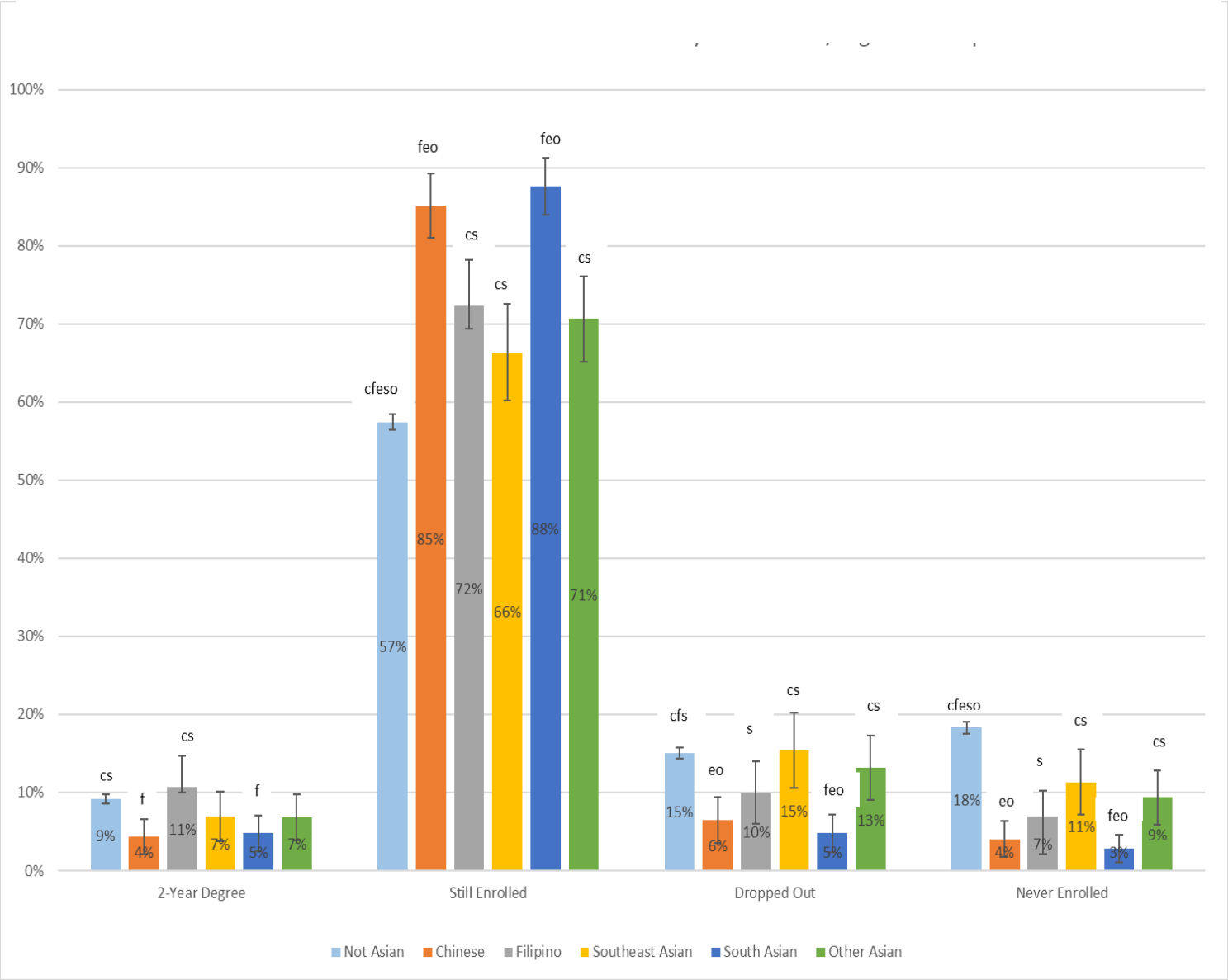
	2-Year Degree		Still Enrolled		Dropped Out	
	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	0.52***	0.04	0.55***	0.03	0.78***	0.05
Generation						
First Generation	0.57**	0.1	0.54***	0.06	0.61**	0.09
Third+ Generation	0.69**	0.08	0.72***	0.06	0.85	0.09
Asian Ethnic/Regional Groups						
Not Asian	0.81	0.26	0.53**	0.12	0.6	0.16
Chinese	1.78	0.89	3.64***	1.33	1.18	0.54
Filipino	2.54*	1.13	1.79	0.61	1.06	0.44
South Asian	2.77*	1.4	5.33***	2.07	1.24	0.6
Other Asian	1.2	0.51	1.29	0.38	1.04	0.38
Intercept	1.21	0.38	10.92***	2.4	1.86**	0.5

Note. n=11,610. The multinomial regression above excluded female, second generation, and Southeast Asian as reference groups among independent variables. The reference level for the dependent variable was not enrolled. *p<.05. **p<.01. ***p<.001. RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 510.59 with a p-value<0.0001, showing that the final model as a whole fits significantly better than an empty model.

Main effects for ethnic/regional groups (controlling for generational statuses and gender) are reported in Table 9, with the corresponding Figure 22 displaying the predicted probabilities of each Asian ethnic/regional group's attainment statuses. As displayed in Figure 22, Filipino youth had the highest attainment of postsecondary credentials at 11%. This rate is more than twice that of Chinese (85%) and South Asians (88%) specifically. Note that this variable consisted almost entirely of 2-year degree attainment. Therefore, it is highly likely that the Filipino youth attained 2-year degrees at a higher rate than Chinese and South Asians at the second follow-up (and not 4-year degrees). Notice also that the Chinese and South Asian youth had higher continued enrollment rates compared to Filipinos (72%), Southeast Asians (66%), and Other Asians (71%). More specifically, Table 9's relative risk ratios indicate that Chinese youth were 3.6 times more likely to be continuously enrolled compared to Southeast Asians, while South Asians were more than five times more likely to be continuously enrolled than Southeast Asians. Dropout and non-enrollment rates for Southeast Asians were also significantly higher than for Chinese and South Asians, as displayed in Figure 22. In particular, Southeast Asian youth (15%) were more than twice as likely to drop out compared to both Chinese (6%) and South Asians (5%). Southeast Asians (11%) were also 2.75 times more likely not to be enrolled compared to Chinese (4%) and 3.7 times more likely not to be enrolled compared to South Asians (3%). Overall, Chinese and South Asians were the two groups with the highest rates of continued enrollment, offset by lower dropout and non-enrollment rates compared to almost all other Asian ethnic/regional comparison groups.

Figure 20

Predicted Probabilities of Attainment Statuses by Asian Ethnic/Regional Groups



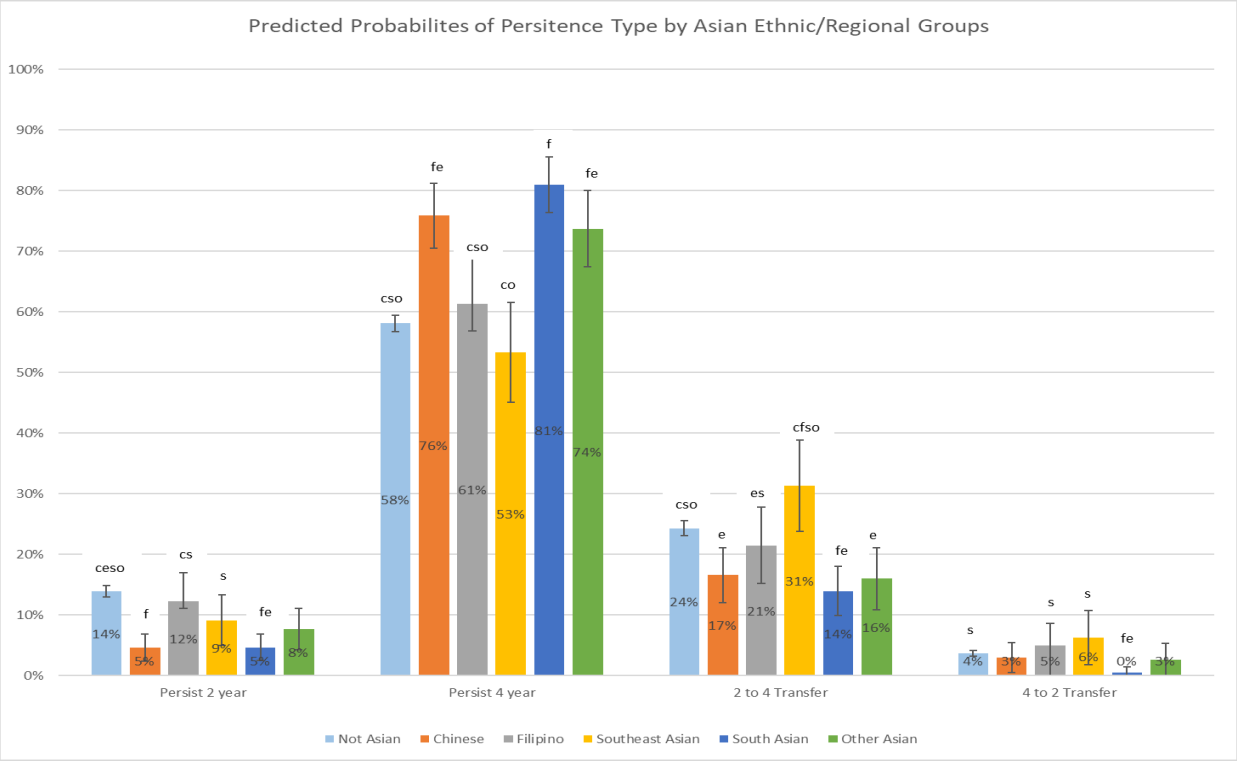
Note: Differences at $p<.05$ between various attainment levels across Asian ethnic/regional groups are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian. These predicted probabilities were generated from the main effects model controlling for gender and generational statuses with all pairwise comparisons conducted.

Persistence Types by Asian Ethnic/Regional Groups

Persistence types by Asian ethnic/regional groups were further explored, and the predicted probabilities are presented in Figure 23. Filipinos (12%) were 2.4 times more likely to persist at a 2-year college compared to both Chinese (5%) and South Asians (5%), while South Asians also had lower 2-year persistence rates also compared to Southeast Asians (9%). More specifically, Southeast Asians were 1.8 times more likely to persist in 2-year institutions compared to South Asians. On the other hand, persistence at 4-year institutions was highest among Chinese (76%), South Asians (81%), and Other Asians (74%). More specifically, Chinese were 1.24 times likelier than Filipinos (61%) and 1.43 times likelier than Southeast Asians (53%) to persist at a 4-year institution, while South Asians were only likelier than Filipinos (1.3 times). Other Asians had higher 4-year persistence rates than both Filipinos (1.2 times) and Southeast Asians (1.4 times). Although Southeast Asians experienced lower 4-year enrollment, upward 2- to 4-year transfers were highest among Southeast Asians (31%). Southeast Asians utilized this path of higher education more than all other Asian groups. As for downward transfer, Filipinos (5%) and Southeast Asians (6%) were more likely to experience this regression than South Asians (0%).

Figure 21

Predicted Probabilities of Persistence Type by Asian Ethnic/Regional Groups



Note: Differences at $p<.05$ between various attainment levels across Asian ethnic/regional groups are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian. These predicted probabilities were generated from the main effects model controlling for gender and generational statuses with all pairwise comparisons conducted.

Interaction Effects for Attainment: Generational Differences Between and Within Asian Regional/Ethnic Groups

An interaction term between ethnic/regional group and generational status was added to the main effects model to estimate generational differences in postsecondary attainment across and within Asian ethnic/regional groups. Table 10 displays postsecondary attainment outcomes disaggregated by generational levels, with Southeast Asians as the reference group. In addition to the regression results, also presented are corresponding figures displaying predicted probabilities

for each attainment levels by Asian ethnic/regional groups and generational statuses. Specifically, Figure 24 displays predicted probabilities for degree attainment rates, Figure 25 displays predicted probabilities for continued enrollment rates, Figure 26 shows predicted probabilities for dropout rates, and lastly, Figure 27 shows predicted probabilities for non-enrollment rates. Within each figure, numerical subscripts above each bar indicate generational differences within ethnic/regional groups, and letters signify generational differences across ethnic/regional groups.

Table 12

Interaction Effects: Multinomial Predicting Attainment Status by Asian Ethnic/Regional Groups and Generation

	2-Year Degree		**Still Enrolled**		**Dropped Out**	
	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	0.52***	0.04	0.55***	0.03	0.78***	0.05
Generation						
First Generation	0.3	0.2	0.27**	0.12	0.1**	0.07
Third+ Generation	0.39	0.51	0.16	0.15	0.34	0.36
Asian Ethnic/Regional Groups						
Not Asian	0.55	0.24	0.34**	0.11	0.32**	0.12
Chinese	3.36	3.03	6*	4.71	0.86	0.79
Filipino	1.81	1.14	1.27	0.65	0.45	0.28
South Asian	2.88	2.62	6.89*	5.41	1.37	1.2
Other Asian	0.68	0.43	0.7	0.33	0.49	0.27
Interaction						
Student is not Asian #1	1.91	1.35	2.05	0.97	6.27**	4.38
Student is not Asian #3	1.81	2.37	4.75	4.44	2.65	2.84
Chinese #1	0.42	0.49	0.55	0.5	4.75	5.54
Chinese #3	0.6	1.24	1.5	2.35	2.31	4.23
Filipino #1	3.54	3.6	2.86	2.27	21.74**	22.3
Filipino #3	0.52	0.84	1.91	2.15	0.95	1.38
South Asian #1	1.69	1.98	1.02	0.96	3.02	3.56

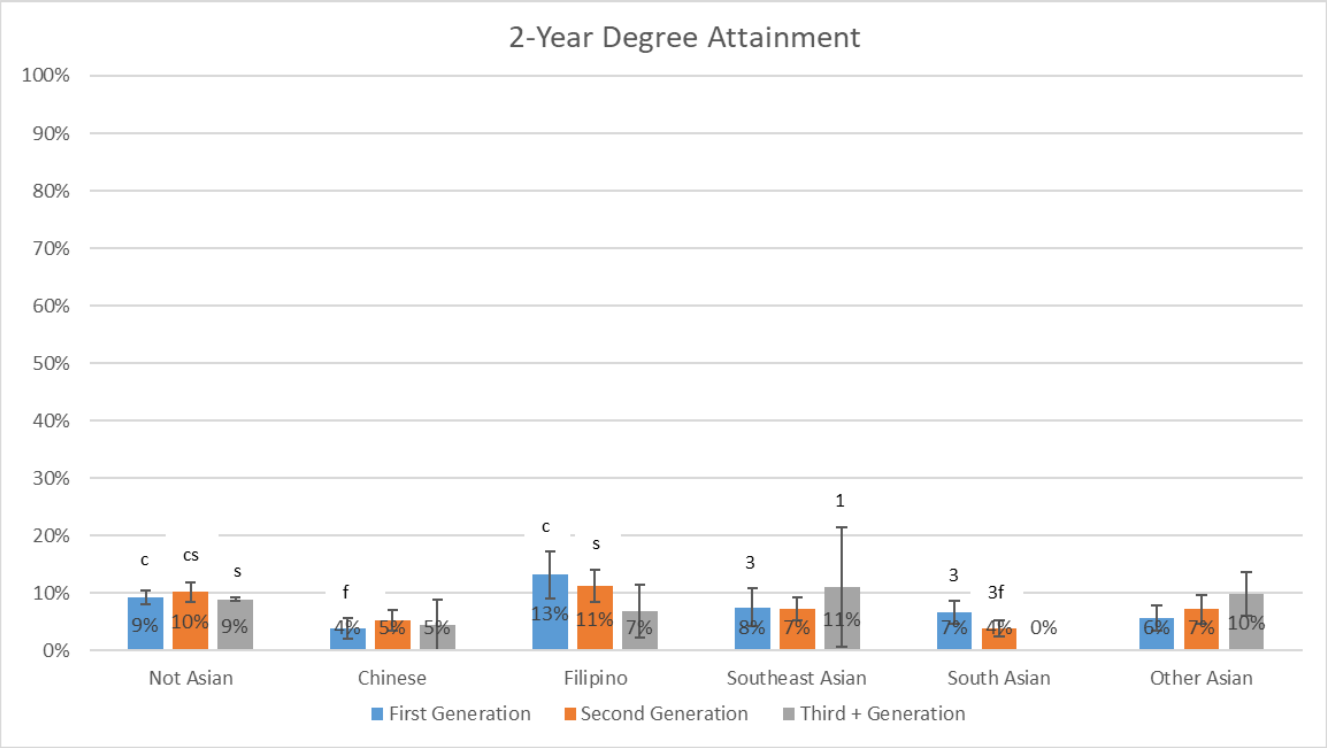
	South Asian #3	0	0	0.12	0.18	0	0
	Other Asian #1	3.06	3.02	4.49*	3.03	11.65**	10.6
	Other Asian #3	1.93	2.87	2.89	3.06	1.82	2.26
Intercept		1.73	0.74	16.25***	5.39	3.37**	1.24

Note. n=11,610. The multinomial regression above excluded female, second generation, and Southeast Asian as reference groups among independent variables. The reference level for the dependent variable was not enrolled. *p<.05. **p<.01. ***p<.001. RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 555.34 with a p-value<0.001, showing that the final model as a whole fits significantly better than an empty model.

Degree attainment rates (primarily 2-year degrees) are displayed in Figure 24. Filipino first-generation youth (13%) exhibited degree attainment more than three times higher than that of their Chinese counterparts (4%) at the second follow-up. Among second-generation youth, significant differences were found between Filipinos (11%) and South Asians (4%): Filipino youth were 2.75 times more likely to complete a postsecondary degree (primarily a 2-year degree) compared with South Asians. On the other hand, generational differences for degree attainment were found within Southeast Asians. Third-generation Southeast Asians (11%) were 1.4 times more likely to attain a degree (i.e., a 2-year degree) than first-generation Southeast Asians (8%).

Figure 22

Predicted Probabilities of 2-Year Degree Attainment Rates by Asian Ethnic/Regional Groups and Generational Statuses



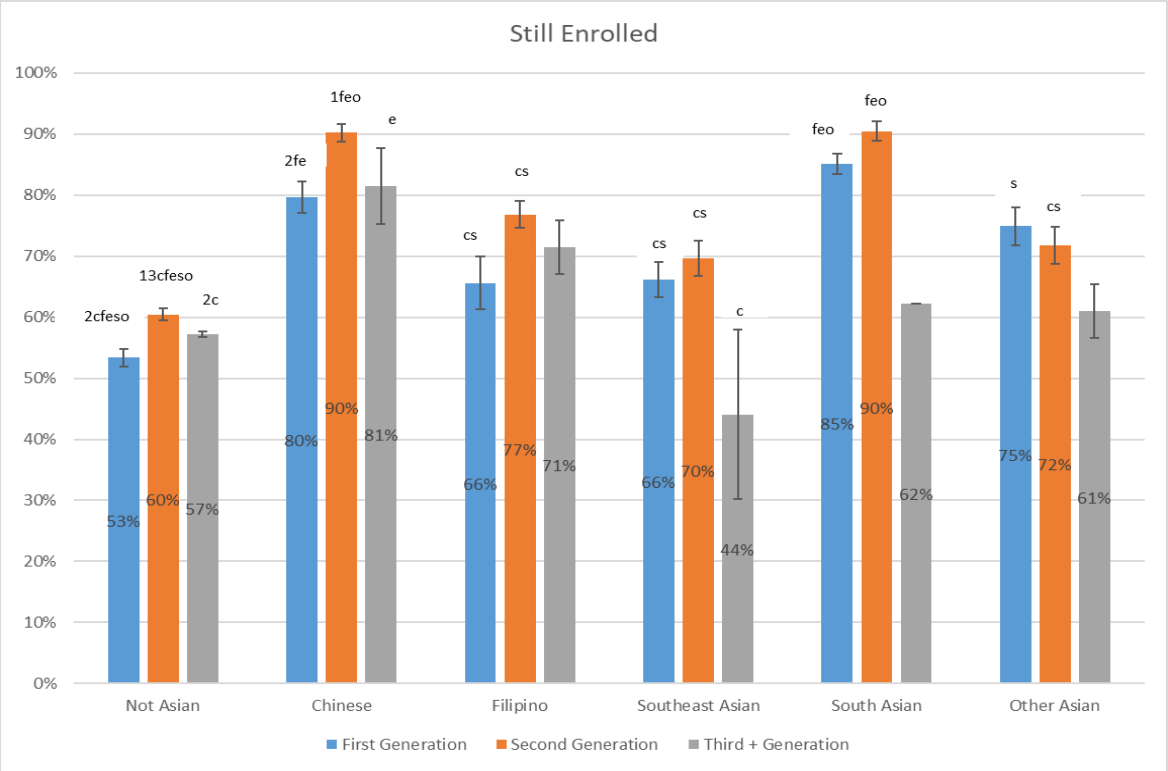
Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian. South Asian estimates might be inaccurate due to small cell sizes.

Next, results are presented for continuous enrollment rates in Figure 25. Continuous enrollment rates describe students who persisted and continued to be enrolled in a postsecondary institution 3 years after high school graduation. Among first-generation students, ethnic/regional differences were found primarily between Filipinos and Southeast Asians versus Chinese and

South Asians. Chinese (80%) and South Asian (85%) first-generation students were 1.2 times and 1.3 times more likely to be continuously enrolled (i.e., persist), respectively, compared to both first-generation Filipinos (66%) and Southeast Asians (66%). First-generation South Asians (85%) were also 1.13 times more likely to persist compared to their Other Asian (75%) counterparts. Differences among second-generation youth followed a similar pattern, with Chinese and South Asians showing equal rates of persistence but both groups exhibiting higher persistence rates than Filipinos, Southeast Asians, and Other Asians. The most pronounced of these differences was between second-generation South Asians (90%) and Southeast Asians (70%), where second-generation South Asians were 1.3 times more likely to persist compared to second-generation Southeast Asians. Conversely, generational differences for persistence were found only among Chinese youth. Second-generation Chinese (90%) were 1.2 times more likely to persist compared to first-generation Chinese (80%). At the pan-racial level, first-generation Asians (78%) were less likely to persist than second-generation Asians (83%), but this pattern was only consistent among Chinese youth when the data were disaggregated by ethnic/regional groups.

Figure 23

Predicted Probabilities of Continuous Enrollment Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

Persistence Types by Asian Ethnic/Regional Groups and Generational Statuses

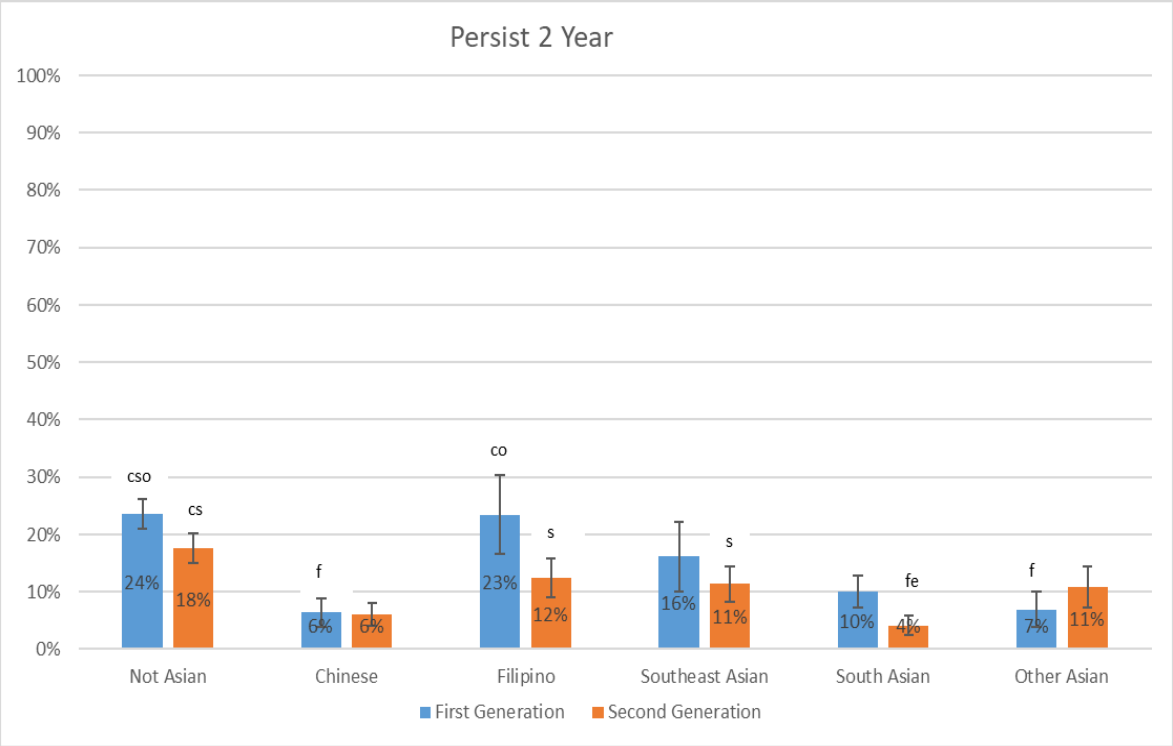
Further estimates of continuous enrollment types (i.e., type of persistence) by Asian ethnic/regional groups and generational statuses were conducted, and their predicted probabilities are presented in Figures 26, 27 and 28. Specifically, Figure 26 displays predicted probabilities for 2-year persistence rates, Figure 27 displays predicted probabilities for 4-year

enrollment rates, and Figure 28 displays predicted probabilities for 2- to 4-year transfer rates. Due to small cell sizes, downward transfer from 4- to 2-year colleges and third-generation youth were omitted from the estimations.

Figure 26 indicates that first-generation Filipinos (23%) exhibited 2-year persistence rates 3.8 times higher than Chinese (6%) and 3.2 times higher than Other Asians (7%). Among the second generation, South Asians (4%) had lower rates than both Filipinos (12%) and Southeast Asians (11%), which both shared nearly equal rates of 2-year persistence. Four-year persistence rates in Figure 27 show that first-generation Southeast Asians (38%) had lower rates compared to Chinese (68%, 1.7 times lower), South Asians (70%, 1.8 times lower), and Other Asians (78%, 2 times lower). Second-generation South Asians, on the other hand, exhibited the highest 4-year persistence rates at 81%, particularly significantly different from Filipinos (63%), Southeast Asians (57%), and Other Asians (69%). No generational differences were found within Asian ethnic/regional groups for 2-year persistence and 2- to 4-year transfer rates. However, as presented in Figure 27, first- and second-generation differences were found among Southeast Asians and South Asians for 4-year persistence rates. In particular, second-generation Southeast Asians (57%) were 1.5 times more likely to persist at 4-year institutions than the first generation (38%). Though less pronounced, second-generation South Asians (81%) also saw an advantage in 4-year persistence rates over the first generation (70%) by 1.15 times. Although first-generation Southeast Asians had the lowest rates of 4-year persistence, Figure 28 indicates that 2- to 4-year transfer rates were highest among first-generation Southeast Asians (46%). Second-generation Southeast Asians (31%) also exhibited higher rates of 2- to 4-year transfer—though this was only significantly different from Chinese (17%) and South Asians (15%).

Figure 24

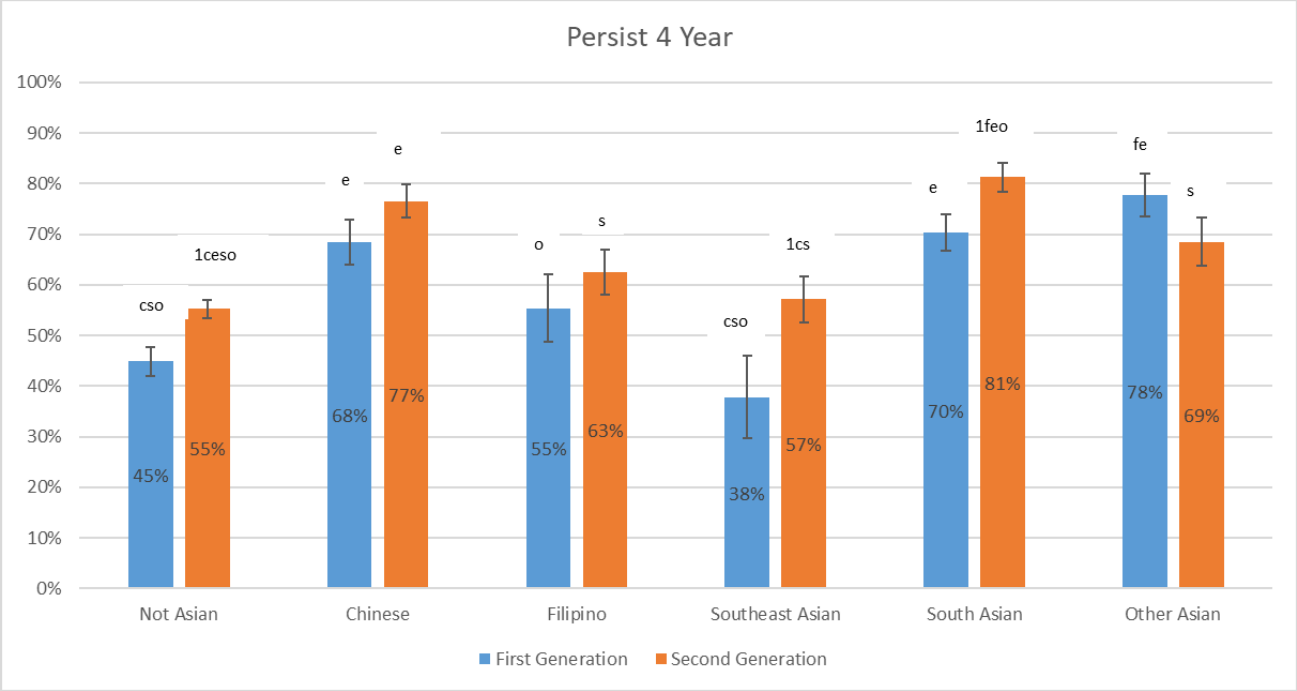
Predicted Probabilities of 2-Year Persistence Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

Figure 25

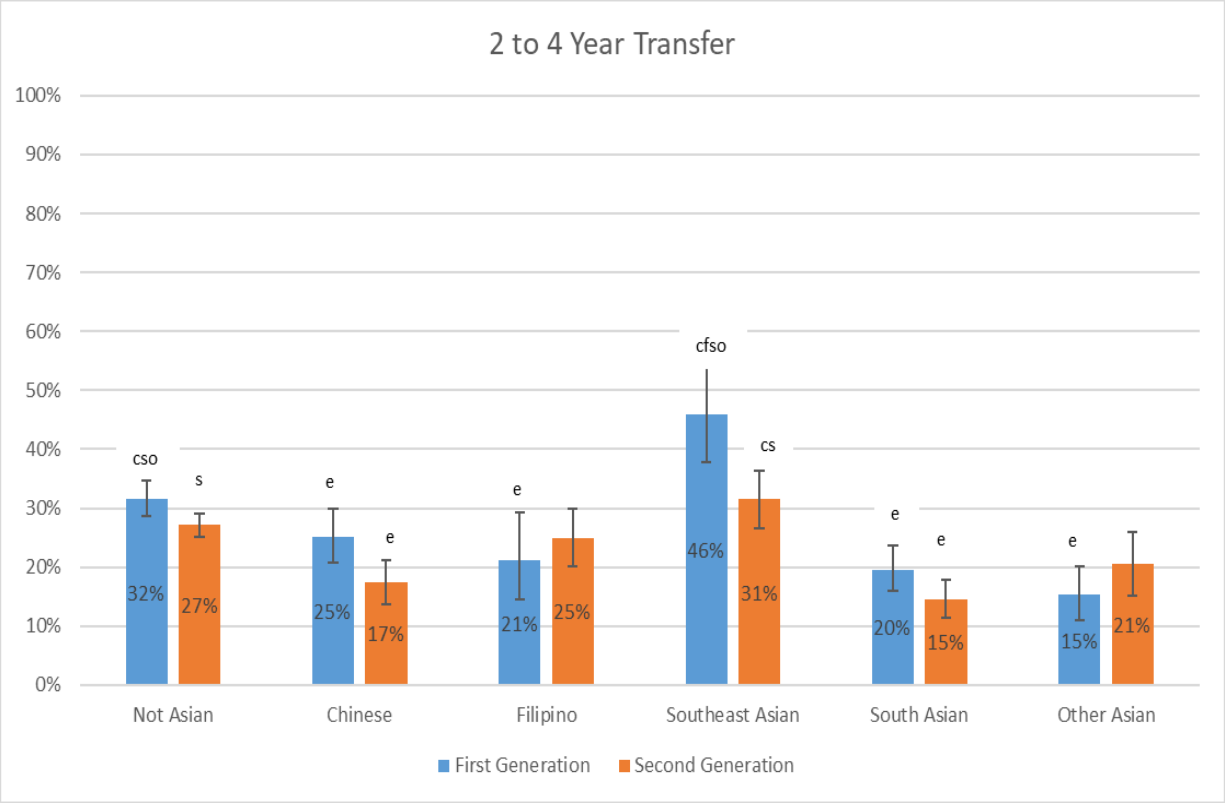
Predicted Probabilities of 4-Year Persistence Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian. Third generation estimates were removed to due to small cell sizes.

Figure 26

Predicted Probabilities of 2- to 4-Year Transfer Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian. Third generation estimates were removed to due to small cell sizes.

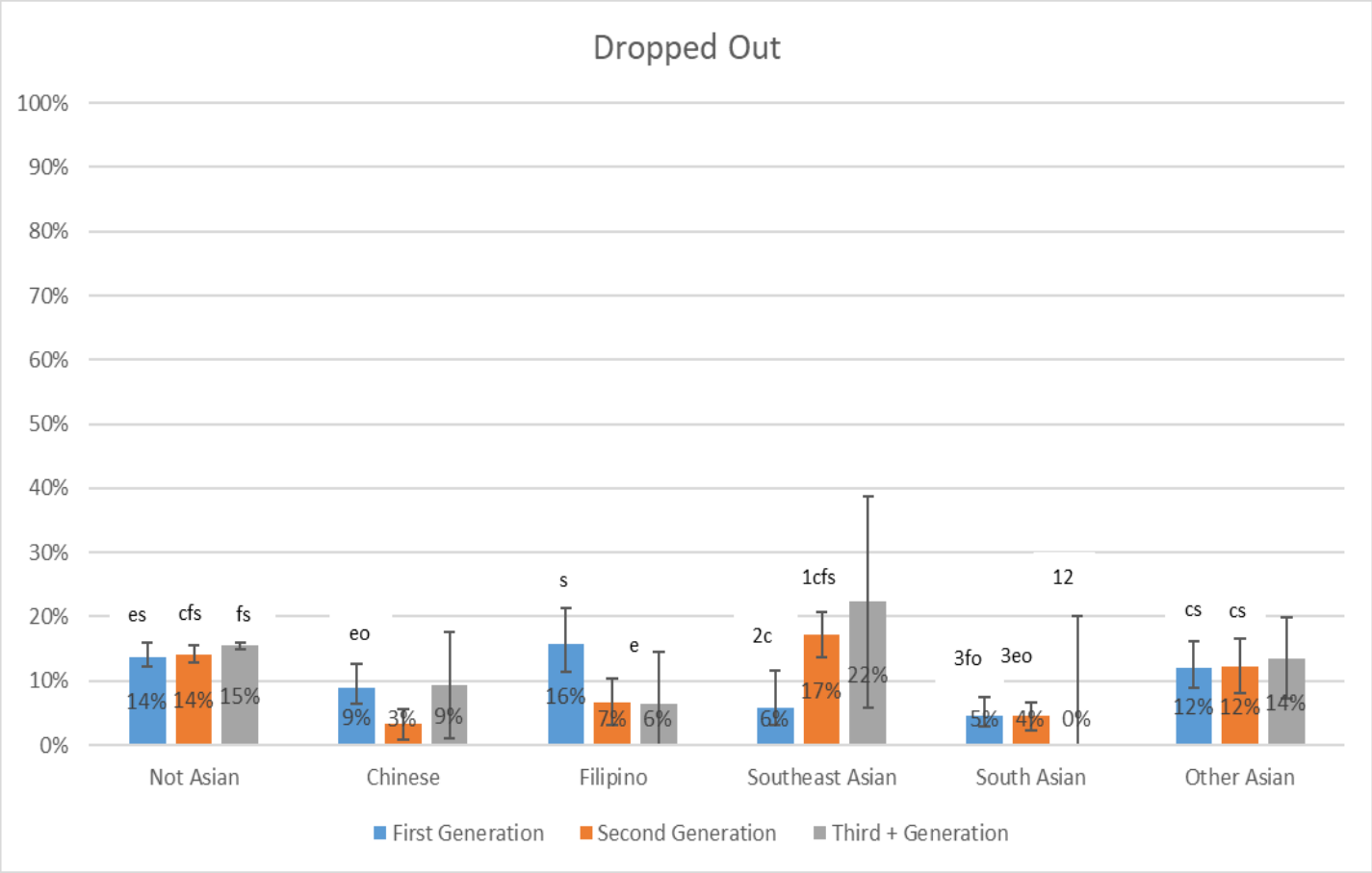
Dropout out rates are estimated in Figure 29. Among first-generation youth, Filipino youth (16%) were more than three times as likely and Other Asians (12%) were 2.4 times as likely to drop out compared to their South Asian (5%) counterparts. Meanwhile, first-generation Chinese (9%) were *more* likely to discontinue enrollment compared to first-generation Southeast Asians (6%) and *less* likely to drop out compared to Other Asians (12%). Conversely, for second-generation youth, the highest dropout rates were among Southeast Asians; specifically, second-generation Southeast Asian youth (17%) were 5.6 times likelier than Chinese (3%), 4.25 times likelier than South Asians (4%), and 2.4 times likelier than Filipino (7%) counterparts to drop out. Dropout rates also varied within ethnic/regional groups across generations for Southeast Asians. In particular, Southeast Asian second-generation youth (17%) were 2.8 times more likely to drop out compared to the first generation (6%).

The relative risk ratios (presented in Table 10) show that differences between the first and second generations existed as a function of ethnic/regional groupings, or said differently, ethnic/regional differences varied as a function of generational statuses. In particular, interaction effects were found for Filipino and Other Asians versus Southeast Asian with comparisons between the first and second generations. Among Southeast Asians, dropout rates were higher for the second generation (17%, vs. 6% for the first generation, as displayed in Figure 29), while never-enrollment rates were higher for the first generation (20%, vs. 6% for the second generation). Among Filipinos and Other Asians, differences were not found between the two generations in either outcome. The interaction effect indicates that *second-generation student*s were more at risk for dropping out (vs. not enrolling) compared to the first generation if they were Southeast Asian and not Filipino or Other Asian. Or said differently, Southeast Asian students were more at risk for dropping out (vs. not enrolling) compared with Filipinos and Other

Asians if they were second-generation and not first-generation. On the other hand, *first-generation student*s were at greater risk for not enrolling (vs. dropping out) compared to the second generation if they were Southeast Asian and not Filipino or Other Asian. Likewise,

Figure 27

Predicted Probabilities of Dropout Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

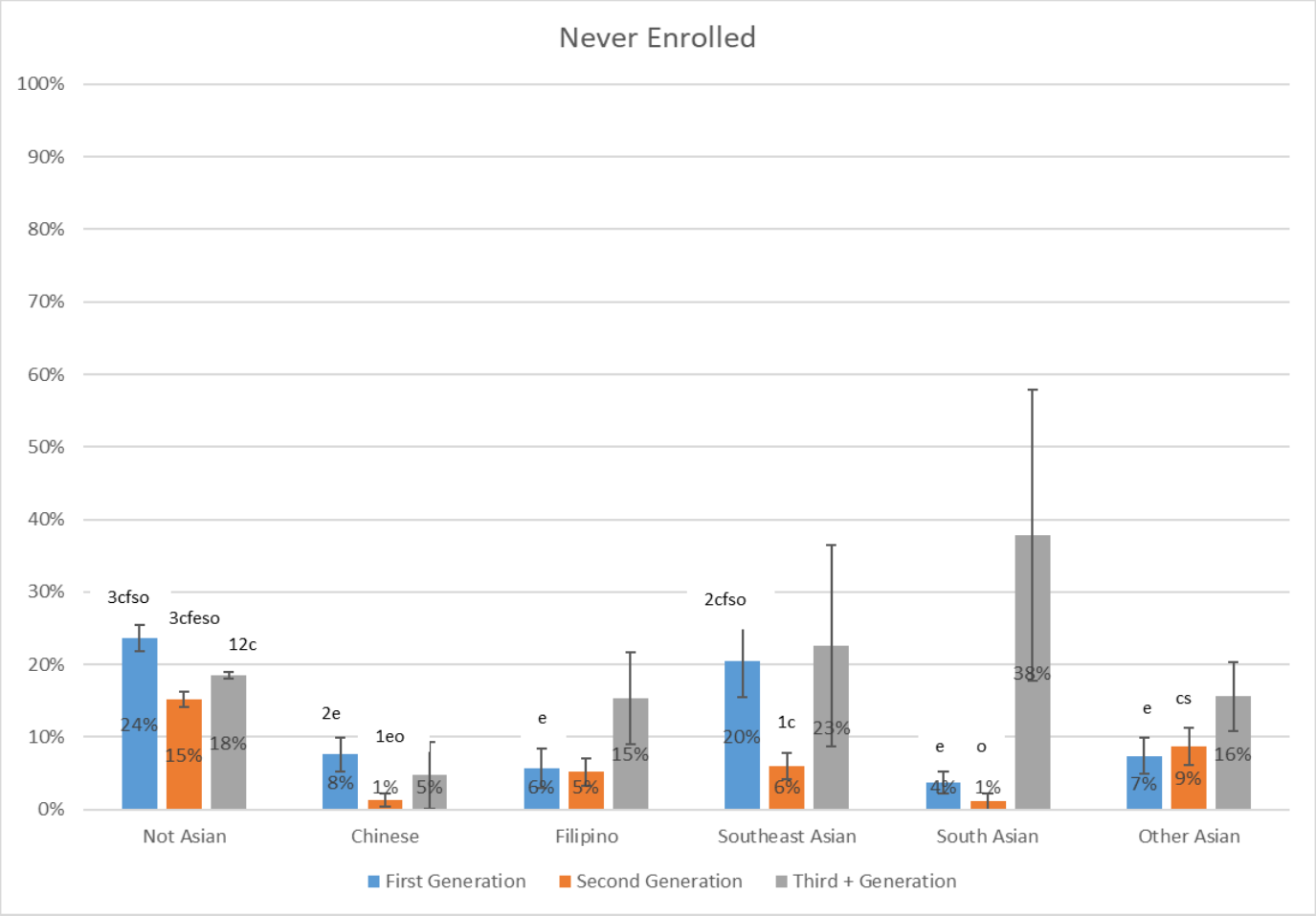
Southeast Asian students were more at risk for not enrolling compared with Filipinos and Other Asians if they were first-generation versus second-generation.

Non-enrollment rates are presented in Figure 30 for each Asian ethnic/regional group disaggregated by generational statuses. Similar to previous findings, first-generation Southeast Asian (20%) had the highest non-enrollment rates. Second-generation Southeast Asians (6%) and Other Asian (7%) were both more likely not to be enrolled compared to Chinese (1%). Second-generation Other Asians (7%) were also more likely not to be enrolled compared to South Asians (1%). Generational differences within ethnic/regional groups existed between first- and second-generation Chinese (8% vs. 1%) and Southeast Asians (20% vs. 6%). For both groups, first-generation youth had higher rates of non-enrollment than the second generation. In particular, first-generation Chinese (8%) were eight times more likely and first-generation Southeast Asians (20%) were three times more likely not to be enrolled compared to the second generation (1% for Chinese, 6% for Southeast Asians).

A significant interaction effect was found between first- and second-generation Other Asian and Southeast Asians (significant relative risk ratio found in Table 10). Among Other Asians, there was no significant differences found between the first and second generations in either persistence or non-enrollment rates. However, for Southeast Asians, significant differences were found between first- and second-generation non-enrollment rates. These variations and the significant interaction effect indicate that first-generation youth were more likely not to be enrolled initially than to continue their enrollment (persist) if they were Southeast Asian. Said differently, Southeast Asian youth were more likely not to be enrolled initially than to persist (continue their enrollment) compared to Other Asians if they were first-generation as opposed to second-generation.

Figure 28

Predicted Probabilities of Never Enrollment Rates by Asian Ethnic/Regional Groups and Generational Statuses



Note. Numerical values indicate significant differences at the $p<.05$ level between generations within Asian ethnic/regional groups. "1" indicates differences from first generation, "2" indicates differences from second generation, and "3" indicates differences from third generation. On the other hand, differences between various enrollment levels across Asian ethnic/regional groups within the same generational status are indicated as follows: "c" signifies differences from Chinese, "f" signifies differences from Filipino, "e" indicates differences from Southeast Asian, "s" indicates differences from South Asian, and "o" indicates differences from Other Asian.

Chapter 5: Discussion

With the increasing demand for a high-skill labor force, current immigrant integration trends are not meeting labor market needs and are in fact creating a bifurcated economy delineated by race and ethnicity (Duncan & Trejo, 2018; Hirshman, 2001; Massey & Hirst, 1998; Portes et al., 2005). Further, it is evident that as a country, we are not preparing immigrant youth for successful integration into American society. Existing inequities by race and ethnicity are compounded by the segmented trajectories of assimilation among immigrant youth (Kao & Tienda, 1995; Portes & Rumbaut, 2001). However, these conclusions are based on an empirical literature with critical gaps. Notably, for example, the research on immigrants' higher education outcomes mainly addresses the issue using broad pan-racial/ethnic approaches to categorizing youth. This crude approach may mask critical ethnic and region-of-origin differences within pan-racial/ethnic categories. A case in point is the grouping of Asian youth, whose families are of many different ethnicities and have migrated from geographically, historically, and politically diverse backgrounds. Similarly, much of the research on immigrant generation and educational outcomes has focused mainly on pan-racial/ethnic groupings.

Thus, one aim of this dissertation was to explore different racial/ethnic groups' pathways through higher education, with a special focus on disaggregated youth educational outcomes by both generation and, in the case of Asian youth, ethnic/regional backgrounds. Enrollment in, persistence in, and graduation from higher education were the primary outcomes analyzed.

Utilizing data from the High School Longitudinal Study 2009, several key findings were evident. First, findings on pan-racial/ethnic differences in enrollment, persistence, and graduation—averaged across generations and when examined by generation—replicated much of

the existing literature published on the topic. For example, Asian and White youth enrollment patterns (at the pan-racial level) were concentrated in 4-year colleges (exclusively). For both of these groups, other types of enrollment (such as non-enrollment, 2-year exclusive enrollment, or enrollment at both 2 and 4-year colleges) were much lower. Latinx, on the other hand, occupied the lowest concentration of 4-year exclusive enrollment and were more likely to exclusively enroll at a 2-year college. This is consistent with previous research indicating that Latinx youth had higher enrollment in 2-year colleges (Fry, 2002, 2003; Trevelyan et al., 2016). Black youth's exclusive enrollment at a 4-year college, however, was much higher than that of Latinx, and Black students were also just as likely to enroll exclusively in 2-year colleges as in 4-year ones. These findings indicate that the participation in higher education appears very different across pan-racial/ethnic groups. For Black and Latinx youth, in particular, 2-year colleges are central to their higher education experience and may be a cornerstone in their eventual attainment of a 4-year degree.

Indeed, similar to enrollment findings, attainment and persistence patterns also show that higher proportions of Black and Latinx youth participated in higher education by interacting with 2-year institutions. For example, there was evidence that upward transfer rates (transfers from a 2- to 4-year college) were higher for Black, Latinx and Multiracial youth compared to other pan-racial groups. Although approximately a third of Black and Latinx youth had transferred from a 2- to a 4-year college, around one-fifth continued to be enrolled at a 2-year college at the time of the second follow-up. Those who continue to persist at 2-year institutions (even 3 years after high school) may be completing higher education at a slower pace. Higher rates of attainment of a 2-year degree, 2- to 4-year transfers, and persistence at 2-year institutions for both Blacks and Latinx compared to other pan-racial groups reaffirm that for Latinx and

Black youth, the 2-year institution may be central in their pathway towards a 4-year college degree.

The overreliance on 2-year colleges to prepare Black and Latinx youth for bachelor's degree completion (as evidenced by the higher rates of 2-year degree enrollment and attainment among these populations compared to other pan-racial/ethnic groups) is a result of a larger issue: the unequal access to educational opportunities embedded early in elementary school and entrenched even deeper in secondary schools (Weinstein & Savitz-Romer, 2009). Moreover, this phenomenon highlights two things—first, it demonstrates that 2-year colleges pick up where secondary institutions left off. Community colleges serve as institutions to further ready students for 4-year colleges; they continue the work of secondary institutions or sometimes do the work that secondary institutions failed to do. Secondly, the higher rates of 2-year college participation among Black and Latinx youth contribute to the exacerbation of the earning gap (and subsequently wealth gaps) delineated by race and ethnicity. In general, those who do not go beyond a 2-year degree have much lower earning potential than those who attain a 4-year degree. However, beyond this, there is also evidence suggesting that even if one earns a bachelor's degree, there are labor market consequences for those who initiate their postsecondary education at a 2-year college compared to those at a 4-year institution (Xu et al., 2019). In fact, those who initialize their postsecondary degrees at a 2-year college had a $1,449 penalty (per quarter at a 2-year institution) compared to 4-year counterparts in their earnings (Miller, 2007). In addition, more recent research shows that females who entered 2-year colleges were less likely to be employed full-time compared to 4-year counterparts (Xu, Solanki & Harlow, 2019). Given the labor market consequences of 2-year college participation, it is problematic that 2-year participation rates are disproportionally higher among Black and Latinx youth. This calls into

question whether 2-year colleges are serving as opportunity structures to lift marginalized groups out of poverty, as they were originally intended to do.

Beyond examining enrollment, attainment, and persistence patterns by pan-racial/ethnic groups, the study also disaggregated these findings by generational status. Findings from generational statuses diverged from previous research for certain outcomes, and this deviation is where the current dissertation expanded the existing knowledge base. Some previous research indicated that, disaggregated by generational status, first- and second-generation Asian and Black youth have an advantage over their third-generation counterparts (Duncan & Trejo, 2018; Hirshman, 2001). On the other hand, Latinx youth experienced a first-generation *disadvantage* compared to the second and third generations (Duncan & Trejo, 2018; Hirshman, 2001). However, these patterns were only replicated for exclusive 4-year enrollment outcomes in the current dissertation. When outcomes were expanded to include exclusive enrollment in 2-year colleges, non-enrollment rates, and enrollment at both types of institutions, previous generational trends did not hold. Patterns for non-enrollment, in particular, did not follow general trends existing in the literature. For example, among Asians, there seems to be a first-generation disadvantage, where first-generation Asians have higher non-enrollment rates than both second- and third-generation counterparts. This pattern was also exhibited by first-generation Latinx, although the generational differences for Latinx were much more pronounced than for Asians. Therefore, the second-generation advantage (where the second generation has advantages over both the first and third generations) seen among Asians described in the literature was not fully evident for non-enrollment rates in this study. For Latinx youth, the first-generation disadvantage (from previous research) continued to persist in the 4-year enrollment and non-enrollment rates. Higher rates of non-enrollment among first-generation Latinx and Asian immigrants may

indicate that first-generation youth (regardless of race and ethnicity) may face obstacles such as culture and language barriers not experienced by the second and third generations that may influence their decision not to enroll in higher education.

However, interestingly, second-generation Latinx youth were enrolled in both kinds of institutions at a higher rate than the first and third generations. This finding signifies that for second-generation Latinx, utilizing the 2-year college as a pathway to a 4-year degree might be the predominant course of action (over other pan-racial/ethnic groups) given the lower capital their parents possessed as immigrants when entering the country. Lastly, for Black youth, the decline of the third generation compared to the first and second was also consistent with the literature for both 4-year enrollment and non-enrollment rates.

Enrollment, attainment, and persistence findings by generational statuses at the pan-racial/ethnic level all together suggest that immigration and assimilation contexts may explain generational differences. First, the diminishing evidence of the second-generation advantage among Asians for outcomes other than 4-year enrollment may be a result of the diversity within the pan-racial Asian group. The particular findings of this study show that there was a full second-generation advantage evident among Asians (and Whites), where second-generation Asians' enrollment rates in 4-year colleges were higher compared with both the first and third generations. Assimilation processes posit that the second generation is advantaged over the first generation because they are more socialized into the American culture and thus face fewer obstacles, such as language and culture barriers; in addition, they are advantaged over the third generation due to the higher capital newer Asian immigrants have compared to later generations. However, persistence rates did not see the same full second-generation advantage; in fact, the second generation persisted on par with the third (not higher) at colleges in general but continued

to exhibit higher rates than the first generation. Broken down specifically for persistence at 4-year colleges, generational differences did not reach significance, although first- and second-generational differences, at the trend level, were reduced compared to 4-year enrollment differences. In the case of enrollment versus persistence at 4-year colleges, perhaps the second-generation advantage is only seen for educational outcomes that prepare youth to enroll in college (e.g., test scores and grades); once enrolled, however, persistence in higher education may require a different set of skills that the second generation may not have more of than their first-generation counterparts. Or it could also be that those first-generation students who make it into a 4-year college have acquired adequate levels of language and cultural skills that allow them to perform at the same level as the second generation—reducing the differences between the two generation groups.

Similar to the Asian persistence pattern, second-generation Latinx 4-year enrollment and overall persistence were on par with those of the third generation, while the first generation lagged behind both the second and third. The disadvantage of first-generation Latinx might be explained by the much lower educational selectivity of Latinx immigrations, which has implications for the resources available to offspring. Immigrants from Latin American countries, at the pan-ethnic level compared to both Asian and Black immigrants, migrate with less education and social capital. For instance, only 7% of Mexican and 11% of Central American foreign-born immigrants possessed a bachelor's degree or higher (Pew, 2018). This is especially true of Mexican immigrants, who represent the majority of Latinx immigrants and 25% of the overall immigrant population in 2018 (Pew, 2018). Mexican immigrants choose to migrate to escape poverty in their homeland; as a result, they are selected from the lower segment of the social/capital distribution in their homeland. On the other hand, Mexicans with more resources

who are more established economically in their homeland typically do not choose to migrate (Massey et al., 1987). This immigration context explains why first-generation Latinx youth experience a disadvantage in enrollment and persistence found in the dissertation compared to Latinx immigrants in later generations.

For Asian immigrants, higher social capital gives them an advantage over other pan-racial/ethnic groups, but the lower rates of enrollment and persistence (in general) among the first generation compared with the second may reflect the linguistic and cultural barriers faced by newly arrived immigrants. On the other hand, for Black youth, both the first and second generations enrolled and persisted at a similar rate, while the third generation fell behind. The generational differences seen in Black youth can also be explained by the higher educational selectivity of newer immigrants, especially those coming from the African continent. According to the U.S. census, in 2018, 40% of immigrants from Sub-Saharan Africa have a bachelor's degree or higher, compared to 23% of overall U.S. Black adults (Pew, 2021). This is 1.2 times higher even than the overall rate for the U.S.-born population (33% of whom possess a bachelor's degree or higher) (Pew, 2018).

Given the diversity of immigration contexts, the current dissertation further disaggregated data for Asians into ethnic/regional groups. Just as expected, enrollment, attainment. and persistence in 4-year institutions favored South Asians and Chinese immigrants. Southeast Asians and Filipino underperformed along all of these outcomes. However, the findings also show that for Filipino and Southeast Asians, interaction with 2-year colleges was higher compared to other Asian groups. More specifically, exclusive enrollment in 2-year colleges was higher for Filipinos and Southeast Asians, and enrollment in both kinds of institution was highest for Southeast Asians. These two groups also had lower rates of 4-year

persistence; however, upward transfer rates (transferring from a 2- to 4-year institution) were highest among Southeast Asians, followed by Filipinos. In addition, Filipinos had the highest 2-year degree completion (attainment). This reflects a similar experience to Latinx and Black youth, who also utilized the 2- to 4-year pathway towards eventual bachelor's degree attainment, perhaps due to lower costs and higher accessibility, as Southeast Asians and Filipinos may have lower social and economic capital compared to other Asian groups.

The various contexts of immigration among Asian immigrants may help explain these group-level discrepancies. Unlike many South Asian and Chinese immigrants, who arrived as skilled labor to meet the U.S. labor market's needs, Southeast Asian immigrants, for the most part, arrived as refugees and for family reunification. As such, Southeast Asians arrive with lower educational attainment and are less educationally selective given their "forced" migration due to armed conflicts in their homelands. These disparities are demonstrated by educational attainment data from the Census. Specifically, South Asians and Chinese immigrants are highly selective educationally—75% of foreign-born South Asian immigrants and 57% of Chinese immigrants possess a bachelor's degree or higher, while only 32% of Vietnamese, 23% of Hmong and Burmese, and 18% of Laotians possess a college degree or higher (Pew, 2021). Differing educational selectivity levels have implications for the resources and capital available to support children academically at both the family and ethnic community levels.

Among Asian ethnic/regional groups in particular, the second-generation advantage waned and was not consistently found across groups. The full second-generation advantage was only evident among Southeast Asians for 4-year enrollment patterns. More specifically, second-generation Southeast Asians had higher 4-year enrollment rates than both the first and third generations. Second-generation Southeast Asians also persisted at a 4-year college at a higher

rate than the first generation, though differences with the third generation did not reach significance. The disadvantage exhibited by first-generation Southeast Asians, compared to later generational groups, might be attributed to two things—first, lower enrollment rates for first-generation Southeast Asians is likely a reflection of cultural and language barriers; second, this generational discrepancy might be related to the discrepant social and economic capital associated with different waves of Southeast Asian immigration. The first wave of Southeast Asian immigration came with more resources than later waves—those with more capital were able to escape armed conflicts earlier. For the first wave, their children are the second generation, while later waves are represented by first-generation Southeast Asian immigrants. This context might explain the higher rates of non-enrollment for first-generation Southeast Asians compared to other generations and the higher rates of 4-year enrollment in second-generation Southeast Asians compared to other generations. Taken together, this indicates that first-generation Southeast Asians, perhaps due to lack of resources and other assimilation obstacles, were more likely than the second and third generations not to participate in higher education at all. Likewise, among Chinese immigrants, the overall persistence rate at 4-year institutions was higher among the second generation than the first. Again this discrepancy might be attributed to cultural and language barriers experienced by new immigrants.

The findings of this dissertation highlight a need to disaggregate immigrant data to account for the various immigration context that contributes to disparate outcomes among immigrant groups. The dissertation approached this issue with Asian immigrants as an example; however, there is also great diversity within Latinx and Black immigrant communities. It further challenges the practice of many higher education institutions' groupings of racial/ethnic data into

broad pan-racial/ethnic categories. Furthermore, it challenges the Model Minority myth that views Asians as a monolith and surfaces challenges and diversity within this group. Enrollment by pan-racial/ethnic groups shows a second-generation advantage for Asians in 4-year enrollment rates, and that non-enrollment rates are higher for first-generation Asians compared to both the second and third generations. There was a decline of third-generation Blacks compared with the first and second in both 4-year enrollment and non-enrollment rates. Latinx exhibited a first-generation disadvantage in both 4-year enrollment and non-enrollment but a second-generation advantage in enrollment in both kinds of institutions.

These findings also suggest that educational disparities *within* and *between* racial/ethnic groups may center on the lack of capital (rooted in the immigration context) to invest in youth's education. Researchers have suggested that to effectively address the opportunity gap, schools need to permeate a college-going culture (Weinstein & Savitz-Romer, 2009). These recommendations are embedded in social capital theories, which posit that there are potential resources derived from social networks and relationships (Nahapiet & Ghoshal, 1998). Researchers argue that building a school's college-going culture requires that the social capital within the school is equally accessed by and transmitted to all students (Weinstein & Savitz-Romer, 2009). Social capital interventions within schools are most likely more important for youth who do not come from immigrant communities and families with high social capital. In addition, beyond the school context, the lack of capital within communities and neighborhoods also needs to be addressed. For instance, social capital within immigrant-ethnic enclaves varies depending on the immigration context (Lee & Zhou, 2017; Moodhood, 2004; Zhou & Kim, 2006) and the neighborhood in which immigrants are able to settle after migration (Ferguson & Birman, 2016). For those who settle in low-resource neighborhoods and live within ethnic

enclaves with low social capital, these contexts will disadvantage outcomes for their children. Therefore, interventions need to go beyond the schools to also include other exosystems such as communities and neighborhoods as a whole.

Limitations

This dissertation is not without its limitations. For one, there were not enough data on the context of immigration to truly associate differences with specific pre-immigration resources and circumstances. Access to data such as parents' educational outcomes at the time of immigration compared to counterparts in their homeland, the designation of their immigration (e.g., family reunification or H1-B visas), and other geographical data to contextualize immigration can allow for empirical testing of the effects of the immigration context on differences in groups and generations. Second, the data collection period for the current study was only 3 years long, so at time of the dissertation, not enough time had passed to study graduation for most youth—at 3 years post-high school graduation, most students have not yet completed a bachelor's degree. It would be preferable to have a 6- to 8-year lag to examine the full trajectory of higher education and final college attainment for youth.

Third, not enough data were collected on the third-generation Asian students, so *n*-sizes were too small for some Asian ethnic/regional groups to make accurate estimates of third-generation outcomes that required more granular data on types of institutions and pathways. This is especially problematic for attainment and persistence outcomes, which were collected at the second follow-up and likely affected by attrition. Lastly, non-Asian groupings were left in macro groups and not analyzed by region/ethnicity, which limits the ability to compare them to Asian groups meaningfully.

Conclusion

However, despite these limitations, this dissertation has implications for reframing the narrative around immigrants and urges policymakers and higher education institutions to acknowledge the diversity associated with the different immigration processes that may lead to very disparate outcomes and needs among their student population. There are implications for the strengthening and support of 2-year colleges, which are often the pathway to an eventual 4-degree for more disadvantaged groups, as evidenced by Latinx, Black, Southeast Asian, and Filipino youth. There is also evidence that regardless of race/ethnicity, first-generation immigrant students struggle and find it harder to persist in higher education compared to later generation groups, especially among Latinx and Asians. Lastly, the dissertation challenges the existence of the second-generation advantage documented among Asian youth by showing that it is not in full effect for a number of enrollment, attainment, and persistence outcomes and not always evident when disaggregated by ethnic/regional groups.

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Appendix A

Generational statuses at the country-of-birth level (i.e., a proxy for ethnicity rather than race) were also examined for three of the five broader Asian ethnic/regional groups (i.e., Southeast Asian, South Asians and Other Asians) and Latinx ethnic/regional groups (i.e., Central American, South American, Other). Data on ethnicities were easily decipherable for the Chinese and Filipino subgroups, while ethnicity data for Southeast Asians, South Asians, and Other Asians required further investigation into birth locations. For these three subgroups, I used the student's reported place of birth for first-generation students and parents' (both mother and father figures') reported place of birth for second-generation students. Only countries of origin with substantial *n* sizes are reported in Table 1.

Table 1
Southeast Asian, South Asian, and Other Asian Disaggregated Into Countries of Origin

	1st Generation		2nd Generation	
	n	%	*n*	%
Southeast Asian	**89**	**100**	**400**	**100**
Vietnam	28	31.5	167	41.8
Thailand	10	11.2	21	5.3
Laos	—	—	69	17.3
Cambodia	—	—	22	5.5
Others	13	14.6	14	3.5
Missing	38	42.7	107	26.8
South Asian	**172**	**100**	**414**	**100**
India	87	50.6	269	65.0
Pakistan	19	11.0	31	7.5
Bangladesh	13	7.6	22	5.3
Others	40	23.3	33	8.0
Missing	26	15.1	59	14.3

Other Asian		**116**	**100**	**254**	**100**
	South Korea	57	49.1	76	29.9
	Japan	12	10.3	28	11.0
	Others	22	19.0	54	21.3
	Missing	25	21.6	96	37.8
Total		**608**	**37.55**	**853**	**52.69**

Note. Third+-generation students do not have country-of-origin data.

Table 2

Central American, South American, and Other Latinx Disaggregated Into Countries of Origin

		1st Generation		2nd Generation	
		n	%	*n*	%
Central American		**39**	**100**	**204**	**100**
	El Salvador	10	25.6	48	23.5
	Guatemala	9	23.1	39	19.1
	Honduras	9	23.1	22	10.8
	Others	6	15.4	37	18.1
	Missing	5	12.8	58	28.4
South American		**61**	**100**	**164**	**100**
	Columbia	21	34.4	36	22.0
	Peru	10	16.4	14	8.5
	Argentina	—	—	12	7.3
	Ecuador	6	9.8	12	7.3
	Venezuela	—	0.0	9	5.5
	Others	13	21.3	33	20.1
	Missing	11	18.0	48	29.3
Other Hispanic or Latino or Latina		**44**	**100**	**124**	**100**
	Mexico	14	31.8	30	24.2
	Others	17	38.6	48	38.7
	Missing	13	29.5	46	37.1
Total		**419**	**19.8**	**853**	**40.3**

Note. Third+-generation students do not have country-of-origin data.

Appendix B

Table 1 below displays Latinx *ethnic/regional* groups by generational statuses, with subscripts indicating differences in generational proportions across Latinx groups. Among Cubans, Dominicans, and Central Americans, second-generation students make up more than half of each of these subgroups, while both the first and third generations have similar proportions. More specifically, among Latinx subgroups, Central Americans had the largest proportions of second-generation youth at 62%. Third and later generations made up 92% of Puerto Ricans and 62% of the Other Hispanic or Latinx group. However, despite both groups having similarly high proportions of third-plus generations, Other Hispanic or Latinx groups had higher concentrations of first (16%) and second (22%) generations, while Puerto Ricans were less than 1% first-generation and less than 10% second-generation. A lower concentration of first-generation Puerto Ricans is to be expected because Puerto Ricans are not typically considered immigrants, as Puerto Rico is a territory of the United States. However, for the purposes of this study, the interest is in the Latinx population as a whole, and Puerto Ricans are included in the study as Latinx. The generational distribution for Mexican was highly skewed towards the second (45%) and third generations (34%), with lower concentrations of first-generation respondents (22%). South Americans, on the other hand, had larger proportions of first- and second-generation youth (85%) than four out of the six other Latinx subgroups. Among South Americans, less than 8% were third-plus-generation youth.

Table 1

Percentage of First- and Third+-Generation Compared to Second-Generation Immigrants by Latinx Country/Region of Origin

	First generation		Second generation		Third+ Generation	
	n	%	n	%	n	%
Pan-racial Groups						
Mexican, Mexican-American, Chicano	238	21.5 [f]	495	44.7	374	33.8 [bdefg]
Cuban	19	18.1 [fg]	60	57.1	26	24.8 [adfg]
Dominican	16	24.2	34	51.5	16	24.2 [dfg]
Puerto Rican	2	0.8 [fg]	18	7.5	220	91.7 [abcefg]
Central American	39	23.6 [fg]	102	61.8	24	14.5 [adg]
South American	61	39.4 [abde]	82	52.9	12	7.7 [abcdg]
Other Hispanic or Latino or Latina	44	15.8 [bde]	62	22.2	173	62 [abcdef]
Total	419	19.8	853	40.3	845	39.9

Note. This table includes Hispanic/Latino Americans. Multinomial logistic regressions with the second generation as a base group were conducted to examine group differences in immigrant statuses between pan-racial groups.

[a] significantly different from Mexican, Mexican-American, Chicano, $p<.05$

[b] significantly different from Cuban, $p<.05$

[c] significantly different from Dominican, $p<.05$

[d] significantly different from Puerto Rican, $p<.05$

[e] significantly different from Central American, $p<.05$

[f] significantly different from South American, $p<.05$

[g] significantly different from Other Hispanic or Latino or Latina, $p<.05$

Among first- and second-generation Latinx groups, first-generation Central American youth were primarily born in El Salvador (26%), Guatemala (23%), and Honduras (23%). Among parents of second generation Central American students, 24% were born in El Salvador, 19% in Guatemala, and 11% in Honduras. On the other hand, immigrants from Columbia, Peru, and Ecuador made up the majority of South American regional group. Specifically, among first-generation South Americans, 34% were born in Columbia, followed by 16% from Peru. Among parents of second-generation South Americans, 22% were born in Columbia, followed by 9% born in Peru. Among Other Latinx, a plurality of first-generation students was born in Mexico (32%), while 24% of the parents of second-generation students were born in Mexico. Due to the

small cell sizes among the Cuban and Dominican samples, analyses will combine Cubans and Dominicans into one category—Caribbean Latinx. Both of these groups have comparable distributions of first, second, and third generations.

Table 2

Main Effects: Predicting Enrollment Statuses Among Pan-racial/ethnic Groupings by Generational Statuses With Latinx as Reference Group

	Not Enrolled		**2-Year Only**		**Both**	
	RRR	SE	RRR	SE	RRR	SE
Gender						
Male	1.77***	0.10	1.16**	0.06	0.96	0.05
Generation						
First Generation	2.49***	0.3	1.58***	0.16	1.17	0.13
Third+ Generation	2.22***	0.21	1.39***	0.11	1.03	0.09
Pan-racial/ethnic Groups						
American Indian/Alaska Native	1.07	0.35	1.00	0.32	0.71	0.32
Asian	0.1***	0.02	0.20***	0.02	0.48***	0.06
Black/African-American	0.53***	0.06	0.69***	0.07	0.86	0.11
Multiracial	0.47***	0.06	0.54***	0.06	0.68*	0.09
Native Hawaiian/Pacific Islander	0.95	0.36	0.73	0.27	1.45	0.55
White	0.31***	0.03	0.33***	0.03	0.6***	0.06
Intercept	0.4***	0.04	0.95	0.07	0.54***	0.05

Note. n=11,640. The multinomial regression above excluded female, second generation, and Latinx as reference groups among independent variables. The reference level for the dependent variable was 4-year enrollment. *p<.05 **p<.01 ***p<.001 RRR=Relative Risk Ratio. SE=Standard Error. The likelihood ratio chi-square was 806.56 with a p-value<0.0001, indicating that the final model fits significantly better than an empty model.